CareAdvantage from the Johnson & Johnson Medical Devices Companies (JJMDC) helps Northeast health system improve operating room efficiency by revamping suture inventory

Teaming with JJMDC enabled this system to consolidate its suture purchases from JJMDC and standardize its suture inventory through a collaborative process that leveraged comprehensive data and engaged operating room and supply chain staff. These efforts resulted in significant improvements for the health system, including a reduction in the number of suture SKUs stocked and a decrease in the weeks of suture inventory on hand.
Knowing that the long-term success of the initiative required support from the perioperative teams, Ethicon leveraged its deep clinical knowledge and strong relationships to guide the consolidation plans. Ethicon suture experts reviewed each facility’s consolidation analysis with nursing and surgical staff leaders. The teams discussed product alternatives that would allow the system to narrow its suture offerings by increasing the demand for more versatile codes and eliminating low-volume codes. Every step in this collaborative approach balanced the desire for perioperative efficiency with the need to maintain excellent clinical outcomes and patient experiences. Ethicon worked to ensure the clinical leaders’ full understanding of the differences in the attributes of all sutures proposed for consolidation, and did not proceed until all clinical concerns were addressed.

To help manage the growing size of its inventory, the system tried to implement a just-in-time inventory management system, but these efforts fell short of the system’s efficiency goals. As a longstanding contract with another supplier was coming to an end, the system turned to Ethicon, part of the Johnson & Johnson Family of Companies, to propose a plan to optimize management of its suture inventory.

Ethicon professionals worked with the system’s supply chain and perioperative departments to identify the opportunity for improvement. The assessment began with a detailed on-site analysis of suture usage. The team conducted a physical inventory audit of suture stock on hand, evaluated clinical usage data, and documented current suture storage locations. Based on this information, the team benchmarked the system’s performance against similar facilities, finding that the system carried 1,171 suture SKUs, compared with an average of 678 SKUs for similar-size organizations, with large variation in SKUs across its facilities. Additionally, the system was carrying 25.8 weeks of inventory versus 13 weeks for similar-size systems.

This thorough needs identification process gave the teams a strong foundation to develop a tailored approach for each facility in the system to achieve the following goals:

- Preserve high clinical performance
- Reduce working capital and shelf space allocated to suture inventory
- Establish an efficient product mix in the operating rooms

The health system wanted to streamline its large suture inventory to free up working capital and shelf space, reduce waste due to product expiration, and improve staff productivity.

**Needs Identification**

For this Northeast health system with a teaching program and a flagship facility, years of system expansion, acquisitions and added product selection had produced an inconsistent and slow-turning suture inventory.

With consensus on which codes to consolidate, the system created a coordinated project plan to implement the changes at three facilities. The consolidation plan called for simultaneous changes in perioperative, inventory management, and ordering processes in a facility. Thus, Ethicon established a multidisciplinary team including experts in the Ethicon suture portfolio, clinical education, and supply chain to work on-site, side-by-side with the key stakeholders from the health system.

Together, the Ethicon and hospital teams focused their efforts in three areas: training clinical staff on the available suture devices through hands-on in-service sessions, establishing initial par levels for all suture SKUs, and adjusting inventory locations to ensure efficient storage of and access to suture devices in the perioperative area.

The health system collaborated with Ethicon to implement three key strategies to consolidate suture inventory:

1. **Secure Clinical Alignment**
  Knowing that the long-term success of the initiative required support from the perioperative teams, Ethicon leveraged its deep clinical knowledge and strong relationships to guide the consolidation plans. Ethicon suture experts reviewed each facility’s consolidation analysis with nursing and surgical staff leaders. The teams discussed product alternatives that would allow the system to narrow its suture offerings by increasing the demand for more versatile codes and eliminating low-volume codes.

2. **Provide On-site Support**
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3. **Proceed in Phases**
   To allow for sharing of best practices and to ensure availability of resources, the implementation activities at each facility occurred one month apart. After the implementation at a facility was complete, the Ethicon and health system teams spent a full day reviewing every step of the process, ensuring the right people, tools, and timing were in place for the next facility.

   This process of continuously refining and improving plans allowed the teams to reduce the implementation time from two weeks at the first facility down to only one week at the last facility. Furthermore, the phased approach created subject matter experts within the health system who were then able to answer implementation-related questions, even after the Ethicon team was no longer onsite.

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Over the four-month implementation process, this health system achieved its goals by focusing on the total cost of ownership of its suture inventory, not just the contracted purchase price. By making Ethicon its primary suture supplier and consolidating redundant suture SKUs, the health system reduced its suture inventory investment by 30% to under $600,000. After consolidating its inventory, the system stocked 35% fewer suture SKUs and its overall inventory turn rate nearly doubled.

By reducing its working capital, the system invested in patient safety initiatives using funds that were previously allocated towards suture inventory. Additionally, the system anticipated improved labor productivity since there were fewer SKUs to manage.

### Key Success Factors

1. Involve clinical and supply chain stakeholders
2. Utilize supplier’s knowledge and expertise
3. Implement in phases to allow for learning
4. Manage new product requests to maintain efficiencies

Based on the success of the engagement around their suture inventory, the system identified additional areas of the JJMDC portfolio that it plans on working with JJMDC to streamline, continuing to drive efficiency and savings.
To learn more please visit www.CareAdvantageJJMDC.com or email CareAdvantageJJMDC@its.jnj.com.