

Creating a New "Gold Standard" — Healthcare Supply Chain Best Practices from Other Industries



Mark Graban Author, *Lean Hospitals*



Hospitals are not factories. Patients are not cars. Those statements are undeniably true, but are often said in an attempt to resist learning proven best practices from other industries. With healthcare organizations facing greater financial pressures and an increasingly fast-paced world of change, it's important to identify strategies that can help us provide more value: better care that's more affordable.

While some still resist outside ideas and influences, the highest performing healthcare organizations are increasingly adopting (and adapting) practices from other industries, such as hospitality lessons from hotels and patient safety practices from aviation. In recent years, I've seen many healthcare delivery systems discover that supply chain and materials management practices from manufacturing and retailing can boost the bottom line in ways that also make work more fulfilling for staff and help support better outcomes for patients.

Defining a Lean supply chain strategy

The "Lean" methodology and management system is associated with the automotive industry, starting with Toyota and spreading to other automakers. However, Lean methods have proven transferable to other types of manufacturing, service sector companies, government agencies, and healthcare — precisely because Lean is not about how cars are built. Lean is about providing a structure and systems that allow people to focus on their customers (and in healthcare, their patients) and doing their best work.

Lessons learned from other industries

Manufacturing and retail supply chain leaders aren't focused solely on low inventory as a primary goal. The term Lean is often incorrectly associated with simply cutting costs, including reducing inventory or cutting staffing levels. But, a true Lean system has the right amount of resources that are required to do the work the right way. That means *not* being understaffed and it means having the right supplies available in the right quantity at the right locations. Early in my career when I was working in manufacturing, I learned that companies could really damage their business by cutting inventory levels too low. As a Japanese consultant said to a company we visited over ten years ago, the primary goal is to meet customer needs and the secondary goal is low inventory.

I've also learned that hospitals and clinics are using Lean methods to create a less-frustrating workplace for staff. Various studies, along with my own observation and data collection, show that nurses in medical/surgical inpatient units typically spend 2.5 to 3 hours per shift performing supply related tasks. What a waste! When nurses only get to spend a portion of their time at the bedside, it frustrates them professionally.

Sponsored by



As one nurse told me, "I don't remember a class in nursing school called 'looking for supplies.'" When nurses are searching for materials instead of being at the bedside, I've seen patient satisfaction suffer and preventable incidents like falls and pressure ulcers occur. Yes, a hospital could save money in the short term by cutting inventory levels, but what does that cost the hospital if other measures, more closely tied to compensation, suffer? It's like a factory that bragged about low inventory, but couldn't ship anything on time to the customer. The lesson from manufacturing is that inventory is not just a cost, but an important resource that helps us provide value to the customer.

Of course, another lesson is not to have too much inventory. Other industries, such as manufacturing, have long used "pull systems" to help keep inventory levels from growing too large. Toyota is credited with inventing the "Kanban" method of materials management. In reality, Toyota developed this method after being inspired by visiting the American grocery store chain Piggly Wiggly in the 1950s. An auto plant is not a grocery store ... but Toyota was willing to learn from others, without blindly copying their methods.

Methods in other industries evolve over time, incorporating new technologies. Originally, Kanban systems meant physically sending an empty bin back to a warehouse or a supplier. Manufacturers and hospitals alike are taking methods from retail, including the use of barcode scanning and RFID technologies. In a Kanban system, information is sent to a stockroom or distributor that says, "Send more." So, there's no need to send a physical bin; it's the information that matters. Internet technologies and software quickly replaced the fax machine as a way of sending the information that leads to the demand-based replenishment of supplies.

Lean supply chain methods in a hospital allow for staging the right supplies in the right place, which increasingly means keeping supplies in the patient room or just outside. Nurses no longer have to walk the length of the hallway to the supply room to get something as simple as gauze. Lean methods also improve productivity for supply chain

employees. Hospitals have long used "par level" systems as a way of pulling materials. Unfortunately, par level systems require employees to spend hours a day simply counting items that remain on shelves — not a good use of their time! Automated technology, such as RFID scanners and wands, along with simple visual Kanban bins can reduce the time spent counting, allows materials staff to focus on improving their systems and providing better service to nurses, staff, and patients.

One final lesson from the manufacturing industry is to use the right technology for the right purpose. Principle #8 of the "Toyota Way" management system is to use reliable and well-tested technology that serves your people and your process. Toyota and Lean organizations aren't anti-technology, nor do they think technology is a silver bullet. Some hospitals have learned that putting every supply into a locked cabinet can create more waste than it reduces, as nurses queue up to enter passwords to get product that doesn't require deep security. Worse, nurses may actually develop workarounds that defeat the original purpose of the tracking. Most supplies can be kept in open shelving with RFID-enabled technology, which allows for easy access when the product is needed, but still keeps track of where items are and when they've been used, and enables accurate billing.

Continuing education

There are lessons that hospitals can learn from benchmarking and studying the highest-performing supply chains within healthcare. But, chances are those organizations were inspired by or learned directly from other industries. We can do both — looking at other hospitals, but also seeing what the best manufacturers and retailers are doing to perform significantly better than their peers, allowing healthcare to make larger leaps than benchmarking our peers would suggest to be possible. What else can you do to shift supply chain management from being a cost to being a strategic advantage that better serves your patients, your staff, and your own financial performance?

Originally featured on *Fierce Healthcare* as a full-length webinar.

View the full presentation on YouTube.

For more information on supply chain innovations and automated technology, visit our **Medical Supply Chain Solution Center.**

This content is sponsored by Cardinal Health. Mark Graban received compensation from Cardinal Health for participating in this educational program.

© 2016 Cardinal Health. All Rights Reserved. CARDINAL HEALTH, the Cardinal Health LOGO and ESSENTIAL TO CARE are trademarks or registered trademarks of Cardinal Health. Lit. No. 2CHL 16-587507 (10/2016)

Sponsored by

