

# Surgical Supply Chain Optimization Yields Savings at Academic Hospital with 800+ Beds

A hospital (800+ beds) in the Southeastern U.S. identified an opportunity to reduce waste in the OR invasive supplies, create cost transparency, reduce unwarranted variation in pricing and usage, and strengthen processes to sustain continuous improvements. These reductions led to better value for patients, improved clinician satisfaction, and increased quality of care.

## Background

Faced with rising surgical supply costs, changing reimbursement structures, and an increasingly competitive market landscape, an academic hospital (part of a larger health system) in the Southeast region of the U.S. identified an organization goal of \$2.6M supply cost reduction in FY2017 based on a FY2016 \$85M supply spend. This would allow the hospital to provide better value for patients and fund their mission to provide service to their community. Procedural areas (including adult & pediatric Surgery, Cath, EP, Specials, and Endoscopy) were identified as having strategic opportunity in reducing wasted items, decreasing provider-to-provider variation, optimizing inventory (18,000+ unique locations, 3,000+ unique items), and improving inventory turns. In addition, the hospital was in the midst of moving to a new Electronic Medical Record ("EMR"), and sought to ensure a seamless transition for patients and staff alike.

## Our Approach

We used a partnership approach with a blended and dedicated team—including the hospital and health system team members who were coached by GE. The team's objective was to focus on sustainability and enabling replication at other health system facilities. This required engagement from a variety of stakeholders including supply chain, clinical team, and physicians.

The approach to the engagement included the following:

- **Assessment:** Interviews to create engagement and ownership and current state process mapping focusing on variation, breakdowns, and waste, which resulted in a list of prioritized improvement opportunities based on impact.
- **Custom database:** Linked true costs to actual supply usage and the ability to drill-down to item level detail for any procedure; served as a foundation for a data-driven engagement.
- **Clinical variation:** Provided clear, action-oriented recommendations and leveraged a constructive, collaborative, and respectful approach with surgeons, cardiologists, and radiologists that incorporated GE's change management expertise. The team:
  - Validated data with surgeons, removed outliers, and compared similar procedures.
  - Created physician-level reports for each specialty by procedure.
  - Worked with service line administrators to identify physicians practicing as each procedure's highest value provider and created a customized communication approach.
  - Developed pocket guides for like products with significant cost variation which served as an educational and awareness tool.
- **Supply cost:** Provided a prioritized list of recommended negotiations by category and by vendor based on industry pricing benchmarks. Supported a focused pricing cap on spinal implants that projected \$1.8M in savings.
- **Preference cards:** Analyzed open & hold items to guide clinicians to preference cards most likely to need review and updates (reviewed 2,000+ cards); in tandem to moving to a new EMR, reduced the number of preference cards from 18,000 to 7,300.
- **Governance:** Integrated efforts with existing physician-led surgical and procedural governance structure. Provided recommendations to ensure transparent and consistent decision-making (i.e. new supply approvals and addressing cost vs. value discussions).

## Results



### Reduced Clinical Variation

Identified \$7.5M/year savings (or 9% reduction in overall spend) by reducing clinical variation to align with facility's internal benchmarks

### Optimized Supply Cost

Identified \$2.3M/year savings given current cost vs. benchmark through vendor management and negotiations



### Improved Preference Card Accuracy

Achieved \$420k/year savings by reducing waste and procedure cost by reducing excessive and unneeded items on preference cards