HealthCareBusiness news

Dr. Philip Corvo

What is ERAS (Enhanced Recovery after Surgery) and how is it supporting better patient outcomes?

August 27, 2019

Healthcare Business News interviewed Dr. Philip Corvo, who has since 2013 served as chairman of the Stanley J. Dudrick Department Surgery and Director of Surgical Critical Care at Saint Mary's Hospital, Trinity Health Of New England.

He leads an innovative ERAS (Enhanced Recovery after Surgery) program which is helping reduce opioid use, speeding patient recovery and reducing costs. Under Corvo's leadership, they have accomplished this through a combination of multidisciplinary approach and the use of technology like ultrasound guided TAP blocks.

HCB News: How did you first learn about ERAS [Enhanced Recovery after Surgery] protocols?

Dr. Philip Corvo: I first learned about enhanced recovery at my previous institution, Stamford Hospital, while working with the Chairwoman of Anesthesia Dr. Teresa Bowling. Dr. Bowling learned how to apply local regional blocks that our anesthesia colleagues were using on orthopedic patients to abdominal surgeries, and we became successful in decreasing pain and narcotic use in many of our general surgery patients. I then learned more about ERAS at an American College of Surgeons Quality and Safety conference. In my role as Chairman of Surgery, I am always striving to improve our patient safety and satisfaction and programmatic efficiency, and knew that I needed creative thinking to decrease our infection rates and opioid usage

HCB News: What are those objectives exactly?

PC: To increase patient safety by decreasing infections and opioid use; and to enhance patient safety, satisfaction and financial impact on the hospital by decreasing the patient's length of stay.

HCB News: Were there any start-up costs associated with your ERAS program? Did you encounter any obstacles?

PC: There were no additional start-up costs. We did, however, need to purchase opioid alternative medications that we were not using before, and that posed a bit of a challenge for our pharmacy. Most hospitals still function in silos, and our pharmacy silo needed to appreciate the bigger picture, above and beyond their budgetary constraints. Better integration of pharmacy and their chain of command allowed us to overcome this obstacle.

In terms of costs, once the volume of patients increased above a critical point, we also needed to purchase more ultrasound machines for our TAP blocks.

HCB News: Who are the key stakeholders in the program and what surgical specialties are included?

PC: We currently have programs for colorectal, neuro spine, bariatrics, and OB/GYN. Properly performed ERAS programs are truly multidisciplinary. Patients, physicians, nurses, assistants, pharmacy, administration are all key stake holders. The team taking care of the patient at 2 am is just as impactful as the OR team was during the day. And we can't forget that the most important stakeholder is the patient. Patient involvement, starting in the preop phase, is paramount, as is their understanding of the process. If a protocol describes getting a patient out of bed the night of surgery or removing a Foley catheter the night of surgery, the patient really does need to comply with this even if they are not in the mood at the time.

HCB News: What kind of results have you achieved, and how long did it take you to see those?

PC: We saw positive results with our very first patient. We decreased our length of stay from an industry average of 6 days down to 2 days with almost no narcotic usage, and we're to the point where some colorectal patients are going home on postoperative day 1, having taken no narcotics (except for the surgery itself). Specifically, with properly performed preoperative ultrasound-guided TAP blocks using long acting bupivacaine and a mixture of non-opioid medications that are given around the clock, not PRN, most patients receive two thirds less narcotic than they would have otherwise, and many patients go home never having taken a narcotic while in the hospital.

We've also seen drastic reductions in our colorectal infection rate, down to as low as 2% over a 2-year period.

HCB News: What would you estimate your ROI to be on your program?

PC: CMS estimates that the average SSI costs a facility $28,000. Becker's CFO report estimates that an average hospital stay is $2,400 per day. Over the course of our program since 2015, I estimate our ROI to be over $2 million. Perhaps just as important, for the patients who have expressed an opinion, their satisfaction has definitely increased.

HCB News: What role and what importance does ultrasound play within ERAS protocols?

PC: Properly placed TAP blocks, placed preoperatively with point-of-care ultrasound guidance by anesthesia, are a core component of our opioid sparing ERAS protocols. When TAP blocks are done by surgeons intraoperatively, the effect is diminished because the nervous system and brain have already registered the pain.

What is ERAS (Enhanced Recovery after Surgery) and how is it supporting better patient outcomes? (continued)

HCB News: What advice would you give to a hospital hoping to implement an ERAS program and what can they expect to achieve?

PC: The rallying cry for the Connecticut Surgical Quality Collaborative (CtSQC.org) is: "We are building a Cathedral". Implementing an ERAS program is similar in that it takes a truly multidisciplinary team, a clear focus on what the end product should look like, and the constant ability and drive to re-measure and re-adjust as often as necessary.

Essential to this program is the need for unity and alignment at all levels, including administrative support. Saint Mary's is always striving to improve patient care and the patient experience. We are very lucky to have an administration that lives in breathes and believes this every day. At the same time, we are a midsize, tightly aligned facility that allows us to take advantage of the nimbleness of a smaller facility as well as the patient impact of a larger facility. I think we have proven that with the right mindset and team, both large and small institutions can easily build impactful protocols.

HCB News: Can you share any patient success stories?

PC: One of my most memorable patients is a young woman who has a family history of colon cancer, and learned that she also had colon cancer after finding blood in her stool. Her other family members did well with their cancers, so she was not too concerned with hers. Because a loved one was a recovered narcotic addict, she was more worried about addiction potential than she was about her colon cancer. She learned about our opioid sparing protocol after searching for us on the Internet, and chose to have her surgery at Saint Mary's. She spent approximately 48 hours total in the hospital, and was able to enjoy a holiday picnic the very next weekend.

Another patient was a young woman who presented to us with acute appendicitis on the day that she was supposed to graduate from high school. She was so upset about possibly missing her graduation ceremony that she was contemplating leaving the hospital, going to her ceremony, and then returning to the hospital for her surgery. Even though this was "only" to be a laparoscopic appendectomy, we decided to apply as many ERAS principles as practical, and she was able to attend her ceremony approximately 4 hours postop.