Enhanced Recovery After Surgery
Where the patient is the focus throughout the care cycle

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Enhanced Recovery After Surgery (ERAS) is an evidence-based approach to surgical care, resulting in better surgical experiences for patients, shorter hospital stays and reduced costs.

Enhanced recovery guidelines and practices focus on a more holistic approach to surgical recovery and can help the medical community address the growing issue of over-prescribing medications, including opioids, which are plaguing the country. Furthermore, ERAS programs generally fit nicely within the Perioperative Surgical Home, allowing participation in alternative pilot programs offered through the U.S. Centers for Medicare and Medicaid (CMS), such as the Bundled Payments for Care Initiative (BPCI) and the Comprehensive Care for Joint Replacement Model (CJR).

Complications can increase the cost of surgery by as much as 75 percent and extend hospital length of stay (LOS) by 75 percent, adding $12,000 - $25,000 to the cost of each surgery.

Studies show that the ERAS approach can reduce complications, LOS, recovery time, postoperative nausea, vomiting, cognitive dysfunction, pain scores and the need for opioids. ERAS has also proven effective in reducing Hospital Consumer Assessment of Healthcare Providers and Systems scores (HCAHPS), incidence of C. difficile infection and hyperglycemia >200. All resulting in a better patient experience and an average savings per patient of $2,000-$4,000 or more, plus the savings of minimized complications.

Surgical recovery can be optimized through preoperative, intraoperative and postoperative evidence-based interventions. Patient education, nutrition and preconditioning combined with intraoperative and postoperative standardization can improve patient safety, enhance quality of care, advance outcomes and speed recovery, all while optimizing resource utilization and satisfaction.

Steps for Creating an ERAS program

- Identify one anesthesia champion and one surgeon champion per surgery service line
- Engage administration to set program guidelines and expectations
- Determine the necessary equipment (ECOM, EDM+, FloTrac, ultrasound, for nerve/TAP blocks, CADD, On-Q, dedicated nerve block areas, etc.)
- Note drug expenses and consider implementing narcotic-sparing strategies using analgesics (Exparel/ Entereg/ Ofirmev/ Caldolor)
- Note other necessary resources in personnel and data analysis
- Develop pilot protocols
- Educate staff on ERAS protocols
- Elect an ERAS Coordinator
- Form a multidisciplinary ERAS Committee
- Determine which data to analyze in your pilot protocols and refine the quality initiative process
- Create an ERAS cheat sheet for staff to simplify the process
- Create informational handouts for patients
- Reevaluate program progress periodically and improve or modify as necessary
To prepare the patient and enhance recovery, consider sending an informational letter to patients a few weeks prior to their surgery date. In the letter, include a checklist of things they can do to improve their chances for a speedy recovery, such as:

- Checking with their primary care doctor to understand which medications to take prior to surgery for optimal control of chronic diseases
- Quitting smoking prior to surgery
- Exercising, as they are able, 20 to 30 minutes, three times per week prior to surgery
- Getting proper nutrition, including foods rich in lean protein and carbohydrates
- Hydrating: drinking an additional 20 ounces of water, three times per day for a week prior to surgery and drinking a sports drink, such as Gatorade, three hours prior to surgery; then nothing until after surgery
- Explaining what to expect when they come home from surgery
- Preparing them for pain management
- Setting expectations for a call from the anesthesiology provider the day before surgery

To learn more about ERAS, talk with USAP ERAS experts Dr. R. Heath Gulden (Dallas) and Mauricio Mejia (Denver), or visit the American Society for Enhanced Recovery at www.aserhq.org.

**Interested in bringing ERAS to your facility? Here’s a list of available ERAS guidelines, those in development and the planned gridline extension:**

### Existing ERAS Guidelines:
- Pancreaticoduodenectomy (Whipple)
- Elective Colonic Surgery
- Rectal/Pelvic surgery (APR)
- Radical cystectomy for bladder cancer
- Gastrectomy

### ERAS Guidelines in Development:
- Liver resection
- Total Knee replacement
- Total Hip replacement
- Obesity Surgery
- Nephrectomy
- Major Gynecological

### ERAS Future Pipeline:
- ENT surgery
- Breast reconstruction
- Non-cardiac thoracic surgery
- Esophageal resections

**Resources**

1. Liane S. Feldman, Conor P. Delaney, Olle Ljungqvist and Francesco Carli (eds.) The SAGES / ERAS ® Society Manual of Enhanced Recovery Programs for Gastrointestinal Surgery10.1007/ 978-3-319-20364-5_1
4. www.encare.se
5. ERAS Society (www.erassociety.org)