



Data Matrix is the data carrier of choice in healthcare

Full visibility with identification of packs, patients, and caregivers



Placed on patient's wristband and caregiver's identification badge



Placed on a medication, medical device package and medical devices



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(21)A42536475Z

Identified by the attributes:
Manufacturer Product Code (Global Trade Item Number): 14 digits
Expiry date: 6 digits
Batch/lot number: up to 20 alpha-numeric characters
Unique Serial number: to 20 alpha numeric characters



Read the data with camera-based bar code scanners

Benefits

- A large amount of data in by far the smallest footprint
- Can print variable information at high production speeds
- Direct part marking allows for tracking of parts through the full lifecycle
- Can hold a website URL

Regulations requirements worldwide



• **The Delegated Acts on safety features** (Regulation (2016/161) setting up the first «end-to-end verification system» across the world, were adopted in February 2016.



• It requires the placement of a **data carrier with unique identifier on the packaging** of certain medicinal products, such as the Data Matrix.



• Deadline for implementation of the requirements across **Europe is 9 February 2019**, and in **2025 for Belgium, Italy and Greece**.



• The use of Data Matrix on pharmaceutical products is specified by regulators in **Argentina, Egypt, France, India, Jordan, Korea, Saudi Arabia, Turkey, Ukraine** and the **U.S.**, and recommended for use on vaccines in **Canada**.



All surgical instruments of **Instrumental Quirúrgico FAICO S.A.I.C in Argentina**, are **traced with the GS1 DataMatrix**. The individual identification of the instruments gives legitimacy to the products, **fighting counterfeiting**, brings more **safety to the processes in the supply chain**, and helps to manage instruments inside the sterilisation areas of healthcare centers.

Novartis Pharma in Portugal developed and implemented a traceability programme using **GS1 DataMatrix**, which allows to **track the product, from the warehouse to the patient**, including all the moves in the hospital from the pharmacy to the operating theatre. It also **enables online status checks** in the case of an adverse event or any investigations due to quality aspects.

Patient and caregiver identification for better safety

A standard that can identify the patient and the caregiver - the Global Service Relation Number (GSRN)



A standard used to **identify the relationship** between the **healthcare provider** (an organisation offering the services) and the **patient** (the recipients of services)

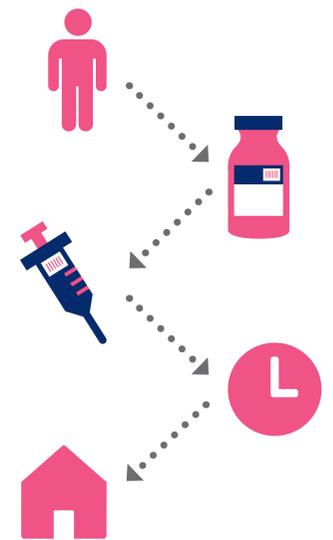
...and can be used to identify the relationship between the **healthcare provider and the caregiver** (the provider of the service).



Homogeneous environment for scanning implies that one single system of standards is used

A standard fulfilling the 5 patient rights

- Right patient
- Right medication
- Right dose
- Right time
- Right route



GSRN is an approved ISO standard (CEN ISO TS 18530)

- The GSRN can be encoded in a GS1 DataMatrix; in a patient's wristband or in a caregiver's badge.
- The GSRN can be electronically used as a "key" in medical files, service registers, dossiers, invoices, and others.

Geneva University Hospitals, Switzerland, can automatically capture all relevant information at the **point-of-care** for oncological treatment.

Before administering medication, the **caregiver scans the GS1 DataMatrix** barcode on the bag. The caregiver also **scans the GSRN** from the GS1 DataMatrix on the **patient's wristband**.

More reliable access to product and patient information has **helped to address and eliminate medication errors associated with incorrect patient, incorrect medication and incorrect timing**. The hospital decided to deploy patient ID wristbands with GS1 GSRN across all hospital units to support other processes, such as patient transport, etc.

St. James's Hospital, Ireland, was early adopters of patient identification and **identified patients with GSRN** in their haemophilia programs already in the early 2000.



Using GS1 EDI in the healthcare supply chain

Enabling healthcare companies to increase accuracy of their business transactions while improving quality of care

Challenge

- Increase the speed and accuracy of transactions between healthcare parties to offer a better quality of care
- Getting the right product on time
- Less ordering errors
- Lowering costs for orders, delivery and invoicing.

Solution

GS1 global standards and guidelines in healthcare for information exchange.

- GS1 EDI set of standards: GS1 EANCOM and GS1 XML
- GS1 identification keys:
 - Global Trade Item Number (GTIN)
 - Global Location Number (GLN) and
 - Serial Shipping Container Code (SSCC)
 - And the GS1 Logistic Label
- Global GS1 EDI Guideline for Healthcare

Benefits

Improved quality of care due to fast, accurate, secure information being exchanged, enabling automatic ordering and improved availability of healthcare products.

- Cost savings due to enhanced information available to all healthcare participants, as appropriate
- Increased efficiency of transactions.



Did you know

Using GS1 GTIN and GLN together with EDI, Becton, Dickinson and Company (BD), a medical technology manufacturer, and Mercy ROi, the healthcare provider Mercy's supply chain company, achieved the following:

30% reduction in days payable outstanding

73% reduction in discrepancies

Did you know

Thanks to GS1 standards, Ramsay has increased both the speed and the efficiency of their purchasing processes, underpinned the efficient operation of their hospitals and helped ensure the continuous delivery of quality healthcare. Procure to pay processing costs have been decreased by approximately

95% per document.