

CareAdvantage from the Johnson & Johnson Medical Devices Companies (JJMDC) helps Spectrum Health improve JJMDC product availability, reduce logistics costs, and decrease variation at its distribution center

Managing inventory to maintain high levels of service while keeping costs low is a common balancing act for any supply chain organization. However, for the supply chain team at Spectrum Health, a 12-hospital, not-for-profit health system in western Michigan, inventory management is not simply another task, but a critical enabler of the organization's mission to provide excellent care.

"Our goal in supply chain is to minimize disruption because we want the caregivers' full attention to be on patients and their families," said Jason Shelton, Manager of Supply Chain Management Operations at Spectrum Health. "Any time a supply chain issue takes a caregiver away from a patient, we consider it a failure on our part."

In early 2016, after noticing regular stockouts of many product codes, Spectrum Health partnered with JJMDC and its CareAdvantage approach to improve the availability of JJMDC devices at the point of care. The efforts resulted in significant improvements for the health system, its clinical teams, and patients, including a 49% reduction in the number of JJMDC codes out of stock, and an 18% decrease in the average length of stockouts.

20%

Time spent by physicians and nurses on supply chain and inventory management. This time, if reallocated, could be spent with patients, on research and education, or on training new staff.¹

To learn more please visit www.CareAdvantageJJMDC.com or email CareAdvantageJJMDC@its.jnj.com.

References

1. Marzouk S, Nelson S. The biggest untapped resource at your hospital? Your supply chain. Cardinal Health website. Available at: <http://www.cardinalhealth.com/en/essential-insights/the-biggest-untapped-resource-at-your-hospital--your-supply-chai.html>. Updated February 14, 2017. Accessed July 6, 2017.
2. Data on file. Johnson & Johnson Health Care Systems Inc. Weekly stocking reviews with Spectrum CSC / J&J Supply Chain. April 2016 - April 2017.

Needs Identification

Spectrum Health services its 12 hospitals through a self-distribution model. Approximately 80% of JJMDC devices being utilized were distributed through the Spectrum Health Distribution Center (DC), and on a weekly basis, dozens of JJMDC devices were out of stock in the DC. This led to clinical inefficiencies and the need for costly expedited shipments.

While it was easy to see that stockouts were reducing service levels and increasing costs, determining the root cause was a challenge. "It was hard to get our arms around the issue," said Gerry Hakala, Purchasing Supervisor for Spectrum Health. "Was it backorders? Stocking level? Ordering patterns? We didn't have a good idea of why this was happening."

Together with the Spectrum Health team, supply chain specialists from JJMDC with Consolidated Service Center (CSC) expertise began compiling data from across the Spectrum Health DC and JJMDC. By bringing together information from both Spectrum Health and JJMDC, the team could identify the critical interdependencies between inventory metrics (e.g. inventory on hand, # of SKUs on backorder, and backorder length) and ordering behaviors (e.g. order date, order size, shipment method, and delivery date). Additionally, the JJMDC team provided insights into how the Spectrum Health DC performance compared against a benchmark of CSCs from similarly sized health systems.

This thorough needs identification process allowed the teams to begin identifying options to connect their supply chain organizations to achieve the following goals related to JJMDC products:

- Reduce average weekly product codes out of stock
- Reduce the number of days products are out of stock
- Minimize expedited order fees for the Spectrum Health DC
- Eliminate stockouts in high-volume SKUs; reduce stockout variability for slow-moving SKUs

Capabilities

1. Aligning Priorities

In addition to setting clear performance goals, the Spectrum Health and JJMDC team established processes to ensure prioritization of top needs.

For example, the team assigned A/B/C designations to JJMDC SKUs stocked in the DC, and tracked the performance of these established A, B, C classes weekly. These designations focused the team's efforts on higher volume items that were most likely to have service impacts. "With so much inventory data that we could potentially analyze, having clear priorities allowed us to allocate our time to the areas that were most critical to ensure Spectrum Health's DC could serve their clinical users," said Bob Rowe Manager, Customer Supply Chain Solutions, JJMDC.

Improvements were noticed almost immediately. "The OR Inventory Manager at the two main hospitals noted a difference, particularly in the suture product," said Hakala. "He said there were fewer inquiries [to the DC], and commented that this was helping operations run more smoothly."

2. Establishing Transparency

Spectrum Health and JJMDC recognized that addressing the root causes of the stockouts at the DC required both organizations to share information that had not been shared in the past.

For example, Spectrum Health provided historical stockout data as a starting point to understand the current state. The JJMDC team did the same with order fees data, making Spectrum Health aware of their current charges and providing benchmark data for comparison to similar health systems.

One result of this increased transparency was a realization that adjusting the DC replenishment cycle to align with DC receiving preferences could improve on-time delivery and decrease lead time. "Honesty and transparency have gone a long way in making this successful," said Hakala. Shelton concurred: "The key to this success is being open to sharing with others," he said. "Taking the armor off, and getting away from the mentality of, 'You sell, I buy.' The focus is now how we can work together to be most efficient."

3. Integrating Processes

Historically, the approach to stockouts had been a reactive one, with members of the Spectrum Health team calling JJMDC customer service once the stockouts had occurred. To proactively address potential stockouts, the team established a weekly process to integrate JJMDC and Spectrum Health inventory data, linking the supply and demand needs across the two organizations.

The increased interactions between the Spectrum Health purchasing teams and the JJMDC demand planners had the added benefit of identifying existing alternatives that were underutilized, such as prompt pay discounts for certain orders. "Some of these things we just didn't know," said Daniel Skuza, Buyer, Spectrum Health.

Additionally, the integration of processes across the two organizations allowed the teams to constantly hone their approaches. "Most companies conduct quarterly or annual business reviews," said Shelton. "We were essentially having operational reviews on a weekly basis. We were able to collaboratively look at the situation in real time and make adjustments."

Delivering Results

After five months, considerable improvements were achieved across all targeted goals. Compared to baseline measures:

49%

Reduction in weekly JJMDC product codes out of stock²

18%

Reduction in average days out of stock²

96%

Reduction in DC expedited order fees²

"I use the work we've done with JJMDC as the benchmark with different manufacturers looking to partner with us"

- Jason Shelton, Manager of Supply Chain Management Operations, Spectrum Health.

Key Success Factors

1. Establish common goals and priorities
2. Share inventory and operational data
3. Connect to expertise from outside your team
4. Assess progress on a regular basis
5. Adopt a collaborative mindset