

**ABSTRACT TITLE:** ERAS PROGRAM VALUE OPTIMIZATION BY REDUCING SURGICAL DEVICE VARIATION

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**Background/Introduction:** The “Value” of a health care service can be defined as quality and outcomes over the cost of care. Enhanced Recovery After Surgery (ERAS) programs have been shown to improve quality and outcomes of patients undergoing colorectal surgeries, which can in turn decrease the cost of care. Additional per-case cost savings can be realized by reducing unnecessary variations in practice, such as surgical devices. Standardization of surgical devices through supplier contracts can result in significant savings but are often prone to resistance by surgeons. Within an ERAS program, however, demonstrating the value of supply standardization can be beneficial to both hospital and surgeons in a value-based payment environment.

**Methods:** Providence Health & Services, a 34-hospital integrated delivery network, signed a sole-source contract with one supplier for endomechanical devices (primarily endoscopic staplers, clip applicators, and suture loop devices). This included the conversion of two previously non-contracted hospitals that had no prior use of this supplier’s products in this category. The choice of supplier was guided by feedback from surgeons from all hospitals, and many hospitals (including the two non-contracted) had already implemented colorectal ERAS practices. Product utilization, contract compliance, colorectal case volume, reoperations, deep tissue abscesses, length of stay and 30-day mortality of colorectal surgeries were measured during the 7 months following conversion and compared to the same data during the same 7 calendar months in the previous year.

**Results:** Conversion was rapid and successful at both hospitals that did not previously use the contracted supplier. Case volume did not decrease, suggesting that no diversion of cases to other hospitals occurred. Mortality, reoperations, and deep tissue abscesses were better or no worse than the index period. Median length of stay during this period improved compared to the index period. The system was able to demonstrate a savings of over \$3 million (over the 3 year contract) based on historical utilization.

**Conclusion:** By decreasing supply costs without significant negative effects on quality and outcomes, the value of colorectal surgeries was increased for the hospital system. Implementing supply standardization may increase the value of colorectal ERAS programs.

	Hosp A		Hosp B		System	
	Index	Post conv	Index	Post conv	Index	Post conv
<b>Case volume</b>	52	56	65	64	1456	1368
<b>Reoperation</b>	5.8%	0.0%	6.2%	1.6%	5.4%	3.4%
<b>Mortality</b>	0.0%	0.0%	0.0%	1.6%	0.5%	0.4%
<b>Deep abscess</b>	7.7%	1.8%	6.2%	3.1%	5.6%	4.2%
<b>LOS (Median days)</b>	4.1	3.4	4.2	3.8	4.2	4.0

### Contract Compliance (Hospital A and B conversion in April 2017)

