



## NEWS RELEASE

### FOR IMMEDIATE RELEASE

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## Optimizing perioperative services inventory to save time and reduce costs

*Study in January 2022 issue of The Joint Commission Journal on Quality and Patient Safety*

(OAKBROOK TERRACE, Illinois, January 6, 2022) – Cost containment has become more important than ever in health care. Perioperative services are often scrutinized, as they consume more than 30% of hospital budgets.<sup>1</sup> 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.<sup>2,3</sup>

A new study in the January 2022 issue of *The Joint Commission Journal on Quality Patient Safety*, "[Inventory Optimization in the Perioperative Care Department Using Kotter's Change Model](#)," used an established change model to effectively implement inventory optimization (IO) – driving improvements across inventory, efficiency and satisfaction metrics.

Researchers at the University of Toronto optimized inventory across four high-volume surgical services using the steps in Kotter's Change Model (KCM): create coalition, create vision for change, establish urgency, communicate the vision, empower broad-based action, generate short-term wins, consolidate gains and anchor change. The process evaluated inventory metrics, operational efficiency metrics and clinician satisfaction.

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<sup>1</sup>Ahmadi E, et al. Inventory management of surgical supplies and sterile instruments in hospitals: a literature review. *Health Syst (Basingstoke)*. 2018 Jul 18;8:134–151.

<sup>2</sup>Waring JJ, Bishop S, et al. Lean healthcare: rhetoric, ritual and resistance. *Soc Sci Med*. 2010;71(7):1332–1340 Epub 2010 Jul 13. PMID: 20702013.

<sup>3</sup>Farrokhi FR, et al. Application of Lean methodology for improved quality and efficiency in operating room instrument availability. *J Health Qual*. 2015;37:277–286.

Total inventory was reduced by 37.7%, with an average tray size reduction of 18%. This saved a total reprocessing time of 1,333 hours annually and labor costs of \$39,995 annually. Depreciation cost savings totaled \$64,320 annually. Case cancellation rates due to instrument-related errors decreased from 3.9 to 0.2%. Additionally, staff completely satisfied with inventory improved from 1.7% pre-optimization to 80% post-optimization.

The study is the first to report successful implementation of KCM to facilitate change in the perioperative setting.

“Through their timely study, [the study authors] prove yet again that not only can surgical staff enlist the proper buy-in and dedication needed to increase perioperative efficiency, they are also capable of organizing a standardized change process to implement the improvements in a manner that is reproducible and relatively predictable,” notes an [accompanying editorial](#) by James Farrelly, MD, MHS.

Also featured in the January issue:

- [Harnessing the Potential of Primary Care Pharmacists to Improve Heart Failure Management](#) (U.S. Department of Veterans Affairs Palo Alto Health Care System, Palo Alto, California)
- [Breaking Clinical Inertia in Heart Failure Management](#) (editorial)
- [A Simulation Systems Testing Program Using HFMEA Methodology Can Effectively Identify and Mitigate Latent Safety Threats for a New On-Site Helipad](#) (Maine Medical Center, Portland, Maine)
- [Comparison of Two Different Models to Predict Fall Risk in Hospitalized Patients](#) (Northwestern Medicine, Chicago)
- [Effects of Different Transitional Care Strategies on Outcomes after Hospital Discharge—Trust Matters, Too](#) (sample of 42 U.S. short-term acute care and critical access hospitals and data from 7,939 Medicare beneficiaries)
- [Increasing Rates of Prone Positioning in Acute Care Patients with COVID-19](#) (NYU Grossman School of Medicine, New York University, New York)
- [Don't Go to the Hospital Alone: Ensuring Safe, Highly Reliable Patient Visitation](#) (commentary)

For more information, visit [The Joint Commission Journal on Quality and Patient Safety website](#).

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#### **Note for editors**

The article is “[Inventory Optimization in the Perioperative Care Department Using Kotter's Change Model](#)” by Jay Toor, MD, MBA; Jin Tong Du, BMSc; Martin Koyle, MD, MBA, MSc; Aazad Abbas, BSc; Ajay Shah, MD; Garry Bassi, BScH; Dante Morra, MD, MBA; and Jesse Wolfstadt, MD, MSc. The article appears in *The Joint Commission Journal on Quality and Patient Safety*, volume 48, number 1 (January 2022), published by Elsevier.

#### ***The Joint Commission Journal on Quality and Patient Safety***

[The Joint Commission Journal on Quality and Patient Safety](#) (JQPS) is a peer-reviewed journal providing health care professionals with innovative thinking, strategies and practices in improving quality and safety in health care. JQPS is the official journal of [The Joint Commission](#) and [Joint Commission Resources, Inc.](#) Original case studies, program or project reports, reports of new methodologies or the new application of methodologies, research studies, and commentaries on issues and practices are all considered.