The Value of Trusted Product Data

Perspectives shared by hospitals and government agencies

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RAMSAY HEALTH CARE

-Andrew Potter, Group Inventory Manager, Ramsay Health Care, Australia

Vital asset for health

At the epicentre of today's changing healthcare sector, hospitals are pushing forward to provide quality patient care while faced with a number of challenges such as more regulations, new patient demands and rising costs.

In response, hospitals worldwide are stepping up to harness GS1 standards and technologies to streamline inefficient processes and improve patient safety. They are especially focused on gaining access to trusted product data—recognising it as a vital asset for the health of their processes and patients.

To better understand the impact of trusted product data, GS1 talked with healthcare providers and government agencies from different parts of the world. This paper summarises perspectives about their journeys to transform their hospital or even an entire country's healthcare system for greater efficiencies, lower costs and improved patient outcomes.

Patient care and costs

Leading the need for change in hospitals are two major forces: patients and costs.

Patients are becoming more and more engaged and knowledgeable when it comes to managing their health. They have access to a wealth of online information about every aspect of their lives and expect the same from healthcare providers—helping them to make informed decisions.

"To grow or even maintain a patient base, hospitals must offer excellent services—consistently," says Sandi Michel, Director of Supply Chain Systems and Quality, Franciscan Missionaries of Our Lady Health System (FMOLHS) in the U.S. "A critical factor for a hospital's growth is having the right product at the right time, in the right place for physicians to provide these services—something that is only possible with quality product data."

Andrew Potter, Group Inventory Manager for Ramsay Health Care (Ramsay) echoes the need for products that are always available. Mr. Potter and his peers support the hospital group's supply chain with more than 200 hospitals and day surgery facilities across Australia, France, Indonesia, Malaysia and the UK. "Data is the lifeblood of our business. Leveraging product data for a highly efficient supply chain helps us ensure that every patient has a seamless care experience with a positive outcome."

Safer and better treatments

Patient safety is also spurring hospitals to demand more complete and accurate data from suppliers. Regulations such as the Unique Device Identification (UDI) system established by the United States Food and Drug Administration (FDA), the U.S. FDA Drug Supply Chain Security Act (DSCSA), and the European Union Falsified Medicines Directive are calling for a harmonised, global system for uniquely identifying products— medical devices and pharmaceuticals—as they travel from manufacturers to hospitals and ultimately, to patients. By accessing this global system of trusted product data, hospitals can facilitate more efficient recalls and verify the legitimacy of drugs for safeguarding patients.

Dr. Hajo Reissmann, Head of Medical Supply Controlling, University Medical Centre Schleswig-Holstein (UMCSH), discusses the need for standardised product data attributes—such as descriptions, sterilisation requirements and strength—to enable more effective clinical treatments. "When medical devices and pharmaceuticals are clearly and uniquely identified, physicians can more easily analyse and compare results from the products used. With globally defined product data, physicians across borders can collaborate to make adjustments for more positive outcomes."

Dr. Reissmann stresses the value of enhanced master data for clinical processes: "For safe and efficient procedures, the right people—patients and healthcare providers—the right appliances, and the right medical supplies have to come together at the right time and place. The same is true for information about all these components. This is obvious with respect to the patient: Pre-existing diseases, allergies and other conditions must be brought to the attention of providers. However, the same is true for the properties of the medical devices. A second challenge besides acquiring or generating that information is its propagation within the hospital's IT landscape in order to have it readily available at the various points of care."

Costs in the supply chain

Perhaps the most pressing need for trusted product data resides in the hospital's supply chain to control costs.

In Australia, the National E-Health Transition Authority (NEHTA) is supporting the country's healthcare providers and suppliers as they move from manual to automated "eHealth" processes, including significant supply chain reform.

Paul Broadbridge heads NEHTA's supply chain initiatives that includes giving hospitals access to standardised product data residing in the GS1 Global Data Synchronisation Network™ (GDSN®), called the National Product Catalogue (NPC) in Australia, and an eProcurement solution designed to streamline purchasing based on GS1 standards.

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UK SH UNIVERSITÄTSKLINIKUM Schleswig-Holstein

- Dr. Hajo Reissmann, Head of Medical Supply Controlling, UMCSH, Germany

GDSN and the GUDID

In September 2013, the U.S. FDA released its UDI regulation to establish a common, worldwide system for uniquely identifying all medical devices entering the U.S. market. As a result, many manufacturers have applied unique product identifiers to all of their medical devices and are maintaining their UDI data in the FDA's Global Unique Device Identification Database (GUDID) based on FDA deadlines.

While they may choose from multiple options, many manufacturers have made the strategic decision to use the GDSN and their GS1-certified data pools to feed UDI data into the GUDID—to meet immediate FDA compliance needs as well as future customer and regulatory requirements in other parts of the world.

Even though the GUDID contains FDA-required medical device data, it alone does not provide all the product data needed by hospitals to meet eProcurement and other process transformation goals. For example, the GUDID does not include pharmaceutical and consumable product data as well as some types of device data like weight, dimension, packaging information, handling, storage, waste and recycling.

"The GDSN has a broader range of product information than the GUDID," advises Ms. Michel with FMOLHS. "And with the FDA's DSCSA, we are required to capture all that information, store it and report on it for six years."

The GDSN provides a mechanism for suppliers to provide data in a trusted and secure way for any product a hospital consumes. Essentially, one connection can provide data for all products for any hospital anywhere in the world.

For more information on GDSN in healthcare, visit www.gs1.org/healthcare.

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Dstiny
ORGANISATIEVERBETERING

- Herman de Smit, Logistic Consultant, Multiple Hospitals, Netherlands

"It's a seamless order-to-cash process that can only be achieved with accurate product data provided by the GDSN."

CHRISTUS Health®

- John Mazzoli, Data Governance Manager, CHRISTUS Health, U.S.

"We're focused on bringing together disparate sources of product data to reduce inefficiencies that add costs to our national healthcare supply chain," explains Mr. Broadbridge. "With eHealth, it's about combining the best product information with the best patient information, and then putting this information in the hands of hospitals to deliver the best care."

Herman de Smit, Logistic Consultant at several hospitals in the Netherlands, summarises the value of product data for health system processes: "Validated product data is crucial to optimally streamline logistic, administrative and care processes. It can be used in financial processes to determine the value of inventory, reduce waste and help calculate the cost of treatments. Trusted data enables traceability of care products for patient safety, and ultimately needs to make employees' work easier each day."

More than five years ago, the Geisinger Health System (Geisinger) in the U.S. recognised the need to drive positive change across the healthcare supply chain when it teamed with four other healthcare systems—Intermountain Healthcare, Kaiser Permanente, Mayo Clinic and Mercy—to create the Healthcare Transformation Group.

"We came together to collectively voice the need for the accelerated transformation of healthcare processes using GS1 standards," says Kevin Capatch, Geisinger's Director of Supply Chain Technology & Process Engineering. "The area where standards, especially the GS1 GDSN, can have significant impact today is in the hospital's procurement process."

Seamless order to cash

Mr. Potter with Ramsay agrees that supply chain improvements can add up to significant savings. He is automating Ramsay's entire order-to-cash process, using GS1 EDI standards and product data shared via the NPC. "To control escalating costs, we're optimising our supply chain with data standards for purchase orders, purchase order responses and invoices."

According to John Mazzoli, Data Governance Manager with CHRISTUS Health (CHRISTUS), his organisation's purchasing department once wasted hours on correcting order errors and locating products that were shipped to wrong locations. Now, this major health system is in the final stages of constructing a master data management system and fully automating its order-to-cash process. Like Ramsay, CHRISTUS intends to reduce human intervention—along with the associated errors and costs—from the process.

One of CHRISTUS' first steps was to assign GS1 Global Location Numbers (GLNs) for 44 of its more than 235 hospitals and other care facilities located throughout Texas, Louisiana and New Mexico in the U.S. as well as in Chile and Mexico.

Working with its group purchasing organisation, MedAssets, CHRISTUS plans to leverage product data from the GDSN to automatically feed and update its master data management system. As products are used in CHRISTUS hospitals and clinics, the unique product identifiers or GS1 Global Trade Item Numbers (GTINs) embedded in barcodes, will be scanned. When the number of scans or uses hits a product's reorder level, a purchase order (PO) will be automatically generated containing the needed products with pricing, identified by GTINs.

"The PO will automatically flow to the supplier who will fill the order and ship it to the right location by referencing the care facility's GLN on the PO," explains Mr. Mazzoli. "When the shipment arrives and is verified, an electronic invoice will be sent to our accounts payable department, and the funds will be electronically transferred to the supplier. It's a seamless order-to-cash process that can only be achieved with accurate product data provided by the GDSN."

Saving time and space

FMOLHS is also working to fully automate its order-to-cash process. After conducting several pilots with suppliers, Ms. Michel reports the new process has removed multiple steps of manual intervention and has eliminated errors. "By using GTINs for accurate product data, it's taken a lot of labour and time out of the process. In just one pilot, we were able to save $52,000 a year by not having staff review every single order."

As its next step, FMOLHS is now implementing the GDSN to further streamline the process. Working with its chosen GS1-certified data pool, FMOLHS is reaching out to manufacturers to bring them on board. "With the GDSN, we'll be able to maintain the accuracy of our product data," says Ms. Michel. "And with up-to-date product data, we expect to further standardise the products we buy and use for even more cost savings."

Ms. Michel also notes that the use of accurate product data—weight, dimensions and packaging—will help the FMOLHS warehouse management system run more efficiently and save valuable space in its new Central Distribution Centre.

The Office of Data Standards and Interoperability led by Ms. Michel, is in the process of assigning GLNs down to PAR locations to enhance product tracking across the health system, expedite product delivery and allow automation to drive efficiencies. Using GLNs will allow FMOLHS to reduce the time it takes to locate products anywhere within its health system to better execute recalls, advance inventory management and accelerate asset tracking.

Collaborating for trusted data

Additional efforts to automate the order-to-cash process are taking place throughout entire healthcare systems in Australia and the UK.

For many healthcare systems, the global nature of the GDSN is a major benefit since many purchases of healthcare products are off shore and from global healthcare manufacturers. "Using the GDSN is not only a benefit for healthcare providers, but also for suppliers as global businesses," explains Mr. Broadbridge with NEHTA. "By publishing their product catalogues only once in the GDSN, suppliers can save significant time and improve accuracy when compared to providing their product data in multiple formats for multiple providers."

Mr. Broadbridge continues that collaborating with suppliers should be part of any hospital's successful implementation of the automated procurement process. "It's important that hospitals communicate the shared benefits of using accurate product data to their suppliers. Electronic POs can flow directly into suppliers' systems; so they don't need a team of people reading orders. And a supplier's cash flow improves when accurate invoices are electronically delivered and paid faster."

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FRANCISCAN MISSIONARIES OF OUR LADY
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- Sandi Michel, Director of Supply Chain Systems and Quality, FMOLHS, U.S.

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- Paul Broadbridge, Manager eHealth Value Chain, NEHTA, Australia

"The adoption of GS1 standards and the development of a shared product catalogue enables end-to-end traceability and full automation for healthcare supply chains."

OSPIDÉAL NAOMH SÉAMAS
ST. JAMES'S HOSPITAL

- Vincent Callan, Director of Facilities Management, St. James's Hospital, Ireland

"Data is not 'trusted' until you start transacting with it. With the GDSN, the good news is that, as issues are resolved between supplier and provider, this accurate data is pushed out to every provider. And as data is traded, it gets stronger and stronger with every transaction."

Geisinger

- Kevin Capatch, Director of Supply Chain Technology & Process Engineering, Geisinger Health System, U.S.

To support Australia's hospitals, NEHTA has undertaken a comprehensive education campaign for suppliers. An increasing number of Australian hospitals have mandated or provided preferential weightings to the use of the NPC in their supplier contracts. According to Mr. Potter, many of Ramsay's suppliers have posted their entire product catalogues in the NPC, with Ramsay also now requiring NPC data as part of its processes. As of January 2016, more than 370,000 products now reside in the NPC.

St. James's Hospital in Ireland also recognises the value of working closely with suppliers. The hospital is fully automating its order-to-cash process with the goal to include all suppliers over the next couple of years, prioritising high-value, critical product categories.

Initially partnering with Cruinn Diagnostics, Fannin/DCC Vital and Johnson & Johnson, the hospital started the eProcurement project by linking its existing codes to GTINs. The suppliers' data was mapped to an agreed upon dataset, which was then uploaded to the NPC for review and import by St. James's. The hospital is also using the accurate product data to electronically exchange procurement messages based on EDI for even more benefits. The next step for the hospital is to use the product data to capture information at the point of care.

"The adoption of GS1 standards and the development of a shared product catalogue enables end-to-end traceability and full automation for healthcare supply chains," explains Vincent Callan, Director of Facilities Management. "It provides the means to converge clinical and business systems, which supports the 'money follows the patient' model."

Proving the benefits

In the UK, Steve Graham, eProcurement Lead, and his team from the Department of Health are making progress to automate healthcare processes across the country's system of National Health Service (NHS) trusts or healthcare providers with the objective of saving more than €462 million (£350 million) and releasing a significant amount of clinical time back to patient care.

A primary use case for their five-year project is the order-to-cash process where suppliers are being asked to select their respective GS1-certified data pool for publishing their entire product catalogue in the GDSN. Since every hospital has its own system and preferences, it will be able to select only the products in which it is interested to "bring into" its own system's catalogue.

"Data pools and the GDSN give us a very clear and straightforward way for getting masses of accurate and up-to-date product (and price) data from suppliers to any one of our NHS hospitals," says Mr. Graham.

The team is working directly with six trusts as demonstrator sites to implement the electronic order-to-cash process along with two other processes enabled by GS1 standards—product recall and inventory management.

"With these six hospitals and their suppliers, we intend to measure the actual, tangible results," explains Mr. Graham. "Even though we're focused on this small number of trusts and suppliers, we're keeping the whole system moving forward. As we prove in the results with the few, we will communicate the benefits to all throughout this five-year journey."

Lessons along the way

Data is a powerful asset—the foundational language—for your business. If you maintain data on an ongoing basis, it will serve you well—today and in the future.

Product data is as important as the product itself. And the quality of the product data is a direct reflection of the quality of the product and its manufacturer.

Automate the order-to-cash process. Start here for significant impact and plan to expand to other processes such as product recall, inventory management and asset tracking.

Collaborate with suppliers for mutual benefits. Sharing trusted data comes with shared responsibilities and shared benefits. With this understanding, the journey will be easier.

Create a project plan with attention to details. Break it up into manageable pieces and use a cross-functional governance body for greater visibility. It's not simply an IT project. Get clinical nursing directors and surgeons to provide their direction and influence.

Communicate frequently—with internal stakeholders, executives and suppliers—about the value of using accurate and complete product data. Share improvements and progress at each milestone and celebrate success.

Benefits are real. Savings can be achieved: time, costs and productivity. Conduct pilots with trusted suppliers to prove in the results.

Take a long-term approach with a sense of urgency. Start now yet realise it will take a concerted effort over several years. Determination and patience will pay off. Remember that you are changing systems and how people work.

As Mr. Graham with UK's Department of Health puts it: "We can learn from the retail experience where it took the sector several years to get GS1 standards embedded into their businesses. And it won't be any different for us in healthcare."

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Department of Health

-Steve Graham, eProcurement Lead, Department of Health, UK

For more information about how to ensure trusted product data for your organisation, visit www.gs1.org/healthcare.

What does it take for product data to be "trusted"?

It all starts when suppliers collect, cleanse and manage their product data before publishing in the GDSN.

Mr. Capatch from Geisinger points to the importance of suppliers implementing processes that ensure the quality of their data. "Many of our manufacturers have devised internal strategies so that product data is accurate and complete, which gives me confidence. It's also important to note that significant efforts have been made by manufacturers to provide exact and trusted data to the FDA."

Mr. Potter with Ramsay advises that he looks to the GDSN's rigorous process checks for trusted data assurance and synchronises Ramsay's master database with any new supplier's published product data for alignment.

Yet, while suppliers may provide and validate their data, hospitals must also trust and use it to deliver value for all. "This is where collaboration is needed between suppliers and hospitals," explains Mr. Broadbridge with NEHTA. "Suppliers must understand the nature of product data for hospitals—whether for clinical, pharmaceutical or supply chain use—in order to provide the appropriate data with the appropriate validations. The importance of trusted data needs to be understood by all trading partners in the healthcare community. With this commitment, we can truly reduce costs and risks."

Cautiously optimistic, Mr. Capatch considers the supplier-provider relationship key. "Data is not 'trusted' until you start transacting with it. With the GDSN, the good news is that, as issues are resolved between supplier and provider, this accurate data is pushed out to every provider. And as data is traded, it gets stronger and stronger with every transaction."

1. CHRISTUS Health System – U.S.

2. Department of Health – UK

3. Franciscan Missionaries of Our Lady Health System – U.S.

4. Geisinger Health System – U.S.

5. National E-Health Transition Authority – Australia

6. Ramsay Health Care – Australia

7. St. James's Hospital – Ireland

8. University Medical Center Schleswig-Holstein – Germany

9. Dstiny Organisatieverbetering – Netherlands

About GS1 Healthcare

GS1 Healthcare is a global, voluntary user community, bringing together all healthcare supply chain stakeholders, including manufacturers, distributors, healthcare providers' solution providers, regulatory bodies and industry associations. The mission of GS1 Healthcare is to lead the healthcare sector to the successful development and implementation of global standards by bringing together experts in healthcare to enhance patient safety and supply chain efficiencies. GS1 Healthcare members include over 70 leading healthcare organisations worldwide. www.gs1.org

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