U.S.

Louisiana hospital system achieves the “touchless order” via GS1 standards implementation

Franciscan Missionaries of Our Lady Health System (FMOLHS) is currently engaged in a two-year pilot to develop a high performance, streamlined and automated supply chain, in large part via the implementation of GS1 standards. Like many hospital systems, FMOLHS aims to eliminate human error and bad data while putting into place supply chain processes that are automated from end-to-end - from the time an order is placed through its materials management information system (MMIS), to the delivery of the product, use of the product at the patient bedside and accurate recording of the product in the patient’s electronic medical record. In 2014, FMOLHS achieved what was previously considered by the U.S. healthcare industry as “mission impossible” – it processed the Touchless Order with zero errors, and has since replicated the process with additional suppliers.

By Sandi Michel

Background

Based in Baton Rouge, La., FMOLHS is the leading healthcare provider in the state of Louisiana. For many years, hospitals in the United States have been working towards establishing a true “Touchless Order” process, a major goal of supply chain management. FMOLHS leveraged lessons learned and best practices of other leading hospital systems, including Mercy, Mayo Clinic and others, and achieved the milestone in the summer of 2014 with its first supplier partner, Cook Medical, and did so ahead of schedule. In addition, the hospital system developed a repeatable process for use with additional supplier partners, including BD, Johnson & Johnson, Abbott Laboratories, Terumo Medical, Bard and Medtronic, to automate the order process from end-to-end and without human touch. FMOLHS expects to implement the Touchless Order for additional suppliers in the months ahead.

Challenge

The current era of accountability across the healthcare system means that all of healthcare must pull together to provide quality care to patients, reduce healthcare costs and improve the health of the community at large. However, a hospital cannot achieve operational excellence if it uses faulty data. Accurate, consistent data is important to every function within the hospital, as it impacts quality of care provided to patients, the safety of the products used in the delivery of that care and the security of the supply chain. With healthcare’s ongoing reliance on electronic communications and business transactions, the very foundation of quality healthcare rests with sound, accurate and reliable information every step of the way.
Solution

GS1 standards in a fully automated supply chain wrapped with sound business processes work together to enable improved patient safety, supply chain security, and critical information sharing each step of the way (from manufacture to patient use and beyond). Standardised data provides countless predictable and unpredictable benefits.

Having a clear view of the supply chain leads to improvements in every area that a product touches, including inventory management, contract management, claims and reimbursements, patient care and records management, among others. The information can be used for U.S. Food Drug Administration actions, such as product recalls, post-market surveillance and counterfeit abatement efforts. Standardised data also supports regulation, such as U.S. FDA Unique Device Identification (UDI) and pharmaceutical product serialisation, as required by the Drug Supply Chain Security Act. Standards also support many industry priorities as well (Meaningful Use, Triple Aim, and others.). At FMOLHS, the transition to Touchless Order has been much smoother than the team at FMOLHS had originally expected.

FMOLHS started implementing GS1 standards with Cook Medical in May 2014, and its first go-live order was processed successfully on July 7, 2014. The order was 100 percent touchless, meaning that FMOLHS was able to create a purchase order, submit it, receive the product at its central dock, scan it into their IT systems, send receipt acknowledgement, receive and pay the invoice, and have the product accurately delivered within the hospital, all without manual entry.
FMOLHS GS1 standards implementation project phases

- Completion of pilot and key decisions
- Document project activities and processes
- Identify and communicate with parallel projects (e.g. launch of FMOLHS’s new, centralised distribution center and alignment with ROI)
- Closure plan, including internal certification of system readiness certification
- Rollout (for Cook Medical, FMOLHS is entering monitoring phase. In this phase, will conduct analytics for financial and other benefits)
- Transition to Operations (30-60 days post pilot)

A few basic steps

Working closely with Cook Medical, FMOLHS went through a few basic steps to implement GS1 standards, specifically the Global Location Number (GLN) to identify locations and the Global Trade Item Number® (GTIN®) to identify products. This process is now being replicated with other suppliers:

1. FMOLHS established its hierarchies and registered the GLN for its facilities. The information was shared with Cook Medical, which now uses GLNs instead of customer numbers created in house. Cook also shared their GLNs with FMOLHS.

2. FMOLHS tested all of its transaction points using GLNs. This step involved working with data translator partners to ensure EDI transactions were being processed using GLN information.

3. FMOLHS coordinated efforts with its MMIS provider (Infor v. 9.1.03) to ensure that their software was able to accommodate GLN information. For now, this involved simply setting up a transaction table within the system. Future versions of the software will contain GLN and GTIN fields.

4. FMOLHS conducted round trip order processing tests (successfully), and then implemented the orders live.

Cook Medical has assigned a Global Trade Item Number (GTIN) for each of its products, and is now requiring customers to transact using GTINs going forward. FMOLHS received the GTIN for the items used, and loaded that information into the MMIS. The FMOLHS team verified that all the product attributes were accurate, and that the information in the hospital information system matched with Cook’s descriptions for consistency. Once all the records that contained GTINs were in the MMIS, FMOLHS was able to submit orders using GTINs. For four weeks, the FMOLHS team monitored every electronic order closely, and every single automated order was processed accurately.

The GTIN piece is very important, because it is through these transactions that FMOLHS is supporting FDA UDI. Capturing GTIN allowed FMOLHS to know where the product went once it was in the hospital, which improves patient safety, security in the supply chain (to prevent counterfeits, for example) and for potential product recalls. As hospitals launch initiatives to track patient outcomes and population health, knowing when and where a specific product was used and on which patients will become even more critical.
Benchmarks

It is important to look at before/after scenarios to evaluate effectiveness of any business process change. To that end, FMOLHS has established benchmarks to assess metrics in the following areas:

- Accuracy in purchase order, invoicing and payment.
- Revenue reporting factors (charge accuracy, claims processing efficiencies, real-time product usage and consumption, automated replenishment, demand-driven supply chain, and point-of-use systems and processes).
- Inventory management (value of inventory on hand, reduction in inventory, re-labeling activities, recalls, expiration date management).

Conclusion

The journey to the Touchless Order has resulted in FMOLHS finally having a complete, accurate and up-to-date item file for our materials management processes.

As FMOLHS embarks on this exciting transition with other partners, it does so knowing that the long-time healthcare ideal of a fully automated supply chain is now within reach. With the Touchless Order, what seemed like an unattainable vision just a few years ago is now a reality that the hospital experiences everyday. In short order, it could become “business as usual” for the healthcare system.

For those hospitals that have been hesitant or have been delaying their efforts for any reason, a significant lesson learned for FMOLHS is that as intimidating as implementation may seem at the beginning, the adoption of standards is completely “doable,” no matter the size of the hospital system.

About the author

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About FMOLHS

Based in Baton Rouge, the Franciscan Missionaries of Our Lady Health System is the leading health care innovator in Louisiana. They bring together outstanding clinicians, the most advanced technology and leading research to ensure that patients receive the highest quality and safest care possible.

This commitment is grounded in a history that is more than 100 years old, but reflected today by its strategic vision of transforming healthcare through superior performance and excellent patient care.