Connecting the dots to improve patient safety and supply chain efficiency

GS1 Standards in action – from production to the patient!

As GS1 Standards for healthcare were developed and became available over the last few years, healthcare communities worldwide embraced the standards and advanced their implementation. Standards will allow for streamlined supply chain processes and enable visibility – from production to the patient. In turn, they help improve patient safety and supply chain efficiency.

Enhancing patient safety through increased visibility

The safety of patients can be compromised in many ways, from medical errors, counterfeit or substandard medicines, to critical care products being unavailable. Increased supply chain visibility allows for the following issues to be addressed:

- Automatic identification by the caregiver of medicines and patients helps to reduce medication errors by ensuring that the right medicine is dispensed or administered to the right person, in the right dosage, at the right time. Automatic identification of medical devices also allows for the effective retrieval of the necessary information about those devices to ensure their proper use and avoid adverse events. But healthcare providers are struggling to implement such systems due to a lack of standardised barcodes on packages and devices.

- The serialisation of pharmaceutical products by their suppliers and the verification of these serial numbers by the dispensing pharmacist provide an additional layer of protection against the rising occurrence of potentially unsafe counterfeit drugs. Barcodes can be automatically read at different process points to record transactions such as physical transfers or changes of ownership, and the item's chain of custody can be documented. Considering the millions, or even billions of packages worldwide, efficiently managing this process obviously presents an enormous challenge for all stakeholders. Diverging country requirements can make this an even more daunting task, which makes standardisation and harmonisation vital to success.

- Increased stock visibility allows for automatic replenishment of stock, which will reduce the risk of stockouts of products needed for critical patient care.

Several case studies in this reference book illustrate how GS1 Standards help enhance patient safety.

The Taiwanese Food and Drug Administration (FDA) will require GS1 BarCodes on prescription drugs, which will allow hospitals to efficiently implement automatic identification systems to improve medication safety. The Changhua Christian Hospital is taking the lead in this endeavor in Taiwan (case study – see page 30). The Moinhos de Vento Hospital in Brazil has worked with three of its pharmaceutical suppliers to implement the GS1 DataMatrix and leverage those in the medication administration process (case study – see page 15).

Baxter, a leading, global pharmaceutical manufacturer, shows how GS1 Standards enable its serialisation programme, a crucial part of its product integrity strategy (case study – see page 13). In Colombia, a leading wholesaler, Dromayor, has worked closely with Pfizer to demonstrate how GS1 Standards can enable a traceability system to meet the government's requirements (case study – see page 19).

Improving supply chain efficiency through increased visibility

Healthcare costs have been rising for several years, and are still expected to grow faster than national income in most countries in the foreseeable future. Stemming this growth has become a major policy priority and healthcare suppliers and providers are looking for ways to control costs. Health information technology is expected to increase hospital efficiency.

- Leveraging Automatic Identification and Data Capture (AIDC) technologies will play a vital role to achieve this. For example, better visibility of inventory across nodes of the supply chain and transparency on inventory expiry dates will reduce inventory and obsolescence cost.
- Integrating data and using the same language across the supply chain will reduce transaction and processing costs. It will also reduce manual data capture, double checking, and relabeling, while increasing the accuracy of these processes.
- Effectively sharing master data of healthcare products between supply chain partners sets the foundation for an interoperable, electronic supply chain system and electronic procurement systems.

Several case studies in this reference book illustrate how GS1 Standards will enhance supply chain efficiency.

In the Netherlands, hospitals have quantified the expected benefits from several supply chain efficiency improvements: 100 Dutch hospitals will be able to save a total of between € 106 and € 168 million annually (case study – see page 26). The University Hospital of Graz (Austria) has implemented GS1 Standards and radio frequency identification (RFID) to improve its stock management of medical devices (case study – see page 11). The Medicon pharmacies in Germany implemented

category management in their pharmacies to improve their customer service (case study – see page 23).

In the U.S., Becton, Dickinson and Company, Mercy and ROi demonstrated how the use of Global Trade Item Numbers (GTINs) and Global Location Numbers (GLNs) allowed them to achieve fully automated, accurate electronic processing of order transactions – known as the Perfect Order (case study – see page 33).

In Australia, major healthcare suppliers, such as Terumo Australia, Abbott Australia, ArjoHuntleigh and Cook Medical, are experiencing the benefits that the National Product Catalogue (NPC) brings to their supply chain and procurement processes. The NPC is an initiative of the National E-Health Transition Authority and leverages GS1 Standards (case study – see page 4). Siemens is also leveraging GS1 Standards, including the Global Data Synchronisation Network (GDSN), to efficiently manage data for thousands of products across multiple countries (case study – see page 40).

Speak ONE language

Global standards will become the ONE language of choice for supply chain management and electronic commerce in healthcare. GS1 Member Organisations worldwide continue to support the sector to help it benefit from the adoption and implementation of GS1 Standards in its supply chain.

Collaboration among stakeholders is fundamental to fully reap the benefits of standardising healthcare supply chain data. GS1 Global Office and GS1 Member Organisations have successfully brought various supply chain stakeholders together through a global user group and 30 local user groups. These groups are user-driven and provide a forum where the user community can come together to communicate and learn from each other's experiences.

For more information about GS1 Healthcare, both globally and locally, visit www.gs1.org/healthcare.