Germany

How GLNs Contribute to the Standardisation Efforts at Charité University Hospital

ABSTRACT

The basic information in the healthcare supply chain needs to be accurate, up to date, and synchronised. Even though today information and data are more easily accessible than ever before, the healthcare system is still an immature and expensive system with significant barriers to efficiency. Poor data impacts patient safety when the supply chain fails to deliver the right product, to the right patient, at the right time. Common standards are required to effectively control both cost and quality in healthcare.

By **Muazzez Weiß**

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.

Charité mission statement: play an active role

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.

"It is important that organisations take ownership of their data. We did not want to rely on a third party identifying a shipping location. We believe in global, accepted standards, and the efficiencies that can be gained across the supply chain by implementing GS1 Standards."

"Only we can be responsible for knowing who we are"

The Charité situation was considered challenging due to its geographical split, with four sites throughout Berlin:

- Campus Berlin Buch (CBB), located in the north of Berlin
- Campus Virchow-Klinikum (CVK), located in the center of Berlin
- Campus Benjamin Franklin (CBF), located in the south of Berlin
- Charité Management as well as Charité Campus Mitte (CCM) situated in a 4th location in Berlin

In addition, each location may also have several additional delivery addresses. In total, more than 15,000 addresses need to be maintained.

Project steps

The project stakeholders agreed to the following project phases:

- Validate the address information[1] and reconcile any discrepancies
- Assign a GLN to all active shipping addresses
- Upload the assigned GLNs to GEPIR (www.gepir.org) in order to make the GLNs visible to all trading partners
- Verify the process by using the GLN throughout the whole transaction cycle and demonstrate end-to-end success
- Establish a process in order to maintain and update the GLN registry in GEPIR on a daily basis. The process can be initiated by the functional department and be fully supported by an automated web-based solution including a final approval step.

1 *GLNs must have proper alignment with the daily operations and the application they are used for; therefore, it is recommended to determine which locations truly need to be identified with a GLN.*

Project outcomes using GLNs

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

Overall benefits

The project was very successful and resulted in diverse benefits that not only increase patient safety but also improve the hospital's efficiency and information accuracy.

- Improved infrastructure and data accuracy set the stage for process optimisation and patient safety initiatives
- Use of GLNs within healthcare facilities promotes reliable identification of precise locations within the facility. This supports caregivers' efforts to ensure that the right product, procedure, and/or treatment are delivered to the right location
- Real-time encoding of product usage and consumption allows an efficient documentation and account billing
- GLNs facilitate a streamlined product recall process by precisely identifying specific locations where recalled items were received, stored, and/or used

Greater transparency, safety, and quality

Charité also initiated an additional project consisting on the implementation of standardised bar coding in order to improve the time-consuming cost unit billing by Diagnosis-Related Groups (DRG calculation). Scanner systems were introduced. By scanning the GS1 bar codes on the consumed products, materials are allocated directly to the patients through the IT-system.

This optimised stock management process provides up-to-date figures of the article in stock, as the entire ordering process can be automated. With the transparency created, products can also be easily traced within the hospital, contributing to increased efficiency and enhanced patient safety.

About the author

*Mrs **Muazzez Weiß** is Senior Application Manager SAP Logistics. She has been with the Information Technology (IT) Division at Charité since 2003, where she has managed several IT projects (e.g., the implementation of SAP® Supplier Relationship Management (SRM)).*

About Charité

***Charité** is one of the largest university hospitals in Europe. Thirty-eight hundred doctors and scientists provide care, do research, and teach at the top international level. More than half of the German Nobel Prize winners in medicine and physiology come from Charité, among them Emil von Behring, Robert Koch, and Paul Ehrlich. Charité also has an international reputation for excellence in training. It extends over four campuses with more than 100 clinics and institutes bundled under 17 Charité Centers. With 13,000 employees, Charité generates about 1.2 billion euro in sales per year and is one of the largest employers in Berlin.*