



2020 LEAD Capstone Poster Session

Developing an Enhanced Recovery
After Surgery Center

Ejike Nicholas Okoro, MD

Assistant Professor

Department of Anesthesiology and
Pain Management



Abstract

- Enhanced Recovery After Surgery (ERAS) is a series of perioperative programs that implement evidence based best practices to improve post-operative outcomes.
- There is growing evidence that patients on these pathways have the potential to decrease opioid consumption and decrease length of stay without increasing readmission rates.
- ERAS cases currently make up less than 10% of all cases performed in the institution, but the benefits are valuable enough to extend the core components of these protocols to all of our surgical patients.



Objectives

- Define central tenets of Enhanced Recovery After Surgery pathways
- Illustrate cost saving potential
- Describe steps necessary for broader implementation of these tenets



Background Information

- UT Southwestern advertises ten different ERAS pathways online, and each ERAS pathway has a unique protocol.
- The core components of ERAS are to use multimodal pain control, minimizing NPO times, and encourage early ambulation.
- The goals for the pathways are to reduce surgical and anesthesia complications, decrease perioperative opioid requirements, and reduce hospital length of stay.
- Consider the cost savings from decreasing unintended admissions/readmissions from uncontrolled pain, or opioid induced gastrointestinal motility issues.



Specific Aims

- Educate patients on ERAS and the benefits of minimizing opioid use
- Expand the utilization of ERAS core tenets to all UT Southwestern surgical patients
- Increase adherence to ERAS pathways by monitoring and feedback



Project Plan

- **Education**
 - Inform patients online and in pre-surgical testing clinic about ideal NPO times, benefits of ambulation, and about the use of a multimodal pain regimen in lieu of dependence on opioids.
 - Educating perioperative nursing, anesthesiologist, surgeons, and pharmacy about the importance and value of the ERAS initiatives
- **Increased Ease of Medication Administration**
 - New preoperative streamlined order sets with an emphasis on ERAS medication
 - Reorganizing preoperative medicine inventory machines to reflect new focus and facilitate ERAS medication administration
- **Monitoring Adherence and Outcomes**
 - Quarterly reports to anesthesiologist detailing the usage of preoperative multimodal medications
 - Feedback on unexpected post-operative admissions and readmissions due to nausea/vomiting, bowel obstruction, uncontrolled pain, excessive sedation



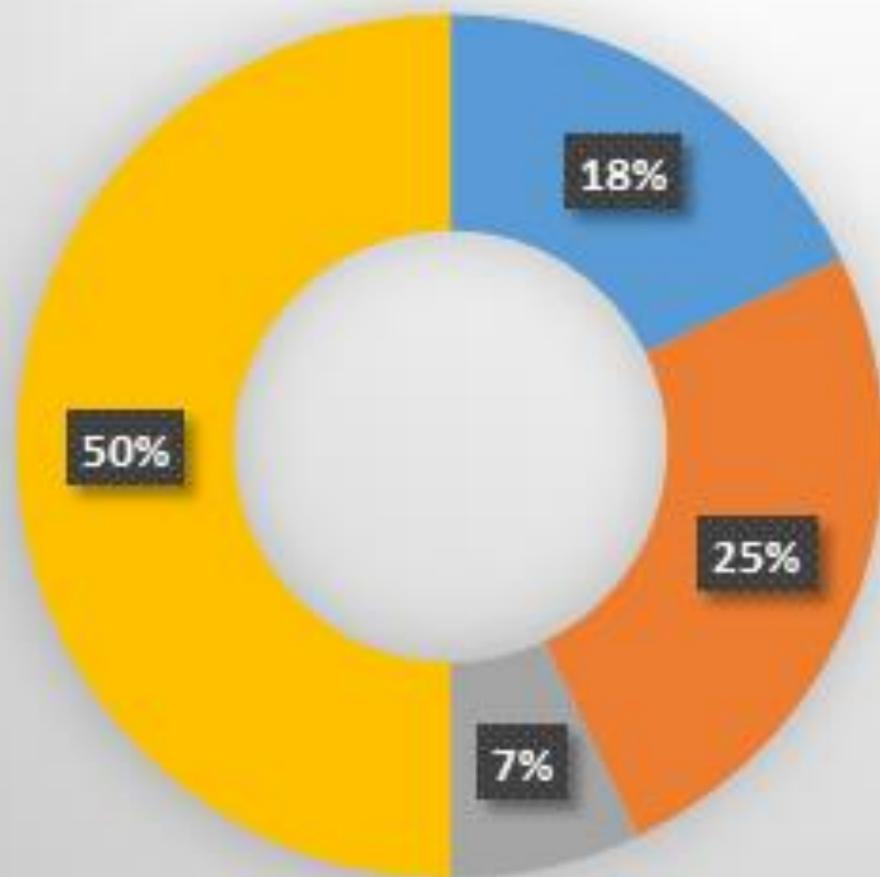
Application of What You Learned at LEAD

- ERAS programs are inherently multidisciplinary and to execute an expansion it will require even greater collaboration between anesthesiology, surgery, nursing, pharmacy and support staff. The communication and situational leadership strategies developed in LEAD will be invaluable.
- As the institution continues to grow, space, time, cost control all will increase in importance. Being able to tie ideas and projects to the institution's strategic planning and vision will capture the attention of key stakeholders tasked with guiding the enterprise.



Proposed Budget

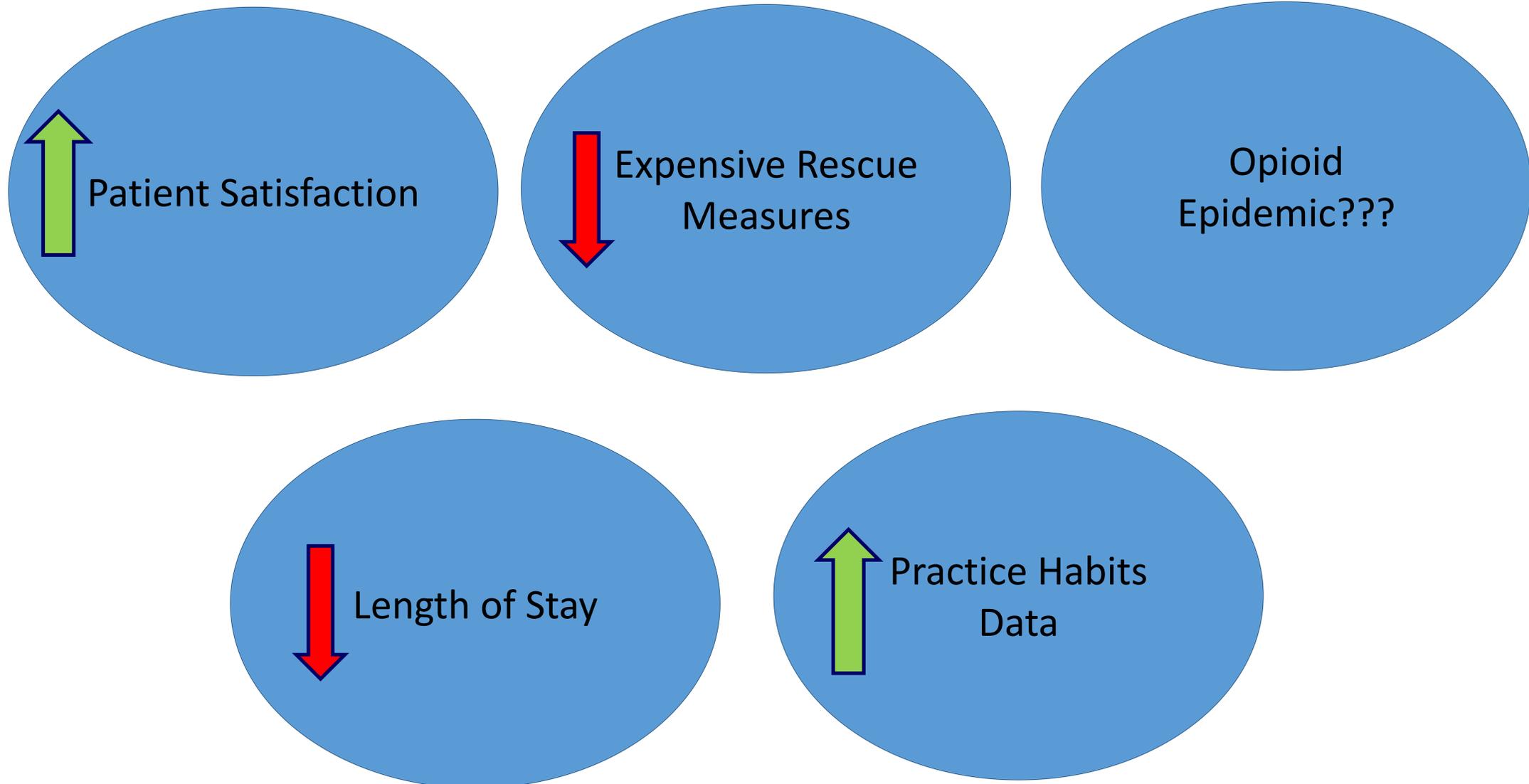
\$140,000



- ERAS Medication \$25,000
- Monitoring/Adherence Staff (0.5 FTE) \$35,000
- Advertising \$10,000
- Patient Education/PST Staff (1.0 FTE) \$70,000



Innovation and Significance





References

- “Enhanced Recovery After Surgery (ERAS): Conditions & Treatments: UT Southwestern Medical Center.” *Conditions & Treatments | UT Southwestern Medical Center*, utswmed.org/conditions-treatments/enhanced-recovery-after-surgery-eras/.
- Engelman DT, Ben Ali W, Williams JB, Perrault LP, Reddy VS, Arora RC, Roselli EE, Khoynzhad A, Gerdisch M, Levy JH, Lobdell K, Fletcher N, Kirsch M, Nelson G, Engelman RM, Gregory AJ, Boyle EM. Guidelines for Perioperative Care in Cardiac Surgery: Enhanced Recovery After Surgery Society Recommendations. *JAMA Surg.* 2019 Aug 1;154(8):755-766. doi: 10.1001/jamasurg.2019.1153. PMID: 31054241.
- Greco M, Capretti G, Beretta L, Gemma M, Pecorelli N, Braga M. Enhanced recovery program in colorectal surgery: a meta-analysis of randomized controlled trials. *World J Surg.* 2014 Jun;38(6):1531-41. doi: 10.1007/s00268-013-2416-8. PMID: 24368573.
- Offodile AC 2nd, Gu C, Boukovalas S, Coroneos CJ, Chatterjee A, Largo RD, Butler C. Enhanced recovery after surgery (ERAS) pathways in breast reconstruction: systematic review and meta-analysis of the literature. *Breast Cancer Res Treat.* 2019 Jan;173(1):65-77. doi: 10.1007/s10549-018-4991-8. Epub 2018 Oct 10. PMID: 30306426.