The Global Language of Business

Healthcare GLN Implementation Guideline

provides implementation guidance for those considering the use of the GS1 Global Location Number (GLN) in healthcare

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Contributors

Name	Organisation
Pete Alvarez	GS1 Global Office
Chuck Biss	GS1 Global Office
Dan Clark	GS1 Canada
Coen Janssen	GS1 Global Office
Sophie Molle	GS1 Global Office
John Pearce	Axicon
Sue Schmid	GS1 Australia
David Weatherby	GS1 UK
Els van der Wilden	GS1 Global Office
Poppy Abeto Kiesse	GS1 Austria
Sylvain Alberola	SANOFI
Andrea Arozamena	GS1 Mexico
Richard Austin	PAREXEL International GmbH
Melissa Banning	TraceLink
Mahdi Barati	GS1 Iran
Henri Barthel	GS1 Global Office
Shreenidhi Bharadwaj	Syndigo
Nick Bobrinskoy	nCoup, Inc.
Arpad Boldis	Deloitte
Céline Bordes-Terrier	CREAPHARM
Giedré Bracaité	F. Hoffmann-La Roche Ltd.
Doris Cadart	SANOFI
Pedro Carvalho	Ipsen
Robert Celeste	Center for Supply Chain Studies
Jiraporn Chalermjirarat	GS1 Thailand
Olivia Chauvel	CH Victor Dupouy
Shawn Chen	GS1 Thailand
Mignone Cheng	GS1 Hong Kong, China

Name	Organisation
Luiz Costa	GS1 Brasil
Sandra Couto	GS1 Canada
Dilip Daswani	Qliktag Software (formally Zeebric LLC)
Jean-Michel Descoutures	International Hospital Federation (IHF)
Karina Duvinger	GS1 Sweden
Judit Egri	GS1 Hungary
Pierre Fernandez-Barbereau	SANOFI
Jesper Kervin Franke	GS1 Denmark
Stefan Gathmann	GS1 Ireland
Andreas Geissler	PAREXEL International GmbH
Robert Giguere	AbbVie
Nicole Golestani	GS1 Canada
Nicolas Gryspeert	F. Hoffmann-La Roche Ltd.
Rami Habbal	GS1 UAE
Michaela Hähn	GS1 Germany
Mark Hanly	Almac Clinical Technologies
Camilla Aabye Hansen	GS1 Denmark
Eileen Harpell	GS1 Global Office
Michael Hoefling	Boehringer Ingelheim Pharma GmbH & Co.KG
Christine Horvath-Hanko	GS1 Hungary
Mike Hutton	Almac Clinical Technologies
Richard Hwang	Pfizer
Marco Inserra	CSL Behring GmbH
Jason James	Bristol-Myers Squibb
PC Jarvis	DHL
Matthias Kallmeyer	Boehringer Ingelheim Pharma GmbH & Co.KG
Steven Keddie	GS1 Global Office
Anna Klapper	GS1 Germany
Kelly Knowles	Bracket Global
Catherine Koetz	GS1 Australia
Anne-Claire Krid	GS1 France
Jitendra Kumar	Thermo Fisher Scientific
Cherish Lallone	McCreadie Group
Nicolas Le Rudulier	CREAPHARM
KC Leung	GS1 Hong Kong, China
Piergiorgio Licciardello	GS1 Global Office
Ildikó Lieber	GS1 Hungary
Valerie Marchand	GS1 France
Timothy Marsh	GS1 Global Office
Olivier Mary	COLCA Medical & Scientific
Feargal Mc Groarty	St. James's Hospital

Name	Organisation
Mike Meakin	DHL
Charlotte Meuldermans	Deloitte
Shabnam Mokashi	Biogen
Adrien Molines	GS1 France
Fabiana Monaco	PAREXEL International GmbH
Yann Montcourt	Ipsen
Barry Moore	GlaxoSmithKline
Mahipal Mula	Signant Health
Zubair Nazir	GS1 Canada
Philippe Neirinckx	GS1 Global Office
Alice Nguyen	GS1 Vietnam
Marianne Perdrijat	DBV TECHNOLOGIES
Richard Perkins	eClinical Forum
James Perng	GS1 Chinese Taipei
Neil Piper	GS1 Global Office
Josef Preishuber-Pflügl	CISC Semiconductor GmbH
Vincent Puglia	Endpoint Clinical
Paul Reid	GS1 UK
Edna Melissa Reina Calderon	Logyca
Sylvia Reingardt	GS1 Germany
Craig Alan Repec	GS1 Global Office
Greg Rowe	GS1 Global Office
Amy Rupp	CSL Behring GmbH
Theodora Sarver	Almac Clinical Technologies
Michael Schlesselman	McCreadie Group
Amanda Scott	Biogen
Julian Sin	GS1 Hong Kong, China
Mig Smith	GS1 UK
Jodi Smith-Gick	Eli Lilly and Company
Tania Snioch	GS1 Global Office
Debbie Streahorn	Endpoint Clinical
Peter Sturtevant	GS1 US
Flora Sue	GS1 China
Colette Thorold	PAREXEL International GmbH
Koichi Uemura	GS1 Japan
Hans von Steiger	Pfizer
Elizabeth Waldorf	TraceLink
Amber Walls	GS1 US
Roland Weibel	GS1 Switzerland
Tasha Wiehe	GS1 Global Office
Connie Wong	GS1 Canada

Name	Organisation
Grace Yang	GS1 Global Office
Tony Zhang	Syndigo
Stefan Zietze	PAREXEL International GmbH
Andrea Zobel	PAREXEL International GmbH
Elisa Zwaneveld	GS1 Global Office

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2.1	Oct 2020	Pete Alvarez/Neil Piper/Elisa Zwaneveld/Tania Snioch	WR 20-136: - Inclusion of reference to GLN application in clinical trials throughout the document - Update to Implementation Success Stories - Addition of 10 steps to implementing a GLN - Minor grammatical corrections

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Table of Contents

1 Introduction

This document provides implementation guidance for the use of the GS1 Global Location Number (GLN) in healthcare. The content has been revised since its initial development to reflect the status of GLN use across the entire healthcare value chain including hospital settings, supply chains, regulatory environments and clinical trials settings.

Note: Clinical trials are used to assess the efficacy of a product that is not ready for commercial release and not yet approved by a regulatory body.

This document also includes several implementation examples to illustrate how GLNs are used in various applications.

For additional information regarding the GLN standard refer to the GS1 General Specifications and for assignment refer to the GS1 GLN Allocation Rules.

For local support and training, please contact your local GS1 Member Organisation (MO).

Important: Please be advised that there may be regulation(s) in specific market areas that are more stringent and SHALL be adhered to. Refer to the Healthcare Public Policy Interactive Map for more information.

1.1 Who should use this document?

This document is developed for organisations that are responsible for assigning and implementing GLNs to support internal and external operations.

For example:

- Healthcare providers, clinics, pharmacies, manufacturers, distributors, Group Purchasing Organisations (GPOs), Ministries/Departments of Health and regulatory bodies.
- Clinical trial stakeholders, including clinical trial sponsors, contract manufacturing organisations, contract research organisations, data management entities and trial sites.
- National healthcare regulatory and standards bodies who govern the healthcare supply chain.
- Supply Chain Managers, Information Technology (IT) Solution Providers in the areas of supply chain systems, finance and eProcurement systems, systems integration, e-commerce and clinical systems.

2 What is a Global Location Number?

The Global Location Number (GLN) improves the efficiency of communication among organisations.

The GLN enables the unique and unambiguous identification of any type of location used in business processes, which is a prerequisite for efficient communication between trading partners. A GLN acts as a database key which references location-specific information that is repeatedly applied. Its function is to reduce input errors and increase efficiency.

GLNs provide a unique and unambiguous identification of the following:

1. **Legal Entities** – Any business, government body, department, charity, individual or institution that has standing in the eyes of the law and can enter into agreements or contracts.
2. **Functions** – An organisational subdivision or department based on the specific tasks being performed, as defined by the organisation. Legal entities and functions can engage as parties in business processes. The use of Global Location Numbers (GLNs) in these areas is driven by the exact role of each party within a given business process.
3. **Physical Locations** - A site (an area, a structure or group of structures) or an area within the site where something was, is, or will be located. The identification of physical locations is an essential element for supply chain visibility. A GLN assigned to a physical location always has a permanent and identifiable geographical address regardless of any business process roles conducted at the site.
4. **Digital Locations** - A digital location represents an electronic (non-physical) address for communication between computer systems. Just as the exchange of physical goods is a transaction between companies, the exchange of data is a transaction between systems, for example, the delivery of an invoice by EDI or email to an accounting system.

Each company or organisation who is a member of a GS1 Member Organisation should use GLNs to identify locations under the terms of its membership. Contact details for all GS1 Member Organisations are available on the GS1 website.

Note: The GLN is fully compatible with ISO/IEC 6523 Information technology -- Structure for the identification of organizations and organization parts (Part 1 & 2). For more information, reference the Global Location Number Executive Summary

In business operations, location numbers must be associated with business attributes. The attributes of the location should be established as part of master data management using the GLN as the key to the information.

Note: Contact your local GS1 Member Organisation to understand the rules and requirements for the implementation of GLNs in your business processes, or work with the local MO and the industry to develop these.

For smaller organisations, it may be sufficient to assign a single GLN at the highest level to cover all purposes. The degree of GLN assignment depends on the individual business needs and that of their business relationships.

The GLN may be used as a replacement for a custom account number or similar identifier such as supplier number, vendor number, trading partner number, clinical trial site ID, etc. However, this will require collaboration and communication among trading partners well in advance of the transition from an existing custom account number to the GLN.

Larger, more complex organisations may have more than one GLN to represent different discrete entities, locations, or functions, for example:

- A supplier may have different physical location or legal entity GLNs for its UK, German and French subsidiaries.
- A hospital may have different physical location GLNs for a pharmacy, an operating theatre and receiving departments.
- A hospital may have a separate function GLN for its billing department.

Locations, functions and legal entities often have implied hierarchical structures. For example, a room, within a department, within a building within a hospital. Where hierarchies are needed, they should be built into a database that manages the GLN key rather than within the key itself. As with all GS1 Keys, it is best to not introduce any intelligence in the number structure of the GLN to replicate a hierarchy. This adds limitations making GLNs difficult to maintain, reduces the flexibility of changing organisations and makes IT systems more expensive to maintain. Please contact your local GS1 Member Organisation for additional information.

Below are examples of how Global Location Numbers can be used:

- To identify an organisation as a corporate entity.
- To identify physical locations such as a hospital, a pharmacy, a storeroom, a doctor's office or an operating theatre.
- To identify a company's legal and functional entities engaging as parties in a particular business transaction, for example as buyer, seller, or carrier.
- In either a barcode or EPC/RFID (Electronic Product Code/Radio Frequency Identification) tag to automatically identify locations such as storage places in a warehouse, the destination of a pallet, or the origin of a product.
- In electronic messages and registries to inform trading partners about companies and their corresponding GLNs and associated GLN information (e.g. Ship To/Bill to, Ship From/Remit to).
- In the Global Data Synchronisation Network® (GDSN®) to identify the organisations, data sources and data recipients.
- To provide more precise recording and sharing of supply chain events by adding the extension component to a GLN. For example, an extension component may identify sub-locations such as storage bins, dock doors, bed spaces, scan and read points.
- By organisations in the public sector. Various applications exist where governments use GLNs, either to identify their own agencies or to identify companies using central government databases.
- In cases where patients receive regular, long-term deliveries to home, e.g. enteral nutrition, GLNs may be used to identify the ship to location.

2.1 Sharing GLN information

It is essential to share GLN master data with trading partners prior to commencing business communications. If GLNs have been allocated in a hierarchical structure, this hierarchy should be shared. Communication of GLN information will take the format that is best suited to the trading partners involved, whilst ensuring the information exchanged is accurate and complete. There must be a mechanism in place to keep GLN information aligned between all parties at all times.

In some countries, GS1 Member Organisations manage national GLN databases known as GLN registries. These registries provide a common list of GLNs registered within that country. The company issuing these GLNs is responsible for keeping business partners informed of all GLNs related to the trading relationship. For information on mergers and acquisitions refer to section 7 of this document and section 1.6 of the GS1 General Specifications.

3 Why use GLNs?

The GLN not only identifies a specific party or location, but also provides the link to the information pertaining to it (i.e., a database holding GLN master data such as company name, and billing address). This is a key advantage of using a shared, globally unique identifier because all information can be held and maintained centrally in a database reducing the effort required to maintain and communicate information between multiple parties on a national or global basis.

The unique identification number enables supply chain partners to simply reference a GLN in supply chain communications, as opposed to manually entering all of the necessary party/location information. Using a GLN to reference party/location information promotes efficiency, precision and accuracy in communicating and sharing location information.

Note: When a GLN has been allocated by an organisation to their physical or digital locations, legal entities or functions it is important that this is proactively communicated to all trading partners for use in business processes.

3.1 GLNs in eCommerce transactions

GLNs are used in many types of electronic commerce transactions and are most commonly used in conjunction with Global Trade Item Numbers® (GTIN®) and Serial Shipping Container Codes (SSCC) for purchasing, shipping, invoicing and stock status transactions. They provide the globally unique identification needed to securely exchange business information as well as unambiguously identify all legal entities, physical/operational locations described in business documents.

GLNs ensure lean and efficient communication and processing since names, addresses and other information about particular locations do not need to be communicated with every transaction. The necessary information is shared only once, stored in the relevant system (e.g., Enterprise Resource Planning system or Data Management Entity/Interactive Response Technology (IRT), systems used for communication of information during a clinical trial) and subsequently retrieved by referring to a globally unique GLN.

GLNs can identify suppliers, sponsors, purchasers, clinical trial sites, contract manufacturers, transport providers, depots, ship to and bill to locations. GLNs are increasingly important in healthcare transactions to ensure correct pricing is applied to specific customers and that ordering, stock status reporting and delivery processes can become increasingly efficient, requiring minimal intervention from clinical staff.

Note: In EDI transactions, IT systems facilitating message communications, e.g., eCommerce software or clinical trials Data Management Entities (IRTs), do not need GLNs allocated.

GLNs play a key role in computer-to-computer communication to support transactions, traceability and business processes. People will continue to use short-form textual codes and descriptions to identify locations in their day to day communications. These codes and descriptions should be recorded internally as attributes of the relevant GLN.

3.2 GLNs in Data Synchronisation

Exchange of product and, or price information between suppliers and their trading partners (e.g., distributors/wholesalers, hospitals) is called data synchronisation. The information exchanged for data synchronisation is non-transactional and includes the unique product identifier (GTIN) as the record key and additional information such as product descriptions, regulatory information, sizes, and weights. Data synchronisation ensures trading partners are operating with the same set of information.

GS1 provides a standard for data synchronisation via its Global Data Synchronisation Network (GDSN). The GDSN relies on the use of GLNs for unique identification of:

- Certified Data Pools
- Data source (provider of data to the GDSN)
- Data recipient (receiver of the data from the GDSN)
- The recipient of the price associated with an item (customer-specific)

The use of GLNs in GDSN helps ensure that the right information gets to the right organisation at the right time.

3.3 GLNs in product traceability and recall

Product traceability is essential in the pharmaceutical and medical devices sectors where product quality may have major implications for patient safety. Companies already have legal and regulatory obligations to be able to trace and recall their products if issues arise. However, tracing is challenging due to the complexity of the supply chain and the range of systems and processes inuse.

The GS1 Traceability in Healthcare standard provides a single global interoperable mechanism for traceability and recall management. GLNs, in conjunction with GTINs and serialised product identifiers, enable product tracing across the supply chain, with each transfer of control or transfer of ownership identified by the GLN of the receiving party.

Manufacturers and clinical trial sponsors use GLNs to identify each party handling their products to ensure the integrity of the product and to combat counterfeiting. Clinical trial stakeholders expect that the use of GLNs will integrate well into current recall processes without requiring substantive changes. Their use will complement and facilitate increased accuracy.

Finally, healthcare providers use GLNs in conjunction with GTIN and Global Service Relation Number (GSRN) identifiers to ensure that products, equipment, staff, and patients can be traced within a healthcare facility.

More information on the GS1 Traceability in Healthcare standard can be found at https://www.gs1.org/traceability-healthcare.

3.4 GLNs and physical location marking

Global Location Numbers can be encoded in GS1 data carriers, for example, a barcode or RFID tag. Encoding GLNs in GS1 data carriers enables marking of the various locations throughout facilities with GLNs for accurate identification, e.g. a warehouse, a production line, a refrigerator, a doctor's room, an operating theatre, a pharmacy, a dock door. Marking locations within a facility with GLNs enhances your internal business and clinical processes by providing reliable and accurate location identification. Moreover, entering a GLN into an IT system automatically using data carriers (as opposed to typing it in) enables users to record a GLN with as minimal manual intervention as possible, increasing both speed and accuracy.

When physically encoding a GLN in a barcode symbol, GS1 Application Identifiers (AI) are used to indicate how the GLN is to be applied. For example, if a GLN is barcoded on a logistics label applied to a shipping unit, the organisation scanning the barcode needs to understand if the GLN is allocated to a ship to location or a ship from location. GS1 Application Identifiers provide this clarity.

Refer to section 6.2 for examples of physical location marking in hospitals settings. .

4 How to allocate GLNs?

In general, each organisation assigns GLNs to their physical or digital locations, legal entities, or functions for which that organisation has responsibility (a process known as allocation).

There are different rules and best practices for GLN allocation depending on what the GLN is identifying, for example, a physical location, a legal entity, a digital location or a function (refer to section 2 for more information). In practice, a single GLN may identify a combination of location types, for example, both a physical location and a function. In such cases, multiple rules and best practices may apply. Assigning multiple usage types to a GLN should be done with caution, and the potential impact should one of those usage types change should be taken into account. Refer to the GLN Allocation Rules for information about GLN assignment.

Per GS1 General Specifications section 4.6.1.6 titled “Lead time in reusing a Global Location Number”, GLNs used in the healthcare supply chain shall never be reused.

4.1 GS1 Application Identifiers for GLNs

GS1 Application Identifiers (AIs) are numeric prefixes used in barcodes to define the meaning and format of encoded data elements. For example, the package shown below contains four GS1 Application Identifiers. The numbers shown in parenthesis are the GS1 Application Identifiers.

Figure 4-1 Application Identifier (414) – GLN of a physical location

The GS1 system contains standards for a range of GS1 Application Identifiers that function as triggers when information is encoded in GS1 barcodes. These GS1 Application Identifiers tell the software application how to handle that information. For example, in which database field to store the data. Below are the GS1 Application Identifiers relevant to GLNs.

- AI (254): GLN extension component
  - This indicates that the data field contains an extension component of a Global Location Number (GLN). The use of AI (254) is optional, but when used it must appear in conjunction with AI (414), identification of a physical location.
- AI (410): Ship to-Deliver to GLN
  - This is the address of the location where goods are to be delivered.
- AI (411): Bill to – Invoice to GLN
  - This is the addressee of an invoice or bill.
- AI (412): Purchased from GLN
  - This is the location of the company from which a product or service was purchased.
- AI (413): Ship for, Deliver for, Forward to GLN
  - This is used by a consignee to determine the internal or subsequent destination of a physical unit.
- AI (414): GLN of a physical location
  - This is the location of a physical location such as a door, room or control point.
- AI (415): Global Location Number of the invoicing party
  - This is the Global Location Number (GLN) of the invoicing party.
- AI (416): GLN of the production or service location
  - This is the Global Location Number (GLN) of the production or service location.

Note: For additional information on these and other Application Identifiers used with GLNs refer to GS1 General Specifications sections 3.7.5 to 3.7.13

4.2 GLN extension component

The number of GLNs that an organisation can create is limited by the length of its GS1 Company Prefix (GCP), for example an 8 digit GCP can create 10,000 GLNs. This can be an issue when a significant number of GLNs are required. For example, every shelf in a large medical records location, where this level of detail is only relevant to internal systems. In this case, the Application Identifier (254) GLN extension component may be used to identify internal physical locations, such as storage bins, shelves or cupboards. Although optional, when used, AI (254) may only be used in conjunction with AI (414), Identification of a Physical Location. For more information on AI (254) refer to the GS1 General Specifications.

The GLN extension component will not be communicated between trading partners except by mutual agreement. The GLN extension has been developed because it will become an important business requirement when used with RFID tags and EPC. Locations that currently have a GLN may also use an optional GLN extension component to distinguish unique sub-locations, e.g. bed bays, storage slots, door locations, bin storage, shelves, peg holes, rack, cabinet, computer/communication bays.

However, a company may choose to assign a unique GLN without an extension component to identify these locations.

Note: The GLN extension is not recommended for use in the clinical trials environment for any GLN that must be communicated between trading partners.

5 GLNs in manufacturing and distribution

Manufacturers, distributors and clinical trial sponsors depend on GLNs to identify specific legal entities, physical and functional locations in manufacturing and supply chain processes including EDI purchase-to-pay and stock status transactions. 3PL/4PL organisations, shipping and pass through depots all use GLNs to facilitate their identification in these processes. Additionally, GLNs are used by manufacturers, distributors and clinical trial sponsors in support of regulation and traceability applications.

For general information and guidance regarding the use of GLNs in manufacturing and distribution applications refer to the GS1 website - https://www.gs1.org/id-keys/gln.

6 GLNs in hospitals and other clinical locations

Hospitals and other clinical locations trade with multiple industries, for example, medical, diagnostic, hospitality, cleaning, office supplies and more. In addition, these organisations can perform multiple functions, for example, a pharmacy or inpatient hospital ward may also be a clinical trial site. A given GLN can be used by trading partners across different sectors. Providing that no change has been made that is contrary to the GLN Allocation Rules, the GLN can also be used across functions, e.g. the GLN identifying a doctor's office doesn't change even though the office functions as both a medical consultation facility and a clinical trial site.

GLNs can be used to identify retail pharmacies, doctor's offices, dentist's surgeries, private laboratories and other relevant healthcare-related locations. The principles of allocation and use of GLNs for these facilities remain in line with the allocation principles for other supply chain parties.

Note: It is recommended that hospitals and other clinical locations communicate their GLNs and the related location master data to all trading partners in all industry sectors and request that the GLNs be used. Without this step, trading partners may be unaware that GLNs have been allocated and so omit to use them, relying on proprietary internal codes, e.g. site numbers in clinical trials, that are prone to duplication when communicated externally.

6.1 GLNs in supply chain operations

The healthcare supply chain can be highly complex, particularly with products being able to follow multiple routes between the manufacturer or clinical trial sponsor and a hospital or other healthcare facilities, e.g. clinical trial site. Products can be delivered directly to an operating theatre or pharmacy by a supplier or via a combination of the importer, third party logistics provider or distributor. Other healthcare products may have to be delivered to a central warehouse and then to the pharmacy department identified by a GLN, while computer and medical equipment may have to be configured or tested by the IT department before placed into storage or use.

GLNs can be used in such cases to uniquely identify individual delivery points and the final destination of a product. This information can be provided in electronic commerce messages as well as appearing on the shipping label in a data carrier, e.g. barcode, RFID.

Internal stockholding locations, including equipment such as refrigerators or intelligent cabinets, can be identified by GLNs for inventory management purposes.

Location information can then be used in conjunction with other GS1 identifiers by external and internal supply chain operators to ensure that products are delivered to and stored in the correct

location. This is essential as a particular item may be required urgently for an operation or other critical procedure, and any delay in locating it may result in a patient safety issue.

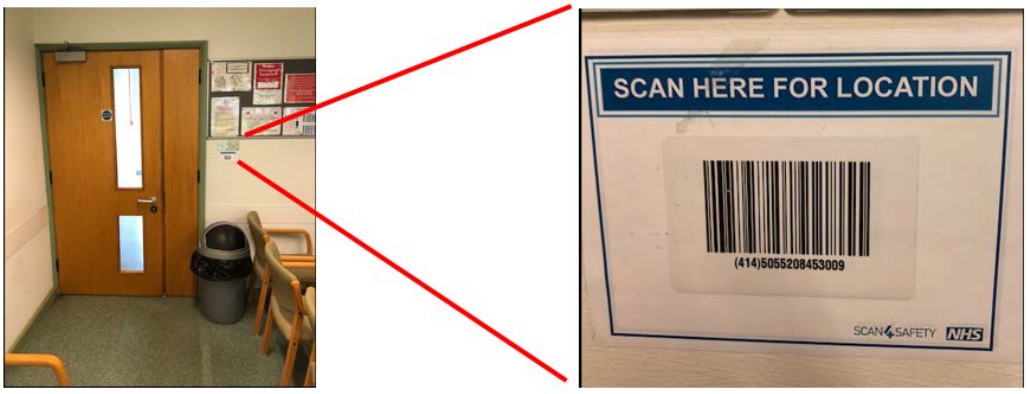
6.2 GLNs for physical location marking

Specific care should be given to label placement in physical locations. Below are actual label placement examples from hospitals in the United Kingdom. These examples are provided for illustrative purposes of actual practices at hospitals who are implementing GS1 standards. It is recommended to consider these principals when applying physical marking of locations irrespective of the organisation type to which the locations belong.

- Labels should be located to ensure ease of scanning on entry to a room and should be sited as near to where relevant physical tasks are undertaken, as is practical.
- Room labels should be placed just inside the entry at a height that is easily scanned and seen, probably alongside the light switch or fire alarm call point.
- Labels should be placed on walls rather than on doors since doors can be replaced for maintenance. Labelling doors leading from one room to another can be confusing. However, care needs to be taken when walls are repainted.
- Bed space labels, if required, should be placed on the wall above the bed space.
- Cupboard labels, if required, should be placed on both the inside and outside of the cupboard.
- In large rooms, such as corridors, there may be a need to apply more than one label. Where multiple labels are required, these may display the same GLN.

GLN label location

The examples below, of the UK's National Health Service (NHS) physical location labels, illustrate where a label may be placed in a room within a hospital.



GLN label design

The examples below, of NHS physical location labels, illustrate that the label can contain existing human-oriented information in combination with the GLN barcode.

Labels need to comply with Infection Control requirements and be sufficiently durable to withstand regular cleaning materials and practices.

6.3 GLNs in patient safety applications

GLNs can be used to uniquely identify both the physical location where an activity takes place, e.g. room 123, and the associated department, e.g. pharmacy department or the function, e.g. dispensing counter #1.

The physical arrangements of hospitals change frequently. For example, a ward may move from one physical location to another to allow for cleaning, two rooms may be converted into one room or vice versa, or the function of a room may change from being part of physiotherapy to being an office or a storage location. GLNs can be used to provide a history of what took place in that location, e.g. in which ward Mr. Smith was in and what was the physical location of his bed.

Best practice recommendations are:

1. Hospital physical locations should generally be identified by a GLN that simply identifies the physical location, e.g. room 21 in building 2, and does not specify the function or activity associated with the location.
2. Hospital departments, cost centres and other organisational entities or functions, should generally be identified by a GLN that simply identifies the function, e.g. the X-Ray department or Ward -10 Geriatrics, and does not specify its current physical location.
3. A link should be maintained between the GLNs of physical locations and the GLNs of the functions or departments currently associated with those locations.

This approach ensures that when a clinic, ward or other function changes its location, it is not necessary to change either the GLN identifying the function or the GLN barcode identifying the physical location. However, it does mean that when recording events, it may be necessary to register the GLNs of both the functional entity and the physical location.

6.4 GLNs in sterile equipment management

Effective decontamination and sterilisation of surgical instruments is a critical activity for every healthcare provider. This aspect is equally important when hospitals outsource decontamination operations to specialist service providers.

Many national healthcare regulators are mandating that each instrument and, or instrument tray must be uniquely identified and each use of the instruments and each decontamination activity is recorded. GLNs are used to support this process by uniquely identifying the locations where instruments are used and stored such as theatre instrument storerooms, operating theatres and sterile service providers.

The use of GLNs in conjunction with GTINs (including serial numbers) and asset identifiers such as the Global Individual Asset Identifier (GIAI) will:

- Improve traceability and more efficient management of surgical instruments.
- Increase the efficiency of resources in instrument tray assembly operations.

- Improve the availability and usage of instruments.
- Improve the location tracking of instrument trays and endoscopes through the decontamination process to the storage area and into theatres and back to sterile services.
- Pinpoint contaminated areas vs needing to quarantine an entire hospital.

6.5 GLNs in medical asset management

Clinical staff may spend unnecessary time looking for particular items of equipment such as wheelchairs, trolleys, patient monitors and infusion pumps. The lack of visibility leads to additional equipment being purchased or rented which increases costs and reduces asset utilisation.

To replace a manual search process with an automated asset tracking system, an increasing number of healthcare facilities have implemented real-time tracking of medical equipment. A combination of GIAI identifiers attached to the equipment in conjunction with RFID tags, wireless networks and GLNs is used.

6.6 Other GLN applications

GLNs can be used for:

- Identification of specific shelf locations where medical records are stored within a medical records storage facility. They can also be used to identify where records were sent and their current location.
- Inventory management and product recall: GLNs identify locations where products are stored including room, shelf, cupboard, cabinet or refrigerator.
- Patient tracking and bed management: GLNs identify wards, theatres, imaging departments – (X-Ray), recovery rooms and bed bays so that patient whereabouts can be unambiguously recorded and provided to consultants, bed managers, relatives and others.
- Sample tracking: GLNs identify pick up points and laboratories reception so that sample location can be recorded accurately and in real-time.
- Dispensed medicine tracking: GLNs identify pick up points, dispensaries and ward stock areas so that medicines can be recorded and tracked accurately and in real-time.
- Medical equipment: GLNs identify equipment libraries, wards, theatres, clinics where medical equipment is located enabling the equipment to be located for planned maintenance or for reallocation to other users.
- Adverse event analysis: GLNs provide clear and unambiguous identification of where events took place. This is valuable to hospitals when performing adverse event analysis.
- Managing other services such as cleaning and maintenance: GLNs identify locations to be cleaned or containing equipment to be maintained.
- Identifying the roles of participating organisations involved in co-development of clinical trials.

Additional healthcare implementation scenarios can be found in the GLN Allocation Rules document.

7 GLNs in Mergers and Acquisitions (M&A)

Global Location Numbers serve a critical role in the identification of legal entities and physical locations associated or named in a merger or acquisition. This section provides guidance on how to treat GLNs in the event of a merger or acquisition.

The phrase mergers, acquisitions and divestitures (abbreviated M&A) refers to the buying (acquisitions), selling (divestiture, also known as divestment or divesture) and combining (merger) of all or part of different companies or businesses. M&A's are normally executed to aid, finance or help a company grow rapidly in a given industry. Whether a purchase or unification is considered a merger or an acquisition lies in how the purchase is communicated and received by the target company's board of directors, employees and shareholders.

Both the Buyers (companies who are acquiring or merging with another company or business) and Sellers (companies who are being acquired or merging with another company or business) will benefit from the use of a comprehensive implementation guideline outlining activities, processes and best practices required during a M&A with reference to managing and communicating GLN and supporting data with their trading partners, e.g. manufacturers, distributors, hospitals, pharmacies. They will need to work towards integrating the acquired company, division and/or products into the buyer's portfolio with minimal impact. Issues to address are who maintains the right to use the GS1 Company Prefix(es) and the GS1 identification numbers (e.g. Global Trade Item Numbers (GTINs), Global Location Numbers, (GLNs), Serial Shipping Container Code (SSCC)) assigned using the GS1 Company Prefix, when ownership of the product or company changes. Also important is how these changes are communicated with all their trading partners and GS1 Member Organisations (MOs) that licened the GS1 Company Prefix or GLN.

Trading partners need M&A implementation guidance to:

- Ensure that subsequent use of GLNs and associated master data is based on a consistent set of terminology and best practice processes, by both buyers and sellers.
- Enable the buyers and sellers to outline key areas of responsibility and to determine what is expected, and what are acceptable results.
- Provide the basis for an open relationship between buyers and sellers as well as an understanding of accountability by both parties.
- Encourage commitment from the buyers and sellers on key activities with a common understanding of expectations.
- Contribute to a more timely and seamless M&A.

This guidance will eliminate confusion on timelines, reduce multiple meanings for terms and remove the uncertainty on the management and assignment of GLNs as well as promoting standardisation of present practices and bring uniformity to activities, processes and information.

Two general factors to consider regarding the transfer of a GLN:

- If the GLN identifies a location, function or legal entity that is part of the sale, then the GLN should be considered as part of the legal transfer. The opposite is also true.
- If the GLN identifies a brand which will continue under the same name, then the GLN should be considered as part of the legal transfer. The opposite is also true.

Lastly, clear and timely communication of impacted GLNs should be communicated to the other side of the trading relationship to prevent confusion and errors in transactions and shipments.

8 Ten steps to implementing a Global Location Number (GLN)

The following steps guide actors in the supply chain to implement the Global Location Number (GLN).

1. Establish Executive support

Decide that your company is going to implement GLNs, and if necessary, establish executive support and approval to proceed with GLN implementation.

2. Form a GLN team

Establish clear roles and responsibilities within the team. Determine who will have overall responsibility for GLN issuance and maintenance, and if necessary, depending on the size of your organisation, involve others to form a GLN team.

3. Get the team educated

The goal in this step is to educate participants. Ensure anyone working with GLNs has strong GS1 standards, GLN registry and GLN knowledge. Contact your local GS1 member organisation to get guidance and support, including attending GS1 system training.

4. Understand rollout requirements

Determine the legal, functional, physical, and digital locations to which GLNs will be allocated and to what level of granularity is required. Establish which systems need access to this information, what systems hold this information, how is it shared with all parties, e.g. registries. Determine which technology can be used to identify physical locations, e.g. barcode and RFID. Map digital locations to GLNs, e.g. IP address of an Access Point to a GLN.

5. Assess systems capabilities

Determine where GLN information will be stored in your organisation to ensure it is maintained as accurate and complete. The capability of your information system(s) to contain and utilize GLN numbers must be assessed, and the necessary changes made. The necessity of parallel files between the old location numbers and GLNs must be planned. Understand any potential issues that may be encountered with the adoption of GLNs.

6. Establish implementation strategy

Document how GLNs will be rolled out and how all GLN data will be continuously maintained.

Establish a GLN implementation strategy, including a corresponding hierarchal organizational chart, e.g. warehouse system hierarchy; divisional hierarchy. The establishment of your organization's GLN hierarchy is a critical step in the implementation process. It is necessary to consider not only how business is currently conducted, but also future business processes and supply system possibilities. In order to do that, current and possible distribution and billing systems must be clearly understood. It should be noted that implementation and use of GLNs in healthcare is an ongoing process. The primary implementation elements are:

- Governance
  - To ensure allocation and maintenance of these GLNs is accurate and efficient; it is important to have a clear governance process in place. This should: include clear accountability regarding roles and responsibilities
  - Include clearly defined processes regarding the allocation, printing, placement, and on-going maintenance of GLNs
  - The agreed policy/process should be signed off by the relevant person/department, e.g. Quality Control/Clinical Governance.
- Allocation of GLNs
- Labelling approach and location priorities / phases etc.
  - Agree on what printing solution to use etc.
  - Printing in batches or print-on-demand
  - Label placement
- Maintenance
  - Ongoing maintenance, replacement etc.

7. Allocate GLNs and collect master data

Create a hierarchy of all the locations that will need GLNs and allocate GLNs to them. Detail the master data about the party/location, e.g. name, address, class of trade, which help to ensure that each GLN is specific to one, very precise location, anywhere. The GLN and its associated attributes are then saved in a database (like a GDNS-certified Data Pool or GLN registry) and shared among supply chain partners; for smaller businesses the GLN and master data could be shared in something as simple as an Excel file.

N.B. Master data could include, company name, address, postcode, country, contact phone number etc.

8. Mark physical locations

If GLNs are going to be allocated to physical locations, ensure all locations that are having their GLNs shared with partners are identified and marked before any information is shared. The type of technology to mark has been determined in Stage 4 and 5.

9. Share GLN master data

The goal is to receive your GLN(s) and share your GLN information with your trading partners using agreed tools / registries as agreed and determined in stages 4 and 5

10. Keep GLN information up to date

On going maintenance of locations identified using GLNs and that these are managed according to governance determined in Stage 6. All systems are kept up to date with any information change and whether any information is archived, or new information added.

Note: Other guidance on appropriate steps for GLN implementation can be found in the following documents:

- GS1 Canada – Healthcare Supplier Implementation Guide - https://www.gs1ca.org/files/GLN_Implementation_Guide_for_Healthcare_Suppliers.pdf
- GS1 USA – Healthcare Supplier Tool kit - https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=642&language=en-US&PortalId=0&TabId=134

A Appendix: Implementation success stories

This appendix contains implementation success stories previously reported via the GS1 Healthcare reference books. This appendix intends to provide a summary of each implementation and a link to where the business case can be found.

GLN Success Stories in Healthcare

1. NSW Health continues to benefit from its implementation of GS1 standards

NSW Health, Australia

Abstract:
In 2005, NSW Health adopted GS1 Australia's Global Data Synchronisation Network (GDSN) compliant data pool, GS1net – known as the National Product Catalogue (NPC) in the Australian healthcare market – as its optimal and compliant solution to facilitate the exchange of accurate, timely and synchronised data across its supply chain.

Purpose / issues:
Manual processing of procurement information using several methods and from various sources.
These processes led to inaccurate, unreliable and variable sources of information and posed a deterrent to business growth. They were not conducive to system-to-system integration, essential for procurement process efficiencies.

Benefits / findings:
The NPC has enhanced the quality of data within the NSW Health procurement information system. The established processes by GS1 Australia provide system architecture improvement to ensure the solution is flexible in terms of accommodating industry endorsed additions and improvements over time. GS1 Locatenet, a central directory of GS1 Global Location Numbers (GLNs), enables the matching of NSW Health Location GLN to receiving Trading Partner GLN.

Reference:
GS1 Healthcare Reference book 2015/2016, Page 42,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_healthcare_reference_book_2015-2016.pdf

2. Ramsay Health Care getting the benefits of using GS1 standards

Ramsay Health, Australia

Abstract:
Ramsay Health Care (Ramsay) wanted to improve the efficiency of its supply chain processes while leveraging Australian national eProcurement recommendations. To address this need, the health system has deployed a full suite of GS1 standards for identifying, capturing and sharing information to support interactions with its suppliers, including GS1 Electronic Data Interchange (EDI) standards.

Purpose / issues:
Improve the efficiency of its supply chain processes

Benefits / findings:
Ramsay has increased both the speed and efficiency of its purchasing processes, strengthened the efficient operation of its hospitals and helped ensure the continuous delivery of quality healthcare. In addition, procure-to-pay processing costs have decreased by approximately 95 percent per transactional document.
Business messages are exchanged with suppliers using GS1 EDI XML standards containing the GTIN and GLN as primary identifiers for products and locations.

Reference:
GS1 Healthcare Reference book 2016/2017, Page 48,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_rb2016_web.pdf

3. How GLNs Contribute to the Standardisation Efforts at Charité University Hospital

Charité University Hospital, Germany

Abstract:
Realising the importance of identifying the location as accurately and precisely as possible, Charité University Hospital decided to implement GS1 Global Location Numbers (GLNs) for accounts/locations as an essential step in its efforts to fully support the adoption of healthcare supply chain standards.

Purpose / issues:
To identify the location as accurately and precisely as possible

Benefits / findings:
The GLN is used to uniquely identify locations and legal entities from manufacturers, distributors, and hospitals, all the way down to nursing stations. Transaction errors are then reduced while ensuring that the right product, procedure, and/or treatment are delivered to the right location.
The use of GLN brought important improvements to the healthcare supply chain:

- Clean data on delivery locations and therefore reduced error rate (by considering the correct internal and external delivery address)
- More accurate purchase orders and invoicing processes
- Real-time access to GLNs – always up-to-date using GEPIR and the recommended processes

Reference:
GS1 Healthcare Reference Book 2013/2014, page 23,
https://www.gs1.org/docs/healthcare/13_GS1_HC_RefBook2013_All.pdf

4. BJC HealthCare GS1 Standards Implementation Case Study

BJC HealthCare, US

Abstract:
This case study details how BJC HealthCare successfully worked with GHX and GS1 Healthcare US to implement global industry standards in business transactions with suppliers and other healthcare trading partners. Today, BJC is using GLNs in all of its purchase orders transmitted through the GHX exchange and is prepared to transact with GTINs as its vendors enumerate their products with this standard.

Purpose / issues:
To automate the process of tracking products from the point of manufacture to the point of use in order to help improve patient outcomes and reduce supply chain costs

Benefits / findings:
To date, BJC HealthCare has derived the following benefits from GLN enablement:

- Improved data accuracy
- Reduced billing and shipping errors
- Greater process efficiency

Reference:
https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=600
GS1 Healthcare Reference Book 2011/2012, page 54,
https://www.gs1.org/docs/healthcare/GS1_Healthcare_Reference_Book_2011-2012.pdf

5. Seton Family of Hospitals and BD Use GS1 Standards and Processes to Reduce EDI Errors in Pursuit of "Perfect Orders"

Ascension Health and BD, US

Abstract:
Both Ascension Health and BD believed that alignment of master data was necessary for accurate transactions and was a pre-requisite for Perfect Orders. They also wanted a solution that could be shared and utilized with other trading partners. Therefore, Ascension Health and BD set out to implement GS1 standards to ensure alignment and accuracy; specifically, GTIN (product ID), GLN (location ID) and GDSN (product attribute data).

Purpose / issues:
Ascension Health manages pricing & product information for 445 locations. Accurate product information in systems and transactions is essential in order to maintain sufficient, reliable supply levels for "just in time" inventory management.

Benefits / findings:

- No Unit of Measure EDI Errors
- No Confusion or Errors on Ship-To Locations
- Perfect Alignment on Contract Eligibility
- No Synchronization "Work Around" Processes
- One Source for Product Data
- Clarity on Manufacturer ID
- Provides Accurate Product Descriptions

Reference:
https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=514

6. Mayo Clinic and Cardinal Health partner to implement GLNs for patient safety and supply chain efficiency

Mayo Clinic, US

Abstract:
In July 2008, Mayo Clinic and Cardinal Health collaborated to implement the GS1 GLN as their sole account/location identifier. Both organisations agreed that the GLN project would be an innovative first step toward the 2010 GLN Sunrise.

Purpose / issues:
To replace custom account numbers in order to reduce costs and improve patient safety. Mayo Clinic firmly believes that supply chain data standards will greatly improve healthcare safety and efficiency, supporting their primary value that "the needs of patients come first."

Benefits / findings:
Price accuracy improves with location identification accuracy. Location identification errors can cause loss of discount eligibility as well as tier qualification and rebate disputes.
Price accuracy for Mayo Clinic and Cardinal Health is currently 99.5%, whereas the average supplier accuracy is 95%.

Superior price accuracy is attributed to not only GLN, but also to the commitment that both organizations make to price integrity and associated improvement efforts.

The use of GLNs improves supply chain management performance, and GLNs used in conjunction with other GS1 standards promise even greater performance. Similarly, the more supply chain partners that adopt GS1 standards, the greater the benefits for the entire industry.

Reference:
GS1 Healthcare Reference Book 2010/2011, page 24,
https://www.gs1.org/docs/healthcare/GS1_Healthcare_Reference_Book_2010-2011.pdf

7. Using GS1 standards to improve EDI accuracy and achieve the perfect order

BD, Mercy & ROi, US

Abstract:
In 2011, Becton, Dickinson and Company (BD), Mercy Health (Mercy) and its supply chain company, Resource Optimization & Innovation (ROi), launched a collaborative initiative to fully automate their order-to-cash process to achieve the "perfect order," implementing GS1 standards from manufacturing site to patient bedside. This

end-to-end integration of global data standards—in supply chain and clinical processes—by a healthcare manufacturer and provider is a first-time accomplishment in the U.S. healthcare industry.

Moving forward, the trading partners have continued to perfect and extend their perfect-order success, resulting in highly accurate and efficient processes with a continual focus on improving patient care. This review will provide an update on how the two organisations implemented EDI to achieve supply chain efficiencies and how their use of GS1 standards continues to evolve.

Purpose / issues:
To eliminate transaction errors, BD and ROi/Mercy took a phased approach to implement GS1 standards, enabling automated EDI transactions to reduce human intervention in their procurement and replenishment processes.

Benefits / findings:
By assigning GLNs, healthcare providers are not required to use the manufacturer-assigned, or distributor-assigned customer numbers for EDI, again eliminating the need to map tables and resulting potential errors. Being more efficient and eliminating supply chain errors means healthcare providers can focus their resources on patient care instead of supply chain rework. Also, eliminating supply chain errors helps to ensure that the right products arrive at the right location when needed by the clinicians

Reference:
GS1 Healthcare Reference Book 2016/2017, page 55,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_rb2016_web.pdf

8. How Intermountain Healthcare Successfully Took Ownership of its GLNs and is Embracing GS1 Standards

Intermountain Healthcare, US

Abstract:
After receiving GLNs from GPOs many providers struggle with the next steps of GS1 implementation. Intermountain took this challenge and went full speed ahead to create a successful roadmap for other organizations to follow by creating an organizational hierarchy to validate and reconcile GLNs and beta testing GLN transactional data with a small group of suppliers.

Purpose / issues:
To take ownership of its GLNs to improve efficiencies, reduce costs and enhance patient safety.

Benefits / findings:

- Improved operational efficiencies
- Reduced costs
- Enhanced patient safety

Reference:
http://www.intalere.com/Amerinet%20Documents/How%20Intermountain%20Healthcare%20Successfully%20Took%20Ownership%20of%20its%20GLNs%20and%20is%20Embracing%20GS1%20Standards.pdf

9. GS1 standards enable an integrated sterilisation management system for University of Fukui Hospital Surgical Centre

University of Fukui Hospital, Japan

Abstract:
Since 2014, the University of Fukui Hospital (Fukui Hospital) had focused on the cost-effective management of its surgical operations by using GS1 standards. The hospital has successfully achieved the traceability of surgical instruments in its surgical centre's sterilisation process by identifying each of 20,000 instruments with the GS1 Global Individual Asset Identifier (GIAI), encoded in a laser-engraved GS1 Data Matrix barcode. To date, Fukui Hospital has reduced the error rate along with the time required when assembling instruments for surgical operations by 2,000 hours per year. Fukui Hospital is the first hospital in Japan to use GS1 Global Location Numbers (GLNs) to identify each of its locations.

Purpose / issues:
To enhance patient safety and the quality of infection control.

Benefits / findings:
By using GLNs as part of its surgical container setting system, Fukui Hospital has helped reduce overall operation time by 500 hours per year.

Additionally, the management of steel instruments directly marked with GIAIs and the management of locations using GLNs have not only contribute to ensuring traceability on individual steel instruments, but also saved a total of 2,500 hours work time annually. This allows nurses to concentrate on other duties, and furthermore, can contribute to a reduction of their overtime work.

Reference:
GS1 Healthcare Reference Book 2017/2018, page 29,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_hcreferencebook_17-18.pdf

10. State-of-the-art hospital relies on GS1 standards for highly efficient and safe ways to work and care for patients

University Hospital Aarhus, Denmark

Abstract:
Constructing one of the largest hospitals in northern Europe has required a new approach to support process improvements and traceability. Five hospitals have merged to one hospital, and the new hospital now covers nearly 500,000 square meters. The hospital has 10,000 employees treating about 1,000,000 patients each year.
State-of-the-art technology has been a requirement for this transformation that has been more than ten years in the making.

Purpose / issues:
To create a foundation of global GS1 standards for innovation and technology adaption in a modern hospital.

Benefits / findings:
Today, each location in the hospital is identified by a GLN. A minimum level of usage is the exchange of GLN information between systems, yet a high level of metadata and location context information is available for systems. On top of the location database, a wayfinding system adds routes, making it possible to be guided to a location based on its identifier. Wayfinding guides are made available to patients before their arrival at the hospital to ensure a positive experience. With global standards in place, including EPCIS, the hospital can now easily locate the people and assets it needs to provide patients with timely and safe care.

Reference:
GS1 Healthcare Reference Book 2017/2018, page 12,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_hcreferencebook_17-18.pdf

11. Dijon Centre Hospitalier Universitaire (CHU): early adopter of the use of GS1 standards and identifiers in a hospital

Centre hospitalier Universitaire Dijon, France

Abstract:
The logistics platform of the CHU of Dijon opened in April 2009 and traces all of its internal deliveries using the GS1 standards. This application covers all the products received and delivered to the hospital, and more precisely health products. The platform traces internal deliveries, and needs to receive dispatch advices from suppliers and get SSCC on cartons and pallets. To ensure the traceability of internal deliveries, the CHU of Dijon has therefore identified all the places of departure, arrival and storage of the products using GLN - Global location Number. This includes 1,700 beds and nearly 6,000 GLNs.

Additionally, the delivery bins are individually identified with a GRAI - Global Returnable Asset Identifier. Handlers are identified by a GLN, this application having been put in place before the adoption of the GSRN - Global Service Relation Number for Healthcare applications.

Purpose / issues:
To ensure complete traceability of deliveries from the platform to the units of care, to monitor the stock of each unit of care, to make a targeted batch recall in the care units received product concerned.

Benefits / findings:
Overall, there are 30% fewer stocks in the facilities. All products received on the platform are recorded and stored with a GTIN, batch number and expiration date. All deliveries record the GTINs, lot number and expiration date (in FIFO=first in first out mode), Batch setback (security) and Time saving in case of withdrawal alert trigger

This results in a 60% decrease in inventory in the healthcare units with a half on the central stock of the platform for better responsiveness.

A 50% reduction in the number of storage places in the new hospital's care units, resulting in a 30% increase in the area devoted to care.

Reference:
GS1 Healthcare Reference Book 2015/2016, page 19, https://www.gs1.org/sites/default/files/docs/healthcare/gs1_healthcare_reference_book_2015-2016pdf

12. Indian Insurance Informatics Bureau (IIIB)

Hospitals in India

Abstract:
Signed a MoU early March to develop a National Hospital Registry using GLNs. The Registry will be the trusted source of reliable healthcare information in the country and will be accessible to various stakeholders including healthcare insurance companies, governmental bodies, regulators and beneficiaries.

Purpose / issues:
Build a single source of reliable, updated and authenticated information on location/contact details, treatments, and costs, etc. Each hospital is uniquely identified.

Benefits / findings:

- Avoid duplicity;
- Visibility and transparency to treatment costs for validating insurance claims;
- Enable future tariff fixing of treatments to standardise healthcare costs in the country;
- Streamline the health insurance process to speed up insurance claims settlement and handling of fraudulent claims;
- Build global visibility of Indian healthcare facilities, services and capabilities for international patients;
- Enable interoperability with other GS1 Healthcare registries;
- Enable greater analytical and reporting to drive decision making by various stakeholders in the healthcare insurance industry.
- A 50% reduction in the number of storage places in the new hospital's care units, resulting in a 30% increase in the area devoted to care.

Reference:
https://www.expresshealthcare.in/interviews/implementing-gln-for-hospitals-needs-a-mind-set-change-ravi-mathur-ceo-gs1-india/414426/
https://www.gs1india.org/content/registry-of-hospitals-launched-for-insurance-sector-rohini-

13. Plymouth Hospitals NHS Trust GLN implementation journey

Plymouth Hospitals NHS Trust in England, the UK

Abstract:

Plymouth Hospitals NHS Trust is the largest hospital in the South West Peninsula. They have a secondary care catchment population of 450,000 with a wider peninsula population of almost 2,000,000 people who can access their specialist services. The use of Global Location Numbers (GLNs) for location numbering is one of the core enablers of the Department of Health's (DH) eProcurement strategy. By introducing GLNs now, Plymouth are making sure they're on track with DH plans for compliance with GS1 standards.

Purpose / issues:
The Trust's property management system was supplied by Micad, a GS1 UK Industry Partner, and contained 6,715 locations. The room numbering conventions weren't consistent and, where the numbers themselves were attached to the doors rather than the location, this led to problems when doors or doorframes were removed or relocated. This created extra work renumbering locations when doors were moved and looking for locations that had no number label at all. The inconsistent numbering system also made it difficult to find locations without a floor plan. Also, there was little or no consistency across different software systems, with the same location being referred to differently in each system. The replication of data also introduced the potential for information to be stored incorrectly for example, when a cost centre changed, this information wasn't cascaded to other systems.

Benefits / findings:
The Trust introduced GLNs as a way of managing their locations in a cost-effective and consistent way. The GLN provides a unique number to every location, and this will eventually allow the Trust's property management system to route information to the other systems with no manual involvement. The next stage will be to make sure that the high priority in-Trust systems are all using GLN identifiers (the Trust has around 240 systems in total) with associated interoperability benefits.

How did GS1 standards help?	What are the benefits?
Standardisation across systems	Inter-operability between systems using locations
Barcoded labels available in every location	Time saving - staff can scan the barcode instead of manually entering data
Using GLNs standardised the naming and labelling conventions for Plymouth physical locations	Removes time spent looking for incorrectly labelled rooms Less ambiguity around ownership and occupancy of locations
All areas now have a barcode associated to a physical location	Some locations could not be identified before
Up to date registry	The Trust has a complete record of its spaces with governance to ensure future compliance

Reference:
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_hcreferencebook_17-18.pdf

14. eProcurement at St James's Hospital, Dublin

St James's Hospital, Ireland

Abstract:
In 2013, St James's Hospital (SJH) embarked on a proof-of-concept (POC) project in conjunction with a number of suppliers to automate the end-to-end ordering process. The objective of the POC was to fully standardise and automate the ordering process between the hospital and the supplier. The process replaces paper-based systems and provides direct links between financial and clinical systems. The globally unique GS1 identification keys for products and locations are at the heart of this solution enabling automation and traceability. In September 2014, St James's Hospital went live with their first supplier, Cruinn Diagnostics. SJH now invites all suppliers to join the programme (which is based on the full adoption of GS1 standards).

Purpose / issues:

To fully standardise and automate the ordering process between the hospital and the supplier.

Benefits / findings:

- Improved patient safety with consequential reduction in duplicate patient procedures
- Increased ability for accurate traceability and recall
- Standardisation and increased accuracy of product information
- Elimination of inefficient paperwork and duplication of data input
- Reductions in stock holdings and level of waste stocks
- Reduction in number of credit notes generated
- Automatic invoice matching
- More efficient utilisation of supply chain management and finance resources.

Reference:
GS1 Healthcare Reference Book 2015/2016, page 23,
https://www.gs1.org/sites/default/files/docs/healthcare/gs1_healthcare_reference_book_2015-2016.pdf

15. Leeds Teaching Hospital takes huge savings in time and spends it on patient care

Leeds Teaching Hospital, England

Abstract:
Leeds Teaching Hospitals NHS Trust (LTHT) is one of the largest in England with more than 2,000 beds across eight hospitals. The two main hospitals are the Leeds General Infirmary and St James' University Hospital with over 17,000 staff, 1.1 million out-patient appointments annually and delivering regional specialist care for up 5.4 million people.

Purpose / issues:
Based on the need for greater efficiencies, improved patient safety and lower costs, LTHT decided to focus on standardising the way it captured data.

Benefits / findings:
As a result, LTHT implemented Scan4Safety, a programme designed to leverage GS1 standards and barcodes to track patients, products and locations. The benefits for both LTHT and its patients have been immense. From improvements in inventory to more time with patients, Leeds hospitals are taking an incredible journey as they scan for safety.

Reference:
GS1 Healthcare Reference Book 2018/2019, page 46,
https://www.gs1.org/sites/default/files/docs/healthcare/Reference-Book/190156_GS1_RB2018_Final_SinglePages_Web_092018.pdf

16. Using Global Location Numbers for a unique identification system in Swiss healthcare

Switzerland

Abstract:
In the early 1990s, a group of visionaries stated that the current way to identify actors in the Swiss healthcare industry was far from sustainable and very inefficient. Every actor— such as healthcare manufacturer, distributor, hospital, pharmacy or medical doctor—was identified in multiple ways. With lack of standardisation, accuracy was impossible and efficiencies in healthcare processes were nonexistent.

Purpose / issues:
The visionaries understood that new processes would only be possible if a robust, accurate and scalable identification system was provided by a neutral source for all of the Swiss healthcare industry. Now, for nearly 30 years, this solution enabled by the GS1 Global Location Number (GLN) has been in place. Global Location Numbers support the needed identification system by uniquely identifying each of the actors and their locations.

Benefits / findings:
The GLN has proven to be the “right choice” in standardising and simplifying the identification of all stakeholders, offering significant benefits for the Swiss healthcare system. By choosing the GS1 GLN as the global identification key, the visionaries have strengthened the use of GS1 standards in the healthcare industry and helped stakeholders understand how globally unique identification can link master data and improve logistical and clinical processes.

Reference:
GS1 Healthcare Reference Book 2018/2019, page 96,
https://www.gs1.org/sites/default/files/docs/healthcare/Reference-Book/190156_GS1_RB2018_Final_SinglePages_Web_092018.pdf

Refer to the Glossary on the GS1 website for a complete listing and definition of terms.