

## Annual Meeting

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## 16. APPLYING ISO 9001 TO CREATE AN EFFECTIVE SURGICAL QUALITY COMMITTEE

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**Background:** Within surgical services the responsibility to provide high quality, safe, and cost-effective care is a priority. Strategies to establish and maintaining a culture of quality and safety in surgery remain elusive. Traditional approaches to surgical quality are embodied in department-specific conferences and operating room committees. These efforts aimed at improving safety are limited by several factors including the siloed nature of individual departments and a lack of involvement by the diverse team of people who impact care of the surgical patient. No consensus exists regarding the most effective way to improve surgical quality.

Outside healthcare, many industries derive their quality management systems from the International Organization for Standardization (ISO®). The use of ISO quality standards (ISO 9001:2015) within healthcare is recognized but has not been widely applied as a methodology applied to improving surgical outcomes.

**Methods:** To improve surgical quality within our hospital we developed a new, multidisciplinary, committee – Surgical Services Quality Outcomes Committee (SSQOC) - using ISO 9001:2015 quality management system standards. The foundational construct acknowledged that safety initiatives isolated to individual components of a complex system are ineffective at improving overall quality and reliability. Quality objectives, termed key result areas (KRAs), were assessed comprehensively to understand how any suggested changes will be impacted based on risks and opportunities inherent in the system.

**Results**: The initial quality focus was on surgical site infections in 5 target services. Multidisciplinary working groups (one for each focus service) were formed to access the data and identify process changes for improvement.

**Conclusion:** This is one of the first studies using ISO 9001 to improve surgical quality, and the results at one year indicate both acceptance and success. Increased transparency of outcomes data has heightened awareness of both need to improve and benefits of following the QMS -improved patient outcomes and reliability of systems.

A challenge was the need for an effective strategy for motivating surgical teams to follow new standardized recommendations. Overcoming this required appreciation of perspectives, sharing of meaningful data, evidence-based decision making, and leadership commitment to facilitating change by engaging and empowering those on the front lines of patient care.

2018					2019			
Infection Type	Infections	Expected	O/E	Procedures	# Infections	Expected	O/E	Procedures
CABG	6	4.657	1.288	448	4	4.44	0.901	406
Colon	16	11.775	1.359	420	7	11.878	0.589	428
Hysterectomy	6	2.832	2.119	352	3	2.934	1.022	362
Total Knee	4	2.876	1.391	732	1	3.267	0.306	843
Total Hip	0	1.025	0	127	1	3.307	0.302	382