

Together, Johnson & Johnson Medical Devices Companies (JJMDC) and Intermountain Healthcare partner to reduce waste and variation by streamlining JJMDC suture inventory

For over three years, Intermountain Healthcare has been leading its product standardization strategy with its own tools and data analytics. Recently, Intermountain expanded its efforts by partnering with JJMDC to utilize JJMDC's clinical knowledge and CareAdvantage approach to help strengthen Intermountain Healthcare's supply chain analytics.

This resulted in significant efficiencies for the system and value for its patients, including reduction in 118 JJMDC suture SKUs, 25% increase in inventory turns, and direct product cost savings of over \$17,000 per year.¹

As pressure to reduce costs and improve outcomes strains healthcare supply chains, innovative collaborations, such as the one between Intermountain Healthcare and JJMDC, are addressing some of the most pressing challenges by utilizing expertise across the broad JJMDC portfolio.

Needs Identification

Managing suture inventory is a complex task for any health system. Across Intermountain's 22 hospitals and 200 clinics, the supply chain organization was managing over 1,200 suture codes – more than 300 of which were only being used by a single facility.

Over the past few years, Intermountain has focused on reducing variation in its clinical products in collaboration with their practitioners. Reducing product variation not only creates economic savings, but it has clinical value as well. Intermountain approached JJMDC for their expertise as a strategic supplier to help reduce variation in its suture use.

"Suture is a significant product category not only because of the sheer number of SKUs, but also because of the clinical complexity involved," noted Reed Jaboro, Division Sales Manager from Salt Lake City and key collaborator between JJMDC and Intermountain on this project. "When it comes to SKU consolidation, trust is a very important factor. The clinicians need to trust their supply chain to achieve the objectives of a SKU consolidation project of this magnitude."

Together the teams conducted a needs analysis and developed the following goals:

- Eliminate products that are only used in one facility
- Minimize amount of low volume product
- Standardize product with multiple units of measure
- Remove products with similar attributes without compromising patient outcomes

The teams also identified the following challenges:

- Lack of detailed product attributes
- Lack of resources needed to fully engage and educate clinicians on the suture standardization activities

- For every \$1 of cost of goods, a provider organization spends \$1.80-\$2.00 in managing resources²
- Up to 15% of a provider's supply chain resources may be wasted due to ineffective processes for analyzing, planning, and placing orders³
- Physicians and nurses spend, on average, nearly 20 percent of their workweek on supply chain and inventory management; this time, which if reallocated, could be spent with patients on research and education, or on training new staff⁴
- Better hospital supply chain management leads to better quality of care and supports patient safety⁴

Capabilities

1. Starting with Data

Intermountain's cross-functional team started with clear and accurate data to ascertain the direction and breadth of the project. According to Chet Damania, Senior Manager, Supply Chain Customer Solutions for JJMDC, the close, ongoing partnership between JJMDC and Intermountain facilitated the efficient sharing of this data. "We were able to draw analytics from existing structures to determine which codes could be standardized or removed without disruption to clinical functions, and support the standardization efforts of Intermountain with their clinicians," said Damania.

Two key data elements were needed to make informative and realistic strategic recommendations:

- Product attributes such as needle type, shape, and size; suture type, length, size, and color were identified
- Product usage was identified at each patient care location for every physician rather than simply relying on the amount of products purchased

2. Providing a Change Management Roadmap

It was important to give clinical teams time to address the volume of sutures identified for replacement. By breaking up the conversions into manageable steps, it allowed the clinicians to adopt each activity such as consolidating units of measure and standardizing to widely adopted suture technologies, such as MONOCRYL® (poliglecaprone 25) Suture, ETHIBOND EXCEL® Polyester Suture, and STRATAFIX™ Knotless Tissue Control Devices.

3. Requesting Feedback

Achieving success required clinician buy-in and comfort with the new recommended products. JJMDC and Intermountain engaged these clinical teams to receive their input and approval. Receiving clinical feedback and integrating it into the standardization process increases the likelihood of the long-term sustainability of the decisions. Further, it strengthened trust and partnership between JJMDC, Intermountain Supply Chain, and clinicians across all the 22 hospitals.

Delivering Results

These efforts enabled Intermountain to achieve what Damania called "the ultimate goal: to reduce variation and achieve consistent performance across hospitals while improving operational efficiency and service."

After reviewing over 500+ different suture products:

- 118 sutures were eliminated by adopting a higher velocity item as the standard¹
- Direct product cost savings came to over \$17,000 per year¹
- Within Intermountain's distribution center, inventory turns for the remaining sutures increased by 25%¹
- Having fewer higher-velocity items reduced risk of expired and obsolete product

Through teamwork, analytics, and comprehensive follow-through, the timely and knowledgeable interaction with JJMDC teams proved to be an essential ingredient to the project's success. "At the core of this project was a collaborative spirit and collective goal to make the healthcare delivery system more efficient and more cost effective," said JJMDC's Jaboro. This partnership helped align JJMDC's commercial and supply chain solutions to bring value and support Intermountain Healthcare's needs for product standardization.

"JJMDC's product knowledge and industry experience enabled our standardization strategy and generated quick results to reduce variation and improve product availability."

- Brent Wigington, Director of Continuous Improvement, Intermountain Healthcare

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

References

1. Data on file. Ethicon US, LLC. "Suture Efficiency Report." 2017.
2. Nachtmann H, Pohl EA. The State of Healthcare Logistics: Cost and Quality Improvement Opportunities. Center for Innovation in Healthcare Logistics, University of Arkansas, July 2009. Available at: http://wordpress.uark.edu/engresearch/files/2013/11/The_State_of_Healthcare_Logistics_July_2009.pdf. Accessed April 5, 2017.
3. Conway K. Applying Supply Chain Best Practices from Other Industries to Healthcare. Available at: <https://www.ghx.com/media/1070/applying-supply-chain-practices-from-other-industries-to-healthcare.pdf>. Accessed April 10, 2017.
4. Marzouk S, Nelson S. The biggest untapped resource at your hospital? Your supply chain. 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 April 5, 2017.