

Grant for SAGES Enhanced Recovery After Surgery (SMART) Program

The introduction of minimally invasive surgery (MIS) revolutionized abdominal surgery, significantly lessening the impact of major surgery, reducing complications and accelerating recovery. For many surgeons, interest in laparoscopic techniques was fueled by the desire to improve outcomes, especially recovery after surgery. There is a limit, however, to what can be accomplished using surgical techniques alone. Factors that keep people hospitalized and delay their return to normal functioning are multiple and complex. These include the surgical stress response, pain, postoperative nausea and vomiting, limited mobility, fluid overload, fatigue and deconditioning, and can occur even in the absence of surgical complications. Enhanced Recovery After Surgery (ERAS) pathways are coordinated, multidisciplinary care plans incorporating evidence-based interventions along the entire perioperative trajectory. Traditionally, surgeons, anesthesiologists and nurses have delivered care in individual silos. ERAS pathways represent a paradigm shift from traditional care, integrating all the elements of perioperative care, as well as empowering patients and their caregivers to better understand the recovery process. However, most research in ERAS has been done in the open surgery setting, and there is a lack of evidence to guide its use in combination with laparoscopy, especially for procedures other than colorectal surgery.

This grant will support research into the use of ERAS in combination with laparoscopic digestive surgery. This could include one or a combination of:

1. Evidence synthesis with identification of gaps to prioritize research
2. Development and validation of patient reported outcomes to measure postoperative recovery, responsive to differences between laparoscopic and open surgery
3. Clinical trials investigating specific elements of ERAS for laparoscopic surgery (eg fluid management, mobilization, nutrition, exercise, analgesia etc).
4. Knowledge translation work developing implementation strategies for ERAS programs for GI surgery, such as innovative audit and feedback strategies

Depending on the project, success could be defined as:

1. Development of an outcome measure for surgical recovery that is patient reported, reflects recovery after discharge, poses minimal burden on patients and investigators, is psychometrically sound, and is sensitive to differences between laparoscopic and open surgery
2. Completion of a clinical trial in ERAS with peer-reviewed presentation and publication
3. Development and implementation of a novel, web-based, low burden audit tool to follow ERAS care processes and outcomes

Maximum budget: \$50, 000 (\$25, 000 per year x two years; second year funding is dependent on first year progress report).

Budget limitations: Budget cannot be applied towards primary investigator's salary, but can be used toward research assistant support. Other usual SAGES grant restrictions apply.