Healthcare

Building a GLN Hierarchy

Best Practice Guide

Release 3.0, October 13, 2023
# Table of Contents

1. **Executive Summary** ........................................................................................................................................ 4

2. **Introduction** .................................................................................................................................................. 6

3. **Allocating/Assigning GLNs** .......................................................................................................................... 8
   3.1 Naming Practices ........................................................................................................................................... 8

4. **Understanding Location Types** .................................................................................................................... 9
   4.1 Corporate / Parent Organizational Entity ................................................................................................. 9
   4.2 Bill-to / Paid-by........................................................................................................................................... 9
   4.3 Sold-to ....................................................................................................................................................... 10
   4.4 Ship-to ..................................................................................................................................................... 10
   4.5 Deliver-to ............................................................................................................................................... 10

5. **Understanding GLN Types** .......................................................................................................................... 12

6. **Use Deliver-to GLNs in SDQ Segments** ........................................................................................................ 13

7. **General Structure of a GLN Hierarchy** ........................................................................................................ 14

8. **Sample GLN Hierarchies** ............................................................................................................................. 15
   8.1 Hierarchical Structure ............................................................................................................................... 15
   8.2 Detailed Structure ..................................................................................................................................... 16
   8.3 Owned vs. Leased Structures .................................................................................................................... 17
   8.4 340B Hierarchy ....................................................................................................................................... 18
   8.5 Hierarchy Structure for Divestures and Acquisitions ............................................................................. 20
   8.6 Hierarchy Structure for Manufacturers ................................................................................................. 21
   8.7 Hierarchy Structure for Distributors and/or Wholesalers ..................................................................... 21

9. **References** ................................................................................................................................................... 22
About GS1

GS1® is a neutral, not-for-profit, global organization that develops and maintains the most widely used supply chain standards system in the world. GS1 Standards improve the efficiency, safety, and visibility of supply chains across multiple sectors. With local Member Organizations in over 110 countries, GS1 engages with communities of trading partners, industry organizations, governments, and technology providers to understand and respond to their business needs through the adoption and implementation of global standards. GS1 is driven by over a million user companies, which execute more than six billion transactions daily in 150 countries using GS1 Standards.

About GS1 US

GS1 US®, a member of GS1 global, is a not-for-profit information standards organization that facilitates industry collaboration to help improve supply chain visibility and efficiency through the use of GS1 Standards, the most widely used supply chain standards system in the world. Nearly 300,000 businesses in 25 industries rely on GS1 US for trading partner collaboration that optimizes their supply chains, drives cost performance and revenue growth, while also enabling regulatory compliance. They achieve these benefits through solutions based on GS1 global unique numbering and identification systems, barcodes, Electronic Product Code (EPC®)-based RFID, data synchronization, and electronic information exchange. GS1 US also manages the United Nations Standard Products and Services Code® (UNSPSC®).

About GS1 Healthcare

GS1 Healthcare is a global, voluntary healthcare user group developing global standards for the healthcare supply chain and advancing global harmonization. GS1 Healthcare consists of participants from all stakeholders of the healthcare supply chain: manufacturers, wholesalers, and distributors, as well as hospitals and pharmacy retailers. GS1 Healthcare also maintains close contacts with regulatory agencies and trade organizations worldwide. GS1 Healthcare drives the development of GS1 Standards and solutions to meet the needs of the global healthcare industry and promotes the effective utilization and implementation of global standards in the healthcare industry through local support initiatives like GS1 Healthcare US® in the United States.

About GS1 Healthcare US

GS1 Healthcare US® is an industry group that focuses on driving the adoption and implementation of GS1 Standards in the healthcare industry in the United States to help improve patient safety and supply chain efficiency. GS1 Healthcare US brings together members from all segments of the healthcare industry to address the supply chain issues that most impact healthcare in the United States. Facilitated by GS1 US, GS1 Healthcare US is one of over 30 local GS1 Healthcare user groups around the world that supports the adoption and implementation of global standards developed by GS1.
### Document Summary

<table>
<thead>
<tr>
<th>Document Item</th>
<th>Current Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Title</td>
<td>Best Practice Guide for Building a GLN Hierarchy</td>
</tr>
<tr>
<td>Date Last Modified</td>
<td>10/13/23</td>
</tr>
<tr>
<td>Document Description</td>
<td>This document offers definitions of key concepts, examples of hierarchy structures, and best practices for defining a GLN hierarchy.</td>
</tr>
</tbody>
</table>

### Log of Changes

<table>
<thead>
<tr>
<th>Release Number -- Date</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release 3.0 October 13, 2023</td>
<td>Updated section 8.4 on 340B hierarchy</td>
</tr>
<tr>
<td>Release 2.0 August, 2012</td>
<td></td>
</tr>
</tbody>
</table>
1 Executive Summary

GS1 Global Location Numbers (GLNs) enable all supply chain partners to identify the same location or party using one, globally unique identifier. GS1 US Data Hub® | Location is a single source of information for GLNs. All supply chain locations and parties for an organization are brought together and can be presented in a GLN hierarchy defined by the organization.

A GLN hierarchy is a classification structure presenting organizational locations arranged in levels of detail from the broadest to the most detailed. Although it can resemble an organization chart, the purpose of a GLN hierarchy is not to define the legal or corporate structure. Rather, the purpose is to define a relational structure of supply chain locations that supports supply chain operations.

Defining a well-thought-out supply chain structure and GLN hierarchy is an essential part of the process of setting up GLNs to transact business. However, every organization is different. There is no one, standard supply chain structure that fits all companies – and thus no one GLN hierarchy template. However, there are some general principles and best practices for companies to follow when creating a GLN hierarchy, and the GS1 Healthcare US® Location Identification Workgroup created this document to explain some of those high-level concepts and best practices. To that end, this document offers definitions of key concepts, examples of hierarchy structures, and best practices for defining a GLN hierarchy.
## Introduction

The Global Location Number (GLN) is the globally unique GS1 Identification key for locations and parties. Using GS1 Standards and guidance, organizations assign GLNs to various supply chain locations and parties within their organization to facilitate precise identification within business communications and transactions. For example, the questions below reveal some of the supply chain locations and parties that need to be identified with GLNs to support supply chain transactions:

- Who is the buying organization?
- Where will the products be received/shipped?
- Who will receive the invoice?
- Who is the selling organization?
- Where are payments sent?
- Where are products inventoried?

Within GS1 US Data Hub | Location, all supply chain locations and parties for an organization can be brought together and presented in a GLN hierarchy, a classification structure presenting organizational GLNs arranged in levels of detail from the broadest to the most detailed. It is not a view of an organization's corporate or legal structure. Rather, it is a multi-level view of an organization based on supply chain locations and parties (e.g., Bill-to locations; Ship-to locations; Deliver-to locations; etc.). Figure 1 below presents a hypothetical GLN hierarchy illustrating how various supply chain locations and parties come together in a GLN hierarchy.

**Figure 1: Example of a GLN Hierarchy**

The purpose of a GLN hierarchy is to define a structure of supply chain locations and parties that supports supply chain processes and transactions. Although every organization is different, there are some high-level concepts and best practices that can help organizations define their GLN hierarchy. Those high-level concepts and best practices are provided throughout the remainder of this guide.
Figure 2: Example of a GLN Hierarchy to support the Drug Supply Chain Security Act

This diagram identifies the GLN enumeration requirements of Electronic Product Code Information Services (EPCIS) to support serialized unit-level traceability in an interoperable manner for the Drug Supply Chain Security Act (DSCSA). The figure identifies the Bill-to/Sold-to GLNs as Level 1 and 2 in addition to Ship-to locations as Level 3. The Bill-To or also known as Sold-To is critical for DSCSA as it is a change of ownership law and identify the party that has ownership of the product. As the Ship-To GLN is important to enable the physical traceability of the product.
3 Allocating/Assigning GLNs

GLNs are used to identify **functional entities** (like a hospital pharmacy or accounting department), **fixed physical locations** (like a warehouse or hospital wing or even a nursing station), and/or **legal entities** (like a health system corporation). Other GLN types are **mobile physical locations** (Mobile Clinic) and **digital locations** (EDI Gateway). GLNs are assigned to locations to support supply chain transactions. For example, trading partners will assign one of their own unique GLNs for the following types of locations to support supply chain transactions and communications:

- Location where orders are placed
- Location where orders are processed (e.g., Customer Service)
- Location where products are shipped from
- Location where products are received
- Location where invoices are sent
- Location where payments are sent

There is no one, standard supply chain structure that fits all companies. For example, the **location where orders are placed** and the **location where payments are sent** may be the same for Supplier A. In that case, Supplier A could assign one GLN to the location, and that one GLN would then be used in supply chain transactions to indicate both the **location where orders are placed** and the **location where payments are sent**. In contrast, the **location where orders are placed** and the **location where payments are sent** may be two different locations for Supplier B. In this case, Supplier B would assign a unique GLN to each location, and then one GLN would be used in supply chain transactions to indicate the **location where orders are placed**, and the other GLN would be used to indicate the **location where payments are sent**.

---

**Best Practice(s) for Assigning GLNs**

Because every organization is different, it is important to understand how your organization operates and what you are trying to accomplish with the use of the GLN. This insight is essential for determining what locations need a unique GLN assigned to them, and how to structure all of those GLNs in your organization’s hierarchy.

If using an EPCIS based system to provide and maintain Transaction Information (TI) and Transaction Statement (TS) for DSCSA then enumerating the "Sold-from," "Sold-to," "Ship-from" and "Ship-to" locations (and parties) are critical.

- At a minimum, a separate GLN is needed for each physical location that a Trading Partner ships product from and to. The "Sold-from" and "Sold-to" identify the parties involved in the change of ownership.
- These GLNs can be the same or different based on the organization structure. For example, a GLN could represent both the "Ship-to" and "Sold-to."
- Some organizations set up one GLN to identify the corporate entity as the "Sold-to" and then set up additional "Ship-to" GLNs to identify multiple shipping locations.
- There is also the option to identify location information in EPCIS with greater granularity (i.e., Floor or Suite #), but this is not required for DSCSA.

See section 4.6 for 340B GLN Enumeration recommendations for Ship-to pertaining to DSCSA.

---

3.1 Naming Practices

For the Location name, assign the "name" of the GLN which can be a party, company, department, etc. that you are identifying as you want described. You can also assign a second Location Name. For example, you want to identify the name in another language, or if the legal name and trade name have slight variations, or if you want to provide additional clarification.
4 Understanding Location Types

There are several different types of locations to be specified in supply chain transactions. Figure 3 provides examples of some common location types. (NOTE: Figure 3 is not intended to depict dependencies or relationships.)

4.1 Corporate / Parent Organizational Entity

The Corporate location is generally the organization’s main office or corporate headquarters. (The official name of this location type is “Parent Organizational Entity.”) The Corporate location is the top level of the organization and may be used to tie the entire “system” together for total spend reporting purposes. This is the location where a supplier would send information that needs to be disseminated to your entire organization. Examples: a corporate office; the business office of a smaller hospital or clinic; or the only office in a single physician practice or small clinic.

Best Practice(s) for the Corporate location/ Parent Organizational Entity

The GLN for the Corporate location is usually the top level of the GLN hierarchy that is used to tie the organization’s GLNs together. Beyond that, it is possible that no commerce will occur at this level for a large organization.

4.2 Bill-to / Paid-by

The Bill-to location is the location where invoices are sent for payment. This may be an office next to the receiving dock, a department in another building, etc. The Paid-by location is the location or party that pays the bills (e.g., third party).

Best Practice(s) for Bill-to / Paid-by locations and parties

- In many cases, invoices are sent to and paid by the same location. In this scenario, either the same GLN would be used for both location types, or alternatively only a Bill-to would be implemented.
- In other cases, invoices go to one department for approval and then to a central accounts payable office (or a third party) for actual payment. In this scenario, the Bill-to would be the GLN for the location that receives and approves the invoice. The Paid-by would be the GLN for the location cutting the check.
- It may also help to think about the path paper invoices follow within your organization to best define these location types.
- EDI invoices may be handled differently based on system automation.
4.3 Sold-to

Sold-to is a party or location with whom the sales agreement is negotiated. This is the entity taking ownership of the products/goods.

Best Practice(s) for Sold-to locations and parties

- In many cases, the sold-to is identified as an entity/party GLN. The GLN will identify a party which allows the location details to be dynamic. Where a location GLN is tied to static location details.
- Sold-to can also be the Bill-to or Corporate/Parent Organizational Entity.

Sold-to is critical for DSCSA to identify the change of ownership while Ship-to is important for the traceability of products.

4.4 Ship-to

The Ship-to location is a top-level location where the supplier “drops” products that were ordered. This is normally a bulk delivery location where trucks unload pallets or boxes of goods and supplies (e.g., receiving dock, central warehouse, etc.). Most often, this is not the final destination for the products. However, for most businesses, this is where ownership of the goods transfers from the vendor/supplier to the customer.

Note: Use Case Perspectives for Ship-to locations and parties

- There may be a need to create multiple Ship-to GLN’s for the same physical address in order to accommodate legal, regulatory and/or tax distinctions.
- For example, 340B is an outpatient drug pricing program that limits the cost manufacturers can charge “covered entities” for outpatient drugs. If part of an organization has 340B status and part does not, trading partners may prefer the organization to have one Ship-to GLN for the part of your organization that has a 340B and a separate Ship-to GLN for the part of your organization that does not, even though both may be at the same physical address. (NOTE: 340Bs are discussed in more detail later in this document).

Caution: From a DSCSA transaction perspective, having duplicate Ship-to locations can hinder the ability to transact a combined shipment of 340B products and non-340B products in an aggregated SSCC and therefore would require separate shipments.

- Similarly, an organization may have a need to create multiple Ship-to GLN’s for the same physical address in order to accommodate tax distinctions based on the nature of their business (e.g., taxable vs. non-taxable; for profit vs. non-profit; etc.).

4.5 Deliver-to

A Deliver-to location is a location deeper within a Ship-to location. This is usually a department or specific area within the business [e.g., Just-In-Time (JIT) location, nursing station, floor, lab, etc.]. Often, Deliver-to location is the final destination for the products.
### Best Practice(s) for Deliver-to locations and parties

- If products are only taken from the receiving dock to the final destination by internal staff, this location may not need to have a GLN assigned to it because the supplier is not involved with the delivery to the final destination. In this case, assigning a GLN to this location is optional.

- If suppliers provide the “internal delivery” service or desk-top delivery, this location should have a GLN assigned to it in order to accurately identify the Deliver-to location in supply chain transactions.
5 Understanding GLN Types

GLNs can be used to answer the question of "where" business-related transactions occur for physical and digital locations. GLNs can also identify "who" is involved within business-related transaction by identifying the party.

Physical Locations answer "where?":
- Fixed Physical Location: a tangible place that does not change locations and may be represented by an address, coordinates, or other means.
- Mobile Physical Location: a tangible place that is expected to change locations and may be represented by an address, coordinates, or other means. This GLN Type cannot be added if the GLN already contains the Fixed Physical Location GLN Type.
- Physical Locations are split into fixed physical location and mobile location. Only one of the two can be associated to a specific GLN.
- Digital Location: An electronic (non-physical) address that is used for communication between computer systems.

Parties answer "who?:
- Legal Entity: any business, government body, department, charity, individual, or institution that has standing in the eyes of the law and has the capacity to enter into agreements or contracts.
- Function: an organizational subdivision or department based on the specific tasks being performed, as defined by the organization. A GLN can be used to identify a single party or location or a combination of legal entity, function, physical location, and digital location. This value designates exactly what a GLN is being used to identify.
  
  Note: A P.O. Box should only be used for legal and functional entity identifiers.

A GLN can be used to identify a single legal entity, function, physical location, or digital location. These different options are known as GLN types.

GLN A 0012345000003
GLN B 0012345000010
GLN C 0012345000027
GLN D 0012345000034

GLN may also be used to identify a combination of GLN types.

GLN E = 0012345000041

Allocation option comparison
- 1 GLN = 1 GLN Type
  - Always clear on what is being referred to
  - Simplified application of management rules, attributes, validation rules
  - Noted as being less confusing for users when creating/managing GLNs
  - May support consistency and quality of data
- 1 GLN = >1 GLN Type
  - All GS1 standards permit this
  - Existing GLNs in use may already be used to identify more than one GLN type
  - It may be deemed cost prohibitive to take this route
  - Systems will require logic to consume GLNs with more than one GLN type
6 Use Deliver-to GLNs in SDQ Segments

The Ship Destination Quantity (SDQ) segment is typically used in a low unit-of-measure environment where suppliers deliver products to end departments because the customer only has a small storeroom. In these applications, the information in the SDQ segment is used to identify the end department where suppliers are to deliver the products [e.g., Labor & Delivery, Operating Room (OR), Nurses Station Level 1, Intensive Care Unit (ICU), etc.]. Often, internal identifiers are used in the SDQ segment to indicate the specific departments where the products are to be delivered.

However, a better approach is to assign GLNs to those end departments and use those GLNs to specify the Deliver-to locations in the SDQ segment instead of internal identifiers.

<table>
<thead>
<tr>
<th>Transaction Segment</th>
<th>Location</th>
<th>Location Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1 BT segment</td>
<td>General Hospital</td>
<td>GLN 0012345000003</td>
</tr>
<tr>
<td>N1 ST segment</td>
<td>Central Receiving</td>
<td>GLN 0012345000010</td>
</tr>
<tr>
<td>SDQ segments</td>
<td>Labor &amp; Delivery</td>
<td>Dept.-92000 GLN</td>
</tr>
<tr>
<td></td>
<td>Nurses Station Level 1</td>
<td>Dept.-77000 GLN</td>
</tr>
</tbody>
</table>

**Figure 4: Purchase Order for a Single Provider using Internal Identifiers in SDQ Segments**

![Purchase Order](image)

Best Practice(s) for SDQ Segments

Use Deliver-to GLNs to specify internal location(s) to which products are to be delivered.
7 General Structure of a GLN Hierarchy

As discussed above, a GLN hierarchy is a multi-level view of an organization based on supply chain functions and locations (e.g., Bill-to locations; Ship-to locations; Deliver-to locations; etc.). Although there is no one GLN hierarchy template that fits all companies, there is a general structure for GLN hierarchies. In general, GLN hierarchies are multi-level structures. The levels in the general structure are defined as follows:

**Level One (1)** is the Main Parent. This should be a location that actively receives products or is the corporate entity.

**Level Two (2)** is any entity that reports directly to the Main Parent.

**Level Three (3)** is other buildings and/or the subordinate departments of Level Two.

Additional levels could be used for desktop delivery or Just-in-Time ("JIT") locations.

---

**Best Practice(s) for Hierarchy levels**

- Best practice is to limit initial hierarchies to *Ship-to* levels. More mature implementations can add *Deliver-to* locations later.
- Be sure to differentiate clearly between *Ship-to* versus *Deliver-to* locations.

---

Figure 5 below identifies the hierarchy levels of the hypothetical GLN hierarchy from Figure 1 above in order to illustrate each level and the types of locations that can be found on each level.

**Figure 5: Levels of a GLN Hierarchy**
8  Sample GLN Hierarchies

A GLN hierarchy is a multi-level view of an organization created to support order-to-cash transactions and the use of the GLNs within the managing organization. This section presents two different GLN hierarchy structures as examples. However, it is important to note that a GLN hierarchy does not answer all of the relationship questions between trading partners. Keep in mind that hierarchy design may impact your trading partners in your collaborative business relationship.

8.1  Hierarchical Structure

This hierarchy example shows how Deliver-to GLNs and Ship-to GLNs roll up into Bill-to GLNs, and eventually to the Corporate GLN in GS1 US Data Hub | Location. NOTE: Companies often use Bill-to and Ship-to terminology differently. Therefore, it is important to focus on the structure presented in Figure 6, not the titles.

Figure 6: Sample GLN Hierarchy Using a Hierarchical Structure

Table 1: Pros and Cons of Using a GLN Hierarchy with a Hierarchical Structure

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Clear relationship between <em>Bill-to</em> and <em>Ship-to</em> to Corporate</td>
<td>▪ May not reflect the actual organization of the company</td>
</tr>
<tr>
<td>▪ Would not require cross-referencing between buyer and seller <em>Bill-to Ship-to</em></td>
<td>▪ <em>Delivery-to</em> locations under the <em>Ship-to</em> level might be billed to a different location than the <em>Ship-to</em></td>
</tr>
<tr>
<td>▪ Establishes a best practice for hierarchy setup that allows for easy linking or movement from one corporation to another</td>
<td>▪ More maintenance or validating that <em>Bill-to</em> and <em>Ship-to</em> are depicted correctly</td>
</tr>
</tbody>
</table>
8.2 Detailed Structure

This hierarchy presents a structure that does not include a relationship between Bill-to and Ship-to in order to demonstrate that such a relationship is not required or necessary.

Figure 7: Sample GLN Hierarchy Using a Detailed Structure

Table 2: Pros and Cons of Using a GLN Hierarchy with a Detailed Structure

<table>
<thead>
<tr>
<th>Pro’s</th>
<th>Con’s</th>
</tr>
</thead>
</table>
| - Does not limit the *Ship-to* relationship to multiple *Bill-to’s* | - Would require cross-referencing between buyer and seller for *Bill-to / Ship-to*  
- Not a clear relationship between *Bill-to / Ship-to* to corporate  
- May not establish a hierarchy allowing for easier linking or movement from one corporation to another (more maintenance) |
8.3 Owned vs. Leased Structures

Figure 8: Sample GLN Hierarchy for Owned vs. Leased Structure
8.4 340B Hierarchy

PHS-340B ("340B") is an outpatient drug pricing program that limits the cost manufacturers can charge "eligible covered entities" for outpatient drugs. Manufacturers participating in the Medicaid Drug Rebate Program are required to offer 340B pricing to eligible covered entities. 340B accounts are set-up based on outpatient pharmacy requests for product that is reimbursed based on Medicare/Medicaid. Regardless of how the facility manages inventory, a 340B location may have its own GLN in order to accommodate contracting and reporting based on reimbursement. This section presents three options for setting up 340B accounts in GS1 US Data Hub | Location. It offers guidance to suppliers, providers, and trading partners on how to create their account hierarchy to support the use of GLNs for 340B accounts and suggestions on what will work based on internal ERP account structures.

**Best Practice(s) for 340B Accounts – Option 1**

**Providers:** To minimize the number of GLNs a provider would have to setup, the recommendation is to:
- setup a GLN for the 340B account as a *Ship-to* under the *Bill-to* hierarchy to which it would be associated,
- enter “Outpatient 340B – PHS” in Address Line 3 in GS1 US Data Hub | Location and flag it as a *Deliver-to*, and then send the 340B GLN in the N1 ST UL segment.

**Suppliers:** If invoices are submitted to the same location as non-340B accounts, set-up your systems to control the hierarchy based on what is outlined below. The 340B would become a *Bill-to* / *Ship-to* account tied to the invoicing account.

**Figure 9: Example of a GLN Hierarchy with a 340B Account using Best Practice Option 1**

![GLN Hierarchy Diagram](image-url)
The advantage of Option 1 is that it enables the provider to identify the 340B GLN as a Deliver-to location, which is more aligned with its actual purpose. Again, this will be based on how the GLN for the 340B account will be communicated to the supplier from whom you are ordering and how your system is set-up.

---

**Best Practice(s) for 340B Accounts – Option 2**

**Provider:** Add a *Ship-to* or *Deliver-to* GLN under the *Ship-to* hierarchy associated with the pharmacy depending on how your pharmacy wants the shipments set-up.

**Supplier:** Set-up the provider GLN in your system based on how you control the pricing. If pricing is loaded at a *Bill-to* account:

- create an account number for the 340B with the attention line that matches the provider setup from GS1 US Data Hub | Location,
- classify the account as a *Bill-to* / *Ship-to* for invoicing and shipping purposes, and
- link the *Bill-to* / *Ship-to* internal account with the GLN of the parent account and with the GLN for where invoices are routed as well.

---

**Figure 10: Example of a GLN Hierarchy with a 340B Account using Best Practice Option 2**

![GLN Hierarchy Diagram](image-url)
Best Practice(s) for 340B Accounts – Option 3

**Provider:** Do not add a separate *Ship-to* or *Deliver-to* GLN.

**Supplier:** No action necessary, use existing account set up for 340B transaction.

Figure 11: Example of a GLN Hierarchy with a 340B Account using Best Practice Option 3

The advantage of Option 3 is that it enables the supplier to ship using EPCIS a combined shipment to the Contract Pharmacy, which is acting as an agent for the Covered Entity, of both 340B covered products and non-340B products in one SSCC (Serialized Shipping Container Code). This enables as an example shipping one tote of combined products versus 2 or more totes of separated product to the same location on the same day.

8.5 Hierarchy Structure for Divestures and Acquisitions

The GLN Allocation Rules should be followed for all acquisitions, whether it is a supplier purchasing another supplier or a hospital purchasing another hospital. There are many factors’ suppliers will review and decide when purchasing a new company. The decision to establish a new GLN for an acquired supplier facility is dependent on the supplier’s internal processes and decisions.

The GLN Allocation Rules should be followed for all divestitures. When a supplier or provider divests a business group or a product line, the divesting company needs to validate how they will conduct business for that group and/or product line going forward and follow the applicable timelines in the guideline.
8.6 Hierarchy Structure for Manufacturers

There is no real difference in designing a GLN structure for a manufacturer versus a provider. Therefore, manufacturers should follow the same rules. Although manufacturers may define some of the attributes differently for their locations and parties, the decisions about hierarchy structure can be guided using the same information provided above.

Once the decisions about hierarchy structure have been made, manufacturers need to decide their approach for adding GLNs to GS1 US Data Hub | Location. Manufacturers may choose not to add all of their GLNs to GS1 US Data Hub | Location at this time. For example, some manufacturers have elected to keep a worksheet with the GLNs for all of their locations and parties (e.g., customer service locations, manufacturing, distribution centers, etc.), and only add the GLNs for their customer service and P.O. Box locations based on current use. Decisions regarding which GLNs to add to GS1 US Data Hub | Location and when are left to manufacturers to determine based on what works best for them.

8.7 Hierarchy Structure for Distributors and/or Wholesalers

Distributors use of GLNs to identify locations and parties as a seller versus buyer: The decision of how a distributor/wholesaler identifies their locations and parties in the GS1 US Data Hub | Location is truly up to them. However, there is no need for multiple GLNs to be assigned to the same location based on different contracts within a supplier. The need to have separate GLNs within the same location could be based on product inventory, but the GLNs should not drive how they monitor or control inventory.

Figure 12: Example of a GLN Hierarchy for a Distributor/Wholesaler
9 References

- *GS1 Standards in Use in Healthcare*
- *Best Practice Guide for Implementing GLN in Trace, Chargeback & Rebate Processes*
- *Guidance for Implementing GLNs and GTINs in Order-to-Cash Transactions*
- *How to Identify your Location for DSCSA Requirements*
- *Healthcare GLN Implementation Guideline*
- *GLN Quick Start Guide for Dispensers*
- *GLN Quick Start Guide for Suppliers*
- **GS1 US Data Hub | Location** [https://www.gs1us.org/tools/gs1-us-data-hub/location](https://www.gs1us.org/tools/gs1-us-data-hub/location)
- **Attend GS1 US Data Hub | Location User Group meetings**
  o Meeting the third Thursday of every month, the GS1 US Data Hub | Location User Group gives you the opportunity to ask questions and learn best practices from other industry members which the facilitator provides updates about the tool. Apply for membership through the GS1 US Community Room: [community.gs1us.org/join](community.gs1us.org/join).
Proprietary Statement
This document contains proprietary information of GS1 US. Such proprietary information may not be changed for use with any other parties for any other purpose without the expressed written permission of GS1 US.

Improvements
Improvements and changes are periodically made to publications by GS1 US. All material is subject to change without notice. Please refer to GS1 US website for the most current publication available.

Disclaimer
Except as may be otherwise indicated in specific documents within this publication, you are authorized to view documents within this publication, subject to the following:

1. You agree to retain all copyright and other proprietary notices on every copy you make.
2. Some documents may contain other proprietary notices and copyright information relating to that document. You agree that GS1 US has not conferred by implication, estoppels, or otherwise any license or right under any patent, trademark, or copyright (except as expressly provided above) of GS1 US or of any third party.

This publication is provided “as is” without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Any GS1 US publication may include technical inaccuracies or typographical errors. GS1 US assumes no responsibility for and disclaims all liability for any errors or omissions in this publication or in other documents which are referred to within or linked to this publication. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Several products and company names mentioned herein may be trademarks and/or registered trademarks of their respective companies. GS1 US does not, by promulgating this document on behalf of the parties involved in the creation of this document, represent that any methods, products, and/or systems discussed or recommended in the document do not violate the intellectual property rights of any third party. GS1 US has not performed a search to determine what intellectual property may be infringed by an implementation of any strategies or suggestions included in this document. GS1 US hereby disclaims any liability for any party’s infringement of intellectual property rights that arise as a result of any implementation of strategies or suggestions included in this document.

This publication may be distributed internationally and may contain references to GS1 US products, programs, and services that have not been announced in your country. These references do not imply that GS1 US intends to announce such products, programs, or services in your country.

GS1 US shall not be liable for any consequential, special, indirect, incidental, liquidated, exemplary, or punitive damages of any kind or nature whatsoever, or any lost income or profits, under any theory of liability, arising out of the use of this publication or any content herein, even if advised of the possibility of such loss or damage or if such loss or damage could have been reasonably foreseen.

GS1 US HEREBY DISCLAIMS, AND YOU HEREBY EXPRESSLY RELEASE GS1 US FROM, ANY AND ALL LIABILITY RELATING TO YOUR COMPLIANCE WITH REGULATORY STANDARDS AND LAWS, INCLUDING ALL RULES AND REGULATIONS PROMULGATED THEREUNDER. GS1 US MAKES NO WARRANTIES OF ANY KIND RELATING TO THE SUITABILITY OF THE GS1 STANDARDS AND THE SPECIFIC DOCUMENTS WITHIN THIS PUBLICATION TO COMPLY WITH ANY REGULATORY STANDARDS, LAWS, RULES, AND REGULATIONS. ALL INFORMATION AND SERVICES ARE PROVIDED “AS IS.”

*GS1 US employees are not representatives or agents of the U.S. FDA, and the content of this publication has not been reviewed, approved, or authorized by the U.S. FDA. The following information contained herein is for informational purposes only as a convenience, and is not legal advice or a substitute for legal counsel. GS1 US Inc. assumes no liability for the use or interpretation of the information contained herein.

No Liability for Consequential Damage
In no event shall GS1 US or anyone else involved in the creation, production, or delivery of the accompanying documentation be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other loss) arising out of the use of or the results of use of or inability to use such documentation, even if GS1 US has been advised of the possibility of such damages.

IAPMO
In this publication, the letters “U.P.C.” are used solely as an abbreviation for the “Universal Product Code” which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.

*If applicable