AORN Center of EXCELLENCE in Surgical Safety

BUSINESS CASE

IMPLEMENTING A PROGRAM FOR ENHANCED RECOVERY AFTER SURGERY (ERAS)

EXECUTIVE SUMMARY

An ERAS program is a multimodal and interdisciplinary approach designed to improve recovery outcomes for surgical patients. This business case outlines the rationale, benefits, costs, and implementation strategy for adopting an ERAS program in healthcare facilities. By investing in an ERAS protocol, we can enhance patient outcomes, reduce hospital length of stay, lower healthcare costs, and improve overall patient satisfaction.

BACKGROUND

Surgical procedures often result in significant stress and trauma to patients, leading to prolonged recovery times, increased pain levels, and higher rates of complications. Traditional postoperative care models have focused on addressing these issues reactively. However, ERAS represents a proactive approach, emphasizing preoperative preparation, optimized surgical techniques, and postoperative care to promote recovery.

OBJECTIVES OF AN ERAS PROGRAM ARE:

1. Improve Patient Outcomes: Reduce postoperative complications, pain, and recovery time.
2. Enhance Patient Satisfaction: Improve patient experiences and satisfaction scores.
3. Reduce Length of Stay (LOS): Minimize hospital stays through efficient recovery protocols.
4. Lower Healthcare Costs: Decrease overall costs associated with complications and extended hospitalizations.
5. Facilitate Interdisciplinary Collaboration: Promote teamwork among surgical teams, nurses, and other healthcare professionals.

CLINICAL BENEFITS

- Reduced postoperative complications (eg, infections, thromboembolic events)
- Decreased pain, faster return to baseline function, and decreased readmission rates

FINANCIAL BENEFITS

- Reduced average hospital LOS by 1-3 days, translating to significant cost savings (estimated savings of $1,500 to $3,000 per patient)
- Lower readmission rates leading to decreased penalties from payers and improved reimbursement rates
- Improved resource utilization (eg, operating room efficiency, reduction in unnecessary tests and treatments)

PATIENT EXPERIENCE BENEFITS

- Enhanced patient education and involvement in their care plans
- Increased patient satisfaction scores and overall experience ratings

REPUTATION AND COMPETITIVE ADVANTAGE

- Positions the hospital as a leader in innovative surgical care
- Attracts more patients due to improved outcomes and patient satisfaction

IMPLEMENTATION PLAN

1. Assessment and Planning - Conduct a thorough assessment of current surgical protocols and identify areas for improvement (gap analysis).
2. Forming an Interdisciplinary ERAS team – Convene a team composed of surgeons, anesthesiologists, nurses, dietitians, physical therapists, and others.
3. Protocol Development - Develop evidence-based ERAS protocols tailored to the specific surgical specialties offered at the hospital. Include guidelines for preoperative education, intraoperative management, and postoperative care.
4. Staff Training and Education - Implement training sessions for all relevant staff to ensure understanding and adherence to ERAS protocols. Provide ongoing education regarding the importance of ERAS and its impact on patient outcomes.
5. Pilot Program - Initiate a pilot ERAS program for selected surgical specialties (eg, colorectal, orthopedic). Monitor outcomes, patient satisfaction, and staff feedback during the pilot phase.
6. Evaluation and Continuous Improvement - Collect and analyze data on patient outcomes, length of stay, complication rates, and patient satisfaction before and after ERAS implementation. Adjust protocols based on feedback and outcomes to continuously improve the program and then apply the protocols to all patients.

COST ANALYSIS

Initial Investment

- Staff training and education resources
- Development of educational materials and patient resources
- Potential software for tracking outcomes

Expected Cost Savings

- Reduction in LOS and associated costs
- Decrease in readmission rates resulting in lower costs
- Overall improved efficiency leading to better resource allocation

ALIGNMENT WITH THE CMS (CENTERS FOR MEDICARE & MEDICAID SERVICES) TRANSFORMING EPISODE ACCOUNTABILITY MODEL

The CMS Transforming Episode Accountability Model (TEAM) is part of ongoing efforts to improve the quality of care and reduce costs in the US healthcare system, particularly for Medicare beneficiaries. This model was designed to enhance the accountability of providers for the quality and cost of care delivered during specific episodes of care, such as surgeries or treatment for chronic conditions. ERAS program implementation will help to meet the requirements of this model.

KEY FEATURES OF THE CMS TEAM ARE:

1. Episode-Based Payment: The model focuses on episodic care, whereby providers are reimbursed based on the total cost of care for a defined episode rather than for individual services. This aims to incentivize providers to manage the entire episode of care efficiently.
2. Quality Metrics: Providers must meet specific quality metrics related to patient outcomes, patient experience, and care coordination. This ensures that cost savings do not come at the expense of care quality.
3. Accountability: By linking payment to the performance across episodes of care, the model encourages providers to take responsibility for the overall health outcomes of their patients. This includes managing complications and reducing unnecessary services.
4. Collaboration: The model promotes collaboration among healthcare providers, including hospitals, specialists, and primary care physicians, to ensure coordinated care and better management of patients' needs throughout their treatment journey.
5. Data Transparency: Providers receive data on their performance, including cost and quality metrics, which helps them identify areas for improvement and implement strategies to enhance care delivery.
6. Patient Engagement: The model encourages patient involvement in their care, with a focus on shared decision-making and education to ensure patients understand their treatment options and care plans.

GOALS OF THE MODEL:

1. Improve Quality of Care: By focusing on outcomes and patient satisfaction, the model aims to enhance the overall quality of care delivered to patients.
2. Reduce Costs: The episodic payment structure is designed to lower healthcare costs by reducing unnecessary tests, procedures, and hospital readmissions.
3. Encourage Innovation: The model fosters innovation in care delivery and encourages providers to develop and implement best practices for managing episodes of care.

The CMS TEAM represents a shift toward value-based care that seeks to align financial incentives with high-quality patient care. By holding providers accountable for the entire episode of care, it aims to create a more efficient and effective healthcare system that benefits patients and providers alike.

CONCLUSION

Implementing an ERAS program is a strategic investment that aligns with healthcare facilities' commitment to providing high-quality, patient-centered care. The anticipated clinical, financial, and reputational benefits far outweigh the initial costs. By adopting an ERAS protocol, we can significantly enhance surgical patient recovery, improve satisfaction, and position our hospital as a leader in modern surgical practices.

RECOMMENDATION

It is recommended that the hospital leadership approve the implementation of the ERAS program and allocate the necessary resources to initiate this transformative approach to surgical care.

Variable	Calculation of Annual Net Savings[1]	Sample Calculation[2]	Details
Length of stay (LOS)	LOS pre-ERAS - LOS with ERAS = Reduction in LOS	7.2 days - 5.3 days = 1.9 days	Time from the surgery to the time of discharge.
Direct variable cost	Cost pre-ERAS - Cost with ERAS = Total Cost Savings per Patient	$10,933 - $9,036 = $1,897	Costs that can be controlled by the provider, including room and board, supplies, drugs, operating room, radiology, and laboratory.
Cost savings	Total Cost Savings per Patient	$1,897 x 500 = $948,500	Annual ERAS cases depend on case volume.
Net savings, first year	x Annual ERAS Cases = Total Cost Savings of ERAS Program	$948,500 - $552,783 = $395,717	Costs for initial implementation of ERAS program to support 500 annual cases, including • Implementation ◦ Site visits, training ◦ Leadership time ◦ Capital expenses, equipment • Personnel ◦ Project manager (1.25 FTE) ◦ Acute pain nurse (1 FTE) ◦ Preoperative support (.5 FTE) • Materials ◦ Education materials ◦ Carbohydrate drinks, nutrition supplements ◦ Supplies (fluid monitoring)
Net savings, maintenance	Total Cost Savings of ERAS Program - Costs of ERAS Program [First year] = Net Savings of ERAS Program	$948,500 - $356,944 = $591,556	Costs to maintain 500 annual cases in ERAS program, including • Personnel ◦ Project manager (1.25 FTE) ◦ Acute pain nurse (1 FTE) ◦ Preoperative support (.5 FTE) • Materials ◦ Education materials ◦ Carbohydrate drinks, nutrition supplements ◦ Supplies (fluid monitoring)

References

1. Stone AB, Grant MC, Pio Roda C, et al. Implementation costs of an enhanced recovery after surgery program in the United States: a financial model and sensitivity analysis based on experiences at a quaternary academic medical center. *J Am Coll Surg*. 2016;222(3):219-225. doi:10.1016/j.jamcollsurg.2015.11.021
2. Wick EC, Galante DJ, Hobson DB, et al. Organizational culture changes result in improvement in patient-centered outcomes: implementation of an integrated recovery pathway for surgical patients. *J Am Coll Surg*. 2015;221(3):669-677. doi:10.1016/j.jamcollsurg.2015.05.008