Three Es to Improving Outcomes: Education, Engagement and Enhanced Recovery

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Introduction

- Delnor Hospital participated in a Northwestern Medicine collaborative to develop Enhanced Recovery protocols to improve patient outcomes after surgery.
- Enhanced Recovery is a multidisciplinary approach to surgical care which incorporates:
  - Best practices for preventable harms
  - Patient and family education and engagement
  - Standardized intraoperative anesthesia and multimodal analgesia
  - Early ambulation after surgery
  - Optimal perioperative nutrition and early resumption of oral intake
- Optimizing patient/family engagement in preoperative education is a focal point for the Enhanced Recovery Program (ERP) at Delnor.
- The team monitors 47 data elements.

Identification of the Problem

- Delnor was not able to operationalize the enriched education plan as achieved at the other hospitals in the system due to the:
  - Inability to support a nurse navigator role for the initial phase of the project.
  - Lack of resources and sufficient time in the surgeon's office.
- Implementation of an innovative preoperative education within our current preadmission model was necessary.

Outcomes/Results

- The initial phase of the program was piloted with 4 surgeons for a total of 20 patients.
- All 20 patients received the binder and education with an ERNC.
- The binder is introduced and education begins in the surgeon's office.
- Education continues via multiple ERNC/patient touch points:
  - The patient receives a scheduled call with the ERNC and a visit is scheduled.
  - During the scheduled visit, the ERNC reviews binder contents and provides opportunity for questions. The patient receives an individualized calendar and ERNC contact information.
- The patient receives 2 additional ERNC phone calls 7 days and 1 day prior to surgery.

Discussion

- Patients in the pilot program report high engagement in the process and provided positive feedback. High engagement likely translates to the improved outcomes and program success.
- The Perianesthesia nurses who operationalized the role of the ERNC were highly committed to the patients and the ERP, further contributing to the overall success.
- Data comparison includes some limitation as majority of the baseline performance includes all surgeons performing colorectal procedures.
- The project utilized a quality improvement methodology, therefore direct correlation is not possible.

Conclusions

- Implementation of the ERNC role enhanced patient education and favorably impacted patient/family engagement, LOS, readmission, VTE, and opioid use.

Implications for Perianesthesia Nurses and Future Research

- ERNC scope now includes additional colorectal surgeons and will likely expand to other service lines.
- Conduct a second analysis comparing baseline data for the 4 specific surgeons to pilot data.
- Comparison of Delnor outcomes to the other hospitals within the system since a unique education model was used.
- As ERP expands at Delnor, the team will continue to review and evaluate the effectiveness of the perioperative education delivery method.

References

- NSQIP data reference

Figure 1: Baseline Performance and Goals

<table>
<thead>
<tr>
<th>Metric</th>
<th>Baseline Performance*</th>
<th>Goal</th>
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<tbody>
<tr>
<td>Length of Stay</td>
<td>7 days</td>
<td>6 days or less</td>
</tr>
<tr>
<td>30-day Readmission Rate</td>
<td>10.72% (6th decile)</td>
<td>&lt; 10.72% and/or 6th decile</td>
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<tr>
<td>Post-operative Venous Thromboembolism Rate</td>
<td>2.35% (9th decile)</td>
<td>&lt; 2.35% and/or 9th decile</td>
</tr>
<tr>
<td>Morphine Milligram Equivalents (MME)</td>
<td>73 MME**</td>
<td>Not established</td>
</tr>
</tbody>
</table>

*Data retrieved from the National Surgical Quality Improvement Program Semiannual (NSQIP) and represents all (106) Colorectal cases done in FY16. **Data specific to the colorectal cases preformed by the surgeons in this project.