



The Global Language of Business

# GS1 standards in healthcare

NYHDIF - THE NORTHERN, YORKSHIRE AND HUMBERSIDE NHS DIRECTORS OF INFORMATICS FORUM

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# An international standards organisation



# What are GS1 standards?



**GS1 standards define globally unique identifiers that allow organisations to distinctively identify, capture and share data**



Identify



Capture



Share

# A common language



Identify



Capture



Share

## Identify: GS1 Standards for Identification

GLN Global Location Number    GTIN Global Trade Item Number    SSCC Serial Shipping Container Code



# A common language



Identify



Capture



Share

## Capture: GS1 Standards for Barcodes & EPC/RFID

### GS1 Barcodes

EAN/UPC



GS1-128



ITF-14



GS1 DataBar



GS1 DataBar



GS1 DataMatrix



GS1 QR Code



GS1 Composite Barcode



### GS1 EPC/RFID

EPC HF Gen 2



EPC UHF Gen 2



# A common language



Identify

## Share: GS1 Standards for Data Exchange

**Master Data** Global Data Synchronisation Network (GDSN)

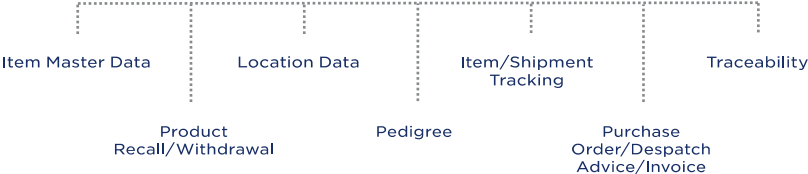
**Transactional Data** eCom (EDI)

**Event Data** EPC Information Services (EPCIS)



Capture



← Interoperability →



Share

# What are GS1 standards in healthcare?



-  **GSRN**  
Positive patient ID by scanning a wristband
-  **GLN**  
Scanning captures the location of the care delivered
-  **GTIN**  
Accurate detailed information captured without errors
-  **GIAI**  
Identifies the asset that has been used on an individual patient
-  **GSRN**  
Positive staff ID by scanning a badge



# Why GS1 standards?





# A four-nation approach



**England**

**NHS Digital**

**Northern  
Ireland**

**HSCNI**

**Wales**

**NHS Wales**

**Scotland**

**NHS Scotland**

# Scan4Safety and beyond



**2014**

**GS1 standards  
mandated in  
2014**

DHSC mandated the use of GS1 standards within the **NHS eProcurement strategy**

**2016**

**Scan4Safety  
Programme  
introduced in  
2016**

Six NHS trusts became fully-funded by the DHSC to join programme: **Leeds, North Tees and Hartlepool, Derby, Royal Cornwall, Salisbury, Plymouth**

**2018**

**All six  
demonstrator  
sites by 2018**

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

**2019**

**Included in the  
Health Systems  
Support  
Framework**

Systems providers associated with the **HSSF Lot 1 must be able to support GS1 standards**

**2020/21**

**The IMMDSR,  
Scan4Safety  
report and the  
MMDA**

Highlighting the importance of unique identification of products and people – **enabling greater traceability** for patient safety

# Healthcare regulatory



Medicines and Medical Devices Act 2021

Legislation that applies in Great Britain supporting the MHRA to improve its traceability of medicines and medical devices. In response to the Independent Medicines and Medical Devices Safety Review (IMMDSR).



**The medical devices register** will be developed to allow for the capture of reference data about medical devices available in the UK market



The **Medical Device Information System (MDIS)**, created by NHS Digital, will capture the patient, the procedure, the product, the place, and the clinicians involved, and store this in the patient's record

# About the Scan4Safety programme



- Published on **15 July 2020**, the Scan4Safety evidence report highlights key findings from the two-year programme
- Centred on using GS1 unique identifiers and capturing that data at the point of care

## Benefits realised were two-fold:

### Patient safety:

Through complete traceability; speedy and accurate recall; reduction of drug error and Never Events; improving routine observations and patient identification

### Cost and efficiency savings:

Through more efficiency and cost-effective product ordering; happier, more efficient staff; the creation of accurate patient level costings; reductions in unwarranted variation



The full Scan4Safety evidence report can be accessed [here](#)

# Overarching programme evidence



**140,000 hours  
of clinical time  
released  
back into  
patient care**



**£9m worth of non-  
recurrent  
inventory savings**



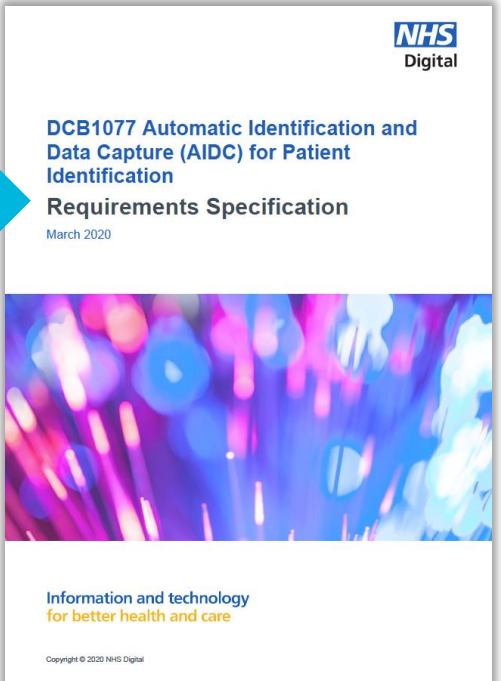
**Nearly £5m worth  
of recurrent  
inventory savings  
across the  
six trusts**

# Person, product and place

GS1 standards in healthcare



# Person



# Product



 **Inventory** **GTIN**    **\* Catalogue management**

 **Assets** **GIAI or GRAI**   **Equipment management**

 **Documents** **GDTI**  **Document control**

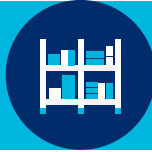


# Place



Where

Physical /  
digital location GLN



\* Location  
identification

Who

Legal entity /  
function GLN



\* Organisation  
identification

# Use cases



**Closed loop medicines**



**Medical records**



**Product recall**



**Inventory management**



**Medical equipment**



**Purchase to Pay**



**Surgical equipment**



**Pathology samples**



**Bed management**



# Healthcare supplier engagement



## Engagement, training and development

- Member support
- Targeted subject-specific training/engagement webinars
- Regular GS1 standards-based educational webinars
- Focused supplier events
- Bespoke eLearn platform
- Dedicated virtual training courses



# GS1 UK partners



Partner finder

Discover GS1 UK approved partners below who can support your business needs

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Find out more about how to become a GS1 UK partner.

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How to become a partner  
Partner programme benefits  
Get in touch

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**axicon**  
THE BARCODE EXPERTS

axicon auto id limited

GS1 UK Approved 1 approved product

Axicon Auto ID is a world leader in barcode verification, having developed and manufactured our own verifiers since 1989. Axicon verifiers are used across the globe and are fully compliant with the ISO/IEC standards for linear and matrix.

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**brother**  
in print

brother healthcare

GS1 UK Approved 9 approved products

Brother is a leading provider of printing technology and has over 25 years' experience in healthcare, working closely with GPs, hospital staff and pharmacists. Brother products are affordable, reliable and fit for purpose every time. ...

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GS1 UK Approved

## Dakota Integrated Solutions

Dakota delivers fit-for-purpose mobile computing and barcode printing solutions into primary and secondary NHS environments. Aimed at reducing clinician administration time whilst providing patients with an enhanced care experience, our expertise spans a range of mission-critical healthcare applications including positive patient identification, asset tracking, wristband printing solutions and labelling.

**dakota**  
healthcare

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[www.dakotais.co.uk](http://www.dakotais.co.uk)

About Product information

### Approved products

Dakota Integrated Solutions have been approved for their product eTrakLogic.

eTrakLogic Introduction video

**GS1** Approved  
UK

eTrakLogic

# Questions

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