Optimizing Perioperative Services Inventory to Save Time and Reduce Costs with Kotter’s Change Model

Perioperative services consume more than 30% of hospital budgets. The procurement, processing, and use of sterile surgical inventory are a major component of the perioperative care budget and have been recognized as an area of operational inefficiency. The optimization of surgical inventory reprocessing is one way to increase efficiency and eliminate waste.

A study from the January 2022 issue of The Joint Commission Journal on Quality and Patient Safety posits that an established organization change model can be used effectively to implement inventory optimization (IO) – driving improvements across inventory, efficiency, and satisfaction metrics.

The study was evaluated using 3 outcome measures. Results showed real improvements:

**INVENTORY METRICS**
- **Total inventory reduction:** 35.2% (from 7,787 to 5,044 instruments)
- **Tray size reduction:** 18%
- **Depreciation costs saved:** $61,395 annually

**OPERATIONAL EFFICIENCY METRICS**
- **Reprocessing time saved:** 1,333 hours annually
- **Labor costs saved:** $39,995 annually
- **Case cancellation rate decreased from 3.9% to 1.2%**

**CLINICIAN SATISFACTION METRIC**
- **Staff satisfaction with inventory increased from 1.7% pre-IO to 80% post-IO**

The project followed KCM’s 8-step process for organizational change:
1. **Create Coalition**
2. **Create Vision for Change**
3. **Establish Urgency**
4. **Communicate Vision**
5. **Empower Broad-Based Actions**
6. **Generate Short-Term Wins**
7. **Consolidate Gains**
8. **Anchor Change**

The study's quality improvement (QI) project aimed to:
1. Implement IO using Kotter’s Change Model (KCM)
2. Overcome organizational barriers to change
3. Measure key outcome metrics related to surgical inventory
4. Track corresponding clinician satisfaction

The study describes the successful implementation of KCM to facilitate change in the perioperative setting, contributing to the growing body of literature that supports KCM as a valuable change management tool in health care.

To learn more about this study, visit: https://www.jointcommissionjournal.com/article/S1553-7250(21)00244-0/fulltext