



Implementation: Tips for Initiating Your Own ERAS Cardiac Program

Form an ERAS Cardiac Team

Identification of A Program Coordinator

The ERAS Cardiac coordinator is paramount, with responsibilities for education, troubleshooting, monitoring, and data collection. This team member is often a registered nurse or nurse practitioner. Engagement of nursing staff in peer-to-peer education is vital for success as many ERAS Cardiac interventions are nursing-based.

Identification of Specialty Champions

Surgeons and anesthesiologists may utilize varied approaches and preferences leading to rejection of standardization. Many physician preferences are born out of experience and training as opposed to evidence. Successful implementation requires all to adopt a standard approach without deviation. Surgeon and anesthesiologist champions are essential and these should ideally be empowered to represent their respective groups or partners.

Champions should also be identified from the following areas as able based on local cardiac surgery models of care: intensivist, nursing, pharmacy, and perhaps cardiology, physical therapy, and advance practice providers. A pharmacy champion has been found to be essential in determining potential medication interactions particularly in populations involving immunosuppression and other complex medical conditions.

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Agreed-Upon Interventions

Consensus recommendations for some of the basic ERAS Cardiac interventions are available elsewhere on the website. Recognize that many ERAS interventions have been applied in surgical patients of other specialties not undergoing cardiopulmonary bypass, extracorporeal support, hypothermia, and hemodynamic manipulations commonplace in cardiac surgery. Literature review coupled with outside expert consultation will facilitate consensus-building among local stakeholders. When consensus is unable to be reached on certain interventions, leaving those areas future iterations of the ERAS Cardiac platform is advised as standardization is a key driver of success.

Leverage Local Expertise

Carefully consider your areas of local expertise. For example, a program with experience and expertise in parasternal nerve blocks should consider this intervention as part of the opioid-reducing measures in the protocol. Another health system may benefit from an expert in patient-reported outcomes or renal biomarkers, and these components may be utilized as well.

Utilize The Electronic Medical Record

Engage the local electronic medical record (EMR) experts for building automated preoperative and postoperative order sets. Utilize the EMR to alert medication interactions and highlight important preoperative testing and laboratory results which may trigger action for preoperative medical optimization. Standardization of order sets electronically will make many components of care more efficient.

Input from All Stakeholders

Identify Barriers

All stakeholders including patients should be given a voice in the design phase of the ERAS Cardiac program. With input from all relevant stakeholders, the ERAS Cardiac team will quickly identify barriers to the implementation of a working protocol. Tailoring to one's own health system and environment of care is vital to success. Some common barriers are listed below.

Identify Enablers

Program enablers may include individuals from nursing, physical therapy, technicians, or perhaps cardiologists with a desire to improve patient care and these persons prove invaluable. Site-based grant funding for any component of the ERAS Cardiac program should be investigated, particularly with health system focuses on preventing readmission, reducing length of stay, and opioid reduction.

POTENTIAL BARRIERS

Patient Related

- Time between surgery need identification and surgery
- Complex patient comorbidities
- Patient unwillingness to change
- Patient expectations
- Patient understanding, including education level and language barriers

Staff Related

- Staff education of all current providers and new providers after implementation
- Staff attitude and behavior to change
- Leadership
- Buy-in
- Maintenance of support

Practice Related

- Ineffective communication
- Lack of resources for education and coordination
- Cost of additional materials, equipment, and education
- IT implementation of order sets, pathways, and data collections

Education

Surgeons, anesthesiologists, administration/management, nurse educators, ICU nurses, nurse anesthetists, advanced practice providers, step-down nurses, dieticians, pharmacists, and outpatient, preoperative, intraoperative and discharge staff must all be invited, educated, and participated in realizing the implementation of a new standardized pathway. Education becomes a continuous process as new hires are a reality in each phase of care from preoperative secretary staff to intraoperative nursing to postoperative advance practice providers.

Audit, Continuous Process Monitoring, Evaluation, and Improvement

Monitoring is undertaken at the outset of ERAS Cardiac initiation for identifying protocol deviations, searching for adverse events, and achieving the continuous education and quality improvement at the core of the ERAS Cardiac program. The nurse or advance practice provider champion assumes the role of primary responsibility for ERAS Cardiac-related deviations, concerns or potential adverse events, and facilitating process improvements.

All licensed independent providers and nurses providing patient care carefully monitor patient well-being, however, consider utilizing dedicated data analysts to prospectively collect and monitor program outcomes and progress. Engage the information technology experts within your local electronic medical record system to facilitate data capture.

Conclusions and Timeline

ERAS Cardiac is an example of value-based care applied to cardiac surgery with goals of earlier recovery, cost reduction, and reduction in opioid use. Once assembled, the ERAS Cardiac team should meet frequently and move forward deliberately. An ERAS Cardiac coordinator, in many cases a cardiac surgery RN, is paramount. Engaged champions from each phase of care and each discipline are critical. Continuous quality improvement with assimilation of new evidence and monitoring of clinical outcomes will make an ERAS Cardiac program nimble and sustainable. A possible timeline for initiation is provided below.

PROPOSED ERAS CARDIAC TIMELINE

Start

- Core team identified

1-2 Months

- Literature, facility resources and provider preferences reviewed to develop pathway
- Metrics determined and baseline metrics before implementation recorded
- Obtain executive sponsorship and support

3-4 Months

- Education of providers along every component including changes to current treatment, new treatments, reasons for the change, and expectations of every provider

6 Months

- ERAS for Cardiac Surgery started practice-wide
- Opportunities for feedback to the core team including: barriers, compliance, successes, and areas to improve
- Core team remains in constant communication with one another when barriers arise
- Quick response by core team to address reported barriers and re-educate providers if necessary

9-12 Months

- Metrics analyzed for changes that have occurred, both positive and negative
- Consider appropriate alterations to pathway in response to negative changes
- Explore additional enhanced recovery interventions that could be implemented in subsequent phases of the program

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