Johns Hopkins Awarded Multimillion-Dollar Contract in Effort to Improve Surgical Outcomes for Patients

Johns Hopkins researchers to bring surgical quality improvement initiative to hospitals nationwide

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The Johns Hopkins Armstrong Institute for Patient Safety and Quality, in collaboration with the American College of Surgeons, has been awarded a nearly \$4 million contract, with the option of \$12 million over three years, for a total of about \$16 million from the Agency for Healthcare Research and Quality (AHRQ) to improve the outcomes and experiences of surgery patients across the United States. The project, funded and guided by AHRQ, will enable more than 750 hospitals to implement enhanced recovery after surgery (ERAS) protocols, which have been shown to reduce complications, decrease lengths of stay and boost patient experience.

ERAS strategies are employed throughout a patient's entire care process — from the time a surgeon decides to operate to after a patient is discharged following a procedure. Protocols include patient and family engagement, avoiding prolonged fasting periods, prescribing and using opioids sparingly, and incorporating multiple methods to control pain. ERAS brings a collaborative care approach, involving close teamwork among surgeons, anesthesia providers and nurses.

While these protocols have existed for years, Johns Hopkins took a novel approach to implementing them in 2013. Elizabeth Wick, M.D., who is now an adjunct associate professor of surgery at the Johns Hopkins University School of Medicine, joined ERAS with AHRQ's Comprehensive Unit-Based Safety Program (CUSP), a five-step culture change intervention that engages front-line health care staff members in preventing harm. CUSP can help overcome the lack of local buy-in that often dooms improvement efforts.

Through the combination of both initiatives, hospital length of stay for patients having colorectal surgery was reduced by about 1.5 days, costs have dropped by \$1,500 and patient complications have gone down, including a 50 percent decrease in surgical-site infections.

"With the success of ERAS at our hospital, we are excited to share this approach with other hospitals," says Michael Rosen, Ph.D., associate professor with the Armstrong Institute. "This will be an important step in improving patient care throughout their surgery process."

In the new project, called the AHRQ Safety Program for Enhanced Recovery After Surgery, improvement and research efforts will initially focus on abdominal operations in colorectal surgery. Future phases will expand to introduce protocols in other areas, such as bariatric surgery, orthopaedic surgery, gynecology and emergency general surgery.

"Too often, patients suffer complications and prolonged hospitalizations after surgery, although the steps to prevent these results are known," says Peter Pronovost, M.D., Ph.D., director of the Armstrong Institute and senior vice president of patient safety and quality for Johns Hopkins Medicine. "This program brings these recommended practices together into one coordinated, unified program where everyone — clinicians, patients and their loved ones — understand what they must do for the best possible outcome."