Communication, Checklist Reduce Post-Op Complications

As the nation grapples with surging healthcare costs, researchers at the University of Connecticut Health Center, Farmington, and Saint Francis Hospital and Medical Center, Hartford, have confirmed two simple cost-effective methods to reduce expensive postoperative complications—communications team training and a surgical checklist. Investigators found that when surgical teams completed communications training and a surgical procedure checklist before, during, and after high-risk operations, patients experienced fewer adverse events such as infections and blood clots. The study is published in the December issue of the *Journal of the American College of Surgeons*.

Surgical teams come together for one common goal—to treat patients using surgical procedures—but occasionally unforeseen circumstances can occur during the process. Sometimes surgical equipment isn't on hand, or the patient requires more blood than expected, which delays the procedure and requires dispensing more anesthesia while a team member hurries to get needed supplies. Also, surgical team members may have inconsistent information about priorities for the procedure, explained Lindsay Bliss, MD, lead study author and general surgery resident at the University of Connecticut. In a larger hospital, some team members may meet for the first time during a procedure. "Everyone brings a different aspect of patient care that they think is the most important," Dr. Bliss said. "But the team has to understand all aspects of patient care and agree on what's important."

Although surgical checklists have existed for a while, they are not universally used. For the University of Connecticut study, Dr. Bliss's colleagues compared three groups of surgical procedures to determine whether communications training coupled with a standardized checklist could bring surgical teams into agreement and reduce patients' complications.

The communications training included three sessions on topics such as differences between introverts and extroverts, effective dialogue among all operating room personnel, and how to use a surgical checklist. Dr. Bliss's team used the one-page Association for Perioperative Registered Nurses Comprehensive Surgical Checklist developed in April 2010. It includes protocols mandated by the World Health Organization, The Joint Commission, and the Centers for Medicare and Medicaid Services, and has been endorsed by the American College of Surgeons and other surgical organizations.

For one group of procedures, the surgical team selected operations from the American College of Surgeons National Surgical Quality Improvement Program database. These operations occurred between January 2007 and June 2010 and served as the baseline group, since these surgical teams neither had gone through the communications training nor had they used a checklist. Dr. Bliss said pulling this

information from the ACS NSQIP database allowed the researchers to access standardized clinical and demographic data on the patients, along with information about 30-day surgical outcomes.

These procedures were compared with two other groups of surgical procedures that occurred between December 2010 and March 2011. In one group, 246 procedures involved surgical teams who had undergone communications training, while the other group included 73 procedures involving surgical teams who had not only gone through the same communications training but also used the checklist.

Study results showed that the communications training coupled with the checklist curbed complications within 30 days of the procedures. Complications included surgical site infections, vein blood clots, lung blood clots and urinary tract infections. When surgical teams had no communications training and did not use a checklist, more than 23 percent of the procedures resulted in complications within 30 days. About 16 percent of procedures by surgical teams who only participated in communications training led to complications within 30 days, and only 8.2 percent of the procedures had a 30-day complication when the surgical teams used both the communications training and the checklist.

Even small steps like making sure everyone on the team introduced themselves before the procedure helped reduce complications. "The theory is that this brings a sense of accountability and makes sure that everyone's voice can be heard," Dr. Bliss explained. "No one on the surgical team is a nameless, faceless body. The checklist makes sure everyone is advocating for the patient." Dr. Bliss said that while this study builds on previous research about the benefits of using checklists, it is the first to look at how communications training can help surgical teams have productive conversations around patient care while using the checklist.

The drop in post-operative complications also has implications for national healthcare spending because Medicare and other health insurance providers are now starting to decline reimbursement for complications that result from the clinicians' errors, especially just a month after the patient's procedure. The authors note that post-operative infections are among the most expensive medical errors, costing $14,500 per case on average.*

"I don't think anyone goes into this profession expecting to hurt the patient, but it happens more than any of us would like," Dr. Bliss said. "Every adverse outcome results in more expense. It means a longer stay in the hospital and more treatment. Communicating and using a checklist do not just add extra minutes on to the procedure. There is an ethical and financial obligation tied to both tools. The checklist is publicly available online," Dr. Bliss concluded. "The cost of a photo copy in exchange for reducing patient morbidity is a fabulous return on investment."

Source URL (retrieved on *09/02/2014 - 10:30pm*):
http://www.surgicalproductsmag.com/news/2012/12/communication-checklist-reduce-post-op-complications