



## CASE STUDY Our customer's viewpoint

### Summary

#### Health Care System

Mercy Health, Cincinnati, Ohio

#### Size

23 hospitals, nearly 500 health care sites serving Ohio and Kentucky.

#### Supply Budget

\$800 million in supplies; \$1.3 billion with contracting agreements.

#### Challenges

- » Lack of systemization in supply chain
- » Inefficient, expensive physician preference item (PPI) logistics model
- » Decentralized contracting, procuring, delivering and storing of supplies
- » No system-wide standardization in process and product

#### Solutions

Rebuild the supply chain culture, organization and logistics processes.

- » Consolidate and standardize all areas of the supply chain
- » Create shared-risk, strategic supply partnerships to improve efficiencies
- » Establish consolidated managed PPI logistics model
- » Restructure staffing and resources

#### Results

Immediate outcomes identified early in the process include:

- » Eliminated 1,861 SKUs (21%) and 336 manufacturers (50%)
- » Streamlined consolidated procurement process
- » Consolidated to one main logistics supply chain partner: Medline
- » Reduced distribution hubs from 14 to 2

## The road to systemness: Delivering an outcomes-driven supply chain.

#### By Dan Hurry

Chief Supply Chain Officer  
Mercy Health



### Our Health System

Mercy Health is the largest health system in Ohio and one of the top five employers in the state with more than 33,500 employees. Based in Cincinnati, we serve Ohio and Kentucky with 23 hospitals and nearly 500 health care facilities, including physician offices, surgery centers, urgent care and imaging centers. Our mission calls us to improve the health of our communities, especially the poor and under-served.

Our 400-member supply chain team manages \$800 million in supply spend and \$1.3 billion overall, including contracts, consulting agreements, IT agreements, etc.

This team handles all physical logistics, field operations, P2P functions, sourcing and contracting.

### Our Challenge

Declining reimbursements and the shift from fee-for-service to value-based reimbursement have created financial challenges for the healthcare industry, including a supply chain cost curve challenge. Our system is not immune.

As a result, significant changes were implemented, including hiring several new senior level positions in the system.

I joined Mercy Health as the new chief supply chain officer in August 2016. My team was charged with transforming our decentralized "Federalist" supply chain model. Although our home office in Cincinnati had oversight of the entire system, each site could run its own show in respect to supply chain management. At its peak, nearly 32,000 people in

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our organization had the ability to order supplies. This chaotic system resulted in overspending and poor standardization in processes and products.

Our lack of standardization – or systemness – directly correlates to the economics of the organization. Increasing costs and waste are a direct result of not being standardized. Going forward, we can't sustain a decrease in revenue if reimbursements go down while allowing cost creep and waste to occur in our supply chain.

**Immediate challenges included:**

» **Inefficient utilization of staffing and resources.** We had 85% of our supply chain staff responsible for procuring and distributing commodity products like gloves and plastics, which represent just 17% of our budget. In our operating rooms, where more expensive supplies are used, the clinical staff was responsible for purchasing products. This group is not dedicated supply chain staff, so in

effect they were doing double duty. They didn't report up to supply chain, so they had little incentive to manage costs and logistics. To lower expenses and increase efficiency, we needed to realign our people, resources and processes for each area and task.

» **Ineffective PPI logistics model.** Physician preference items (PPI)—such as drug eluting stents, coronary balloons and peripherals—are high-cost products with an expensive logistics model. Our replacement and procurement process for PPI was disjointed and disorganized from requisition to replenishment to shipping, receiving and billing.

We wanted to shake up the dynamics of PPI logistics with a model commonly used in other industries but not found in health care, providing us a significant opportunity for large savings and efficiencies.

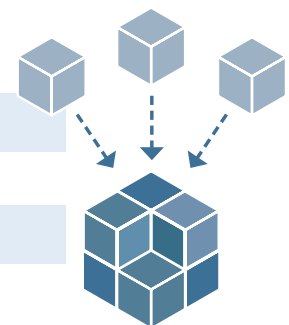
» **Fragmented supply partnerships.** We had one main med/surg products distributor and several smaller suppliers. In all, we were receiving products from 14 different locations, which wasn't efficient or effective. Our goal was to align ourselves with one supply partner in a long-term strategic relationship who could distribute both traditional med/surg products and PPI, as well as help us standardize and reduce SKUs, and become efficient operators.

**The Solutions**

Our bottom line goal in changing our culture, processes and people was to optimize the economics of the system and enhance the quality we provide to our patients. In simple terms, this meant empowering our supply chain team to use fewer products with fewer deliveries, invoices, requisitions and purchase orders across the system and work with fewer suppliers to accomplish these goals.

**The road to systemness – topline results\***

	Before change	After
Staff with purchasing responsibilities	1,000's	80
SKUs**	8,600	6,739
Distribution centers	14	2
Manufacturers**	336	168



\*Estimates

\*\*In addressed categories

“ We’re trying to do something different here – take a step beyond what the norm is today – and I needed a partner that was ready, willing and able to step in. ”

### **Selecting the right strategic partner.**

One of our first orders of business was to find a strategic partner who could help execute our ambitious vision. We chose Medline. As a large, privately-held manufacturer and distributor, they have extensive operations and logistics expertise, infrastructure, IT systems, comprehensive product mix and most importantly, a nimble and engaged leadership team. We’re trying to do something different in supply chain at Mercy Health – take a step beyond what the norm is today – and we needed a partner that was ready, willing and able to step in.

With Medline, we could go beyond a transactional relationship. Some team members didn’t understand why we’d want to align with one partner to execute a wide range of supply chain and logistics services rather than a traditional relationship that looks at each individual asset as an attribute/product they can offer. Normally most hospital systems (not just ours) want to address gloves today and anesthesia products tomorrow, rather than look at the whole book of business in a strategic relationship complete with shared risk and incentives.

Logistics enable success. If we can control the wheels underneath all the products that move in our facilities, we can make good things happen. Medline has an extensive infrastructure, including operating more than 50 distribution centers and manufacturing facilities efficiently and profitably. They have the experience, innovative mentality and rock-solid leadership to help us achieve our goals.

### **Product standardization and SKU reduction.**

There’s a natural synergy between Medline’s desire to sell its own manufactured products and our goal to standardize products and processes across our system. Medline will reduce our supply costs substantially and quickly as we migrate to its company brand and reduce our SKUs. We anticipate saving at least 10 percent on acquisition costs of our commodity supplies. These products are delivered direct to our facilities, eliminating the added cost of a distributor. Key to converting to Medline brand products is the assurance that they’re all clinically equivalent or superior to our existing items. For all non-Medline products, Medline will reduce traditional distribution fees, resulting in additional savings. When implemented fully, this model will be a win-win for both parties.

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So far, we’ve also reduced the number of SKUs by 21%. But we have further to go before we hit optimal efficiency.

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### **Standardizing procurement and distribution.**

When we got together with Medline we asked: “How do we eliminate the chaos of having so many staff members at every location ordering everything in a catalog?” We immediately reduced the number of people with procurement responsibilities from thousands to about three per facility: the supply chain manager, the CFO and the president. We’re streamlining the requisition and procurement

process and establishing a product formulary and guidelines that each facility must follow.

The idea is that if a physician office in Cincinnati orders a box of gloves, it should be the same gloves as the physician office in Toledo or Paducah. This drives efficiencies by minimizing our SKUs, reducing inventory and lowering our acquisition costs. Ultimately everything will go through one point of delivery: Medline. Partnering with Medline also consolidates the number of distribution centers from 14 to two – Canton, Ohio and Louisville, KY. From these two locations, all 450+ facilities can be serviced with one-day or same-day delivery.

### **Consolidated PPI logistics model.**

Having spent much of my early career outside of the healthcare industry, where I managed consolidated logistics nationally, I looked at the way hospitals managed PPI and thought there had to be a better way. PPI represents about 45% of our supply budget yet our system does not fully optimize the supply chain to more effectively purchase, inventory and distribute these items. We must have the right processes in place to be more efficient than we are today. We need to examine the data across the supply chain from the manufacturer to the patient to understand where the supplies are as they move through our system. This information will give us a better handle on what we’re spending and the appropriate actions to affect it. Our idea: treat PPI similar to how we order, deliver and invoice commodity items like a box of gloves or tongue depressors. An analogy to the

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consumer world is a Walmart Super Store where you can buy your clothes along with electronics, pet supplies and all your groceries. This concept sounds a little crazy for the health care industry but it makes sense once you realize they're all supplies. There is a general mindset that PPIs are sensitive and “untouchable” where physicians resist switching. But there is a lot we can do in terms of reducing costs and increasing efficiency before the item reaches the O.R. suite or exam table.

You can easily see the waste in the example of cath lab products. In the traditional model, as a stent is used, a requisition goes to manufacturer X to replace that product. Throughout the day the cath lab may issue two, three, four or five separate POs to the manufacturer for replacement stents (some facilities may batch POs for efficiency gains). The products are then delivered next day to the back dock via Fed Ex or UPS in a one-off delivery.

Imagine several other PPIs used in the cath lab being ordered with a similar process. In the end, you have a large number of very expensive products being delivered overnight to your facility dock all with separate POs, receipts and multiple touchpoints. Compare that inefficient system to a model where you consolidate all your shipments on one truck with all your other med/surg supplies. PPI is treated as one line item on one invoice rather than dealing with separate invoices where you have to cut separate checks.

Medline is integral to this new process by helping move PPI into a more traditional distribution model, aggregating orders for our facilities into one consolidated shipment. When the truck shows up a facility's back dock, it contains traditional med/surg items like gloves and packs, but it also will have stents, serums and ICDs ready for delivery to the individual departments. Under this scenario, we receive only one consolidated delivery from all our manufacturers. Each PPI manufacturer ships only one delivery a week or every other week to a Medline

distribution hub and then Medline manages the daily replenishment to the care sites. The cost-savings and operational efficiencies are obvious with this model – fewer POs, shipments, deliveries, touchpoints and AP transactions. When you're managing a budget of tens of millions of dollars in PPI, the savings are significant.

**Standardizing supply room design.**

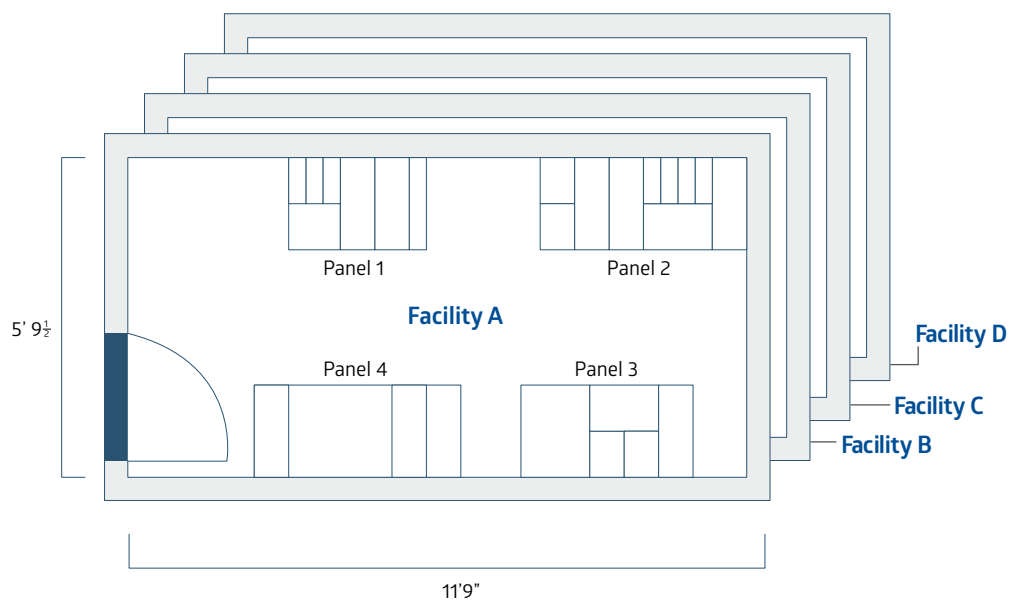
Similar to a retail chain, we're developing a planogram to standardize supply room designs across our system. Having the same design for every supply room will maximize space and drive efficiency in each facility. It will also give us a blueprint for future sites, so when Mercy Health expands we'll be ready to build new supply rooms or transform old ones.

**Item Master clean up.**

One of our main challenges was “cleaning” our item file so that we had updated information and pricing for every product in our system—which number in the thousands.

**Supply room planogram**

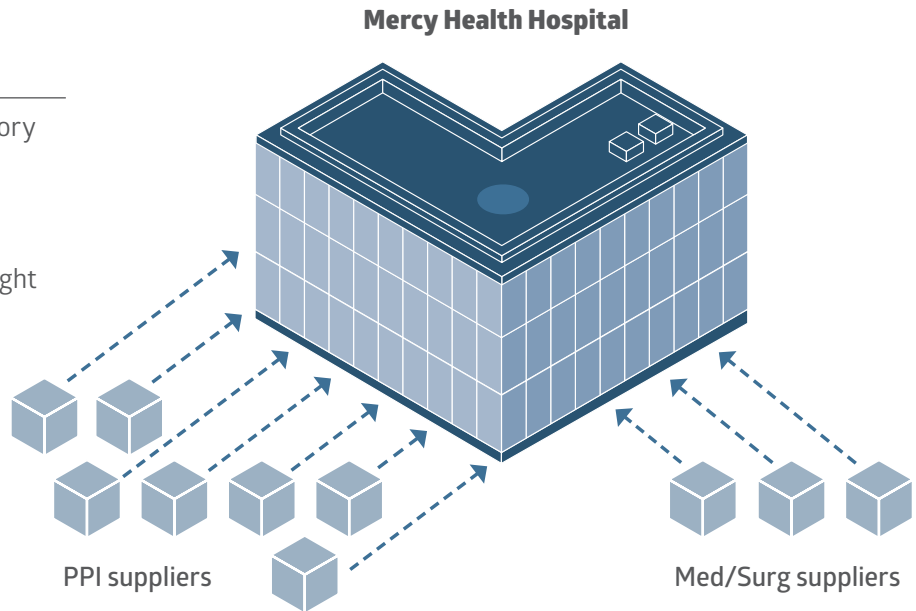
A planogram will optimize shelf layout and staff flow efficiency for supply rooms systemwide. It will be a blueprint for future supply rooms when Mercy Health expands or redesigns old ones.



# The evolution of physician preference items (PPI) logistics.

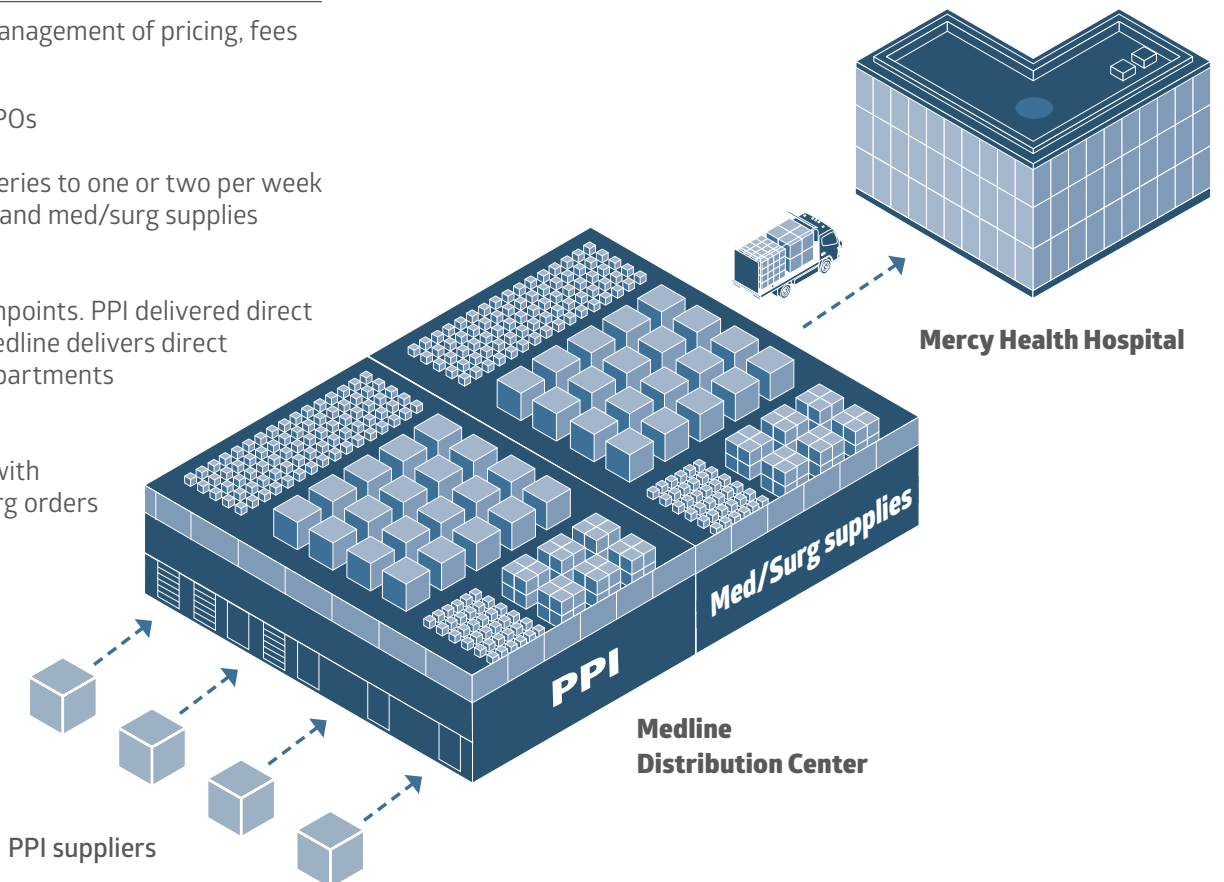
## Old Logistics System

- Poor visibility to data, pricing, inventory
- Multiple POs per item per day from each manufacturer
- Multiple deliveries per day via overnight
- Multiple touchpoints per product
- Multiple AP transactions per manufacturer



## New Consolidated Model

- Better data management of pricing, fees and inventory
- Consolidated POs
- Reduced deliveries to one or two per week with both PPI and med/surg supplies on same truck
- Reduced touchpoints. PPI delivered direct to Medline. Medline delivers direct to hospital departments
- PPI invoices consolidated with other med/surg orders



“ In my experience as a leader, I've learned you need to prove you're moving in the right direction by showing results as fast as you can. ”

With great teamwork and diligence from both Medline and our supply chain team, we are quickly developing an item file that will attain our goal of 100% accuracy. This means that we'll have virtually no price discrepancies or item number issues when ordering and reconciling invoices. For a large, complex health care system like ours, this is no small achievement. Identifying and correcting item file inconsistencies and mistakes are extremely time-consuming for our staff and supply partners. By eliminating this task, our staff's time will be freed up to work on more productive assignments.

**The impact of supply chain on patient care.** The most important goal we have is to assist our clinicians with sourcing the right products that have the data to support the clinical claims. That's why we're closely linked with the chief clinical officer and his team. Our teams regularly meet to ensure we're aligned on products and services needed to deliver the best clinical outcomes. Similarly, it's imperative we deliver the right products to the right place at the right time – basic logistics 101.

## Conclusion

Making dramatic change and getting staff to buy in to our plan is hard. Logically, people understand why change is happening, but emotionally they're fearful of the unknown.

In my experience as a leader, I've learned you need to prove you're moving in the right direction by showing results as fast as you can.

Culturally, I know we're never going to please everyone but when you combine change with good results, you see your vision become reality. And suddenly this change snowballs into its own success. And that's what's happening with us. 2017 was a transformational year for Mercy Health supply chain. Success builds trust and engagement with our staff and we're starting to see the fruits of our labor.

Our overall goal is that when we're finished re-building our infrastructure, we'll be in a great position when we expand. This model will be centered with a consistent framework but modular flexibility for individual facility needs.

## About the author

Dan Hurry is Chief Supply Chain Officer at Mercy Health based in Cincinnati, Ohio. Dan oversees a staff of more than 400 people and a \$2 billion supply budget. Prior to joining Mercy Health in August 2016, Dan was Senior Director and AVP of Supply Chain Operations for Tenet Healthcare for the central region and Texas. He was also Vice President of Supply Chain for Baptist Health System in San Antonio, Texas. Before working in the health care industry, Dan was Senior Manager for Supply Chain and Wholesale Capital Projects for Valero Energy Corporation in San Antonio.



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