



## Saving Money with Surgery Recovery Programme



A new study published in the *Journal of the American College of Surgeons* (JACS) suggests that the costs of quality improvement programmes that help the recovery process of patients after colorectal surgery are offset by savings that are derived from reduced length of stay at hospitals.

The study was conducted by researchers at Johns Hopkins Medical Institutions in Baltimore. The researchers analysed the lengths of stay and costs documented in six published reports of Enhanced Recovery After Surgery (ERAS) programmes that were implemented in U.S. hospitals for patients undergoing colorectal procedures between 2003 and 2015. They generated a financial model based on implementation costs, reduction in hospital stay, per day reductions in direct variable costs and reductions in annual surgical caseload. This data was then used to determine the net financial impact of implementing ERAS programmes.

ERAS programmes help promote the adoption of a standardised approach of evidence based perioperative care by creating evidence-based protocols. Some of the key elements included in this are preoperative counseling for patients and their families, optimising preoperative and postoperative nutrition, minimising use of narcotics for pain management and promoting early mobility after surgery.

Previous studies already demonstrate that ERAS protocols can successfully reduce complications, hospital stays and costs as well as improve patient experience. but as Elizabeth Wick, MD, FACS, a colorectal surgeon at the Johns Hopkins Hospital and associate professor of surgery at Johns Hopkins School of Medicine points out, these programmes require significant initial investment of materials, time, personnel and capital equipment and there is a need for improved collaboration between hospital administrators and surgeons. "The model gives surgeons a framework for having a sophisticated discussion about how to initiate these types of programs with hospital administrators and what type of return on investment can be anticipated. Hopefully it can be used to promote collaboration between surgeons and hospital leadership to really improve the quality, value and patient experience," Dr. Wick said.

In this study, the researchers compared median length of stay with direct variable costs to the hospital including laboratory, pharmacy, radiology, and respiratory care materials and services before and after ERAS implementation. The analysis showed that one-day reduction in length of stay saved about \$1897 in direct variable costs; a three day reduction could potentially save up to \$2240 in direct variable costs. If a hospital had an annual number of 100 colorectal procedures, the implementation of ERAS in the first year would cost approximately \$117,875 with \$107,875 in annual maintenance costs. Similarly, for a hospital that performs 250 and 500 colorectal procedures a year, the implementation cost would be \$325,000 and \$552,783 in the first year respectively with an annual maintenance cost of \$216,300 and \$356,944 respectively. The costs would be offset by net savings derived from reduced length of stay by 1.9 days and direct variable costs by \$1,897 per

patient. With an annual caseload of 500 patients, ERAS protocols yielded a total cost savings of \$948,500. Subtracting the \$552,783 cost of implementing the ERAS program, net annual savings totaled \$395,717.

This analysis clearly shows that ERAS is a beneficial programme even for hospitals that only do a few cases.

Source: [American College of Surgeons](#)

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