Interprofessional Care EP8EO

a. Provide one example, with supporting evidence, of an improved patient outcome associated with an interprofessional education activity led or co-led by a nurse (exclusive of the CNO).
   ➢ Outcome data must be in the form of a graph and a data table.

Nurse-led Interprofessional Education to Improve a Patient Outcome
Gina McConnell, BSN, RN, CCRN, Supervisor/Educator of Cardiac Thoracic Intensive Care Unit (CTICU), led the interprofessional education on Enhanced Recovery After Cardiac Surgery (ERAS Cardiac), which led to the implementation of the ERAS Cardiac program for cardiothoracic surgery patients at WakeMed. The program resulted in a decrease in average postoperative length of stay (ALOS).

Problem
In July 2015, McConnell learned about the use of the Enhanced Recovery After Surgery (ERAS) program for colorectal surgery patients and considered how it could be applied to WakeMed’s cardiothoracic surgery patient population. McConnell noted that the ALOS for postoperative cardiothoracic patients in the CTICU was 64.3 hours in 3rd Quarter FY 2016. A committee was formed to lead the implementation of the ERAS Cardiac program to decrease the postoperative ALOS.

Goal Statement
The goal was to decrease WakeMed’s ALOS for patients following cardiothoracic surgery.

Participants

<table>
<thead>
<tr>
<th>ERAS Cardiac Committee</th>
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<tbody>
<tr>
<td><strong>Name/Credentials</strong></td>
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<tr>
<td>Gina McConnell, BSN, RN, CCRN</td>
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<tr>
<td>Patricia Woltz, PhD, RN</td>
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<tr>
<td>William T. Bradford, MD</td>
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<tr>
<td>J. Erin Ledford, PharmD, BCPS-AQ Cardiology, BCCCP3</td>
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Description of the Intervention
July 2016: McConnell gained support from Charles Harr, MD, MBA, Chief Medical Director, to proceed with making the ERAS program applicable to WakeMed’s cardiothoracic surgery patient population.

August 2016: McConnell developed interprofessional education.

September-November 2016: McConnell provided interprofessional education to WakeMed cardiothoracic surgeons, physicians, anesthesiologists, pharmacists and nurses to gain their buy-in to assist in adopting the ERAS program for cardiothoracic surgery patients.

December 2016: The ERAS Cardiac Committee was formed to lead the implementation of ERAS for cardiothoracic surgery patients.

January-March 2017:
- ERAS Cardiac Committee meetings were held to develop the protocol.
- McConnell developed employee education on ERAS Cardiac.
- McConnell provided interprofessional education on the implementation of ERAS Cardiac to clinical nurses from the following units: Pre-op, Pre-admission Testing, Cardiovascular Surgery Intermediate Care (CVSIC), CTICU, cardiovascular intensive care units, cardiac intermediate care units, Operating Room and Electronic Intensive Care Unit (eICU). McConnell also in-serviced interprofessional colleagues including CRNAs, the Society of Thoracic Surgeons (STS) data analyst, cardiothoracic surgery nurse educators, physicians, intensivists, respiratory therapists, pharmacists, Food and Nutrition department employees and dieticians.
- McConnell and Cindy Klaess, MSN, APRN, ACNS-BC, CCM provided education to cardiothoracic surgery physician assistants.
- The ERAS Cardiac Committee developed preoperative and postoperative order sets detailing the administration of Gatorade, gabapentin, acetaminophen, gum chewing and early mobilization.
- A computerized physician order entry (CPOE) order set was developed and finalized by McConnell; Pat Woltz, PhD, RN; Judson Williams, MD, MSH; William Bradford, MD; and Erin Ledford, PharmD, BCPS-AQ Cardiology, BCCCP3. The protocol included admission optimization, education, minimization of invasive procedures, multimodal opioid sparing analgesia, preemptive complication management, early mobilization and nutrition improvement.
- McConnell and Tom DelCorro, BSN, RN, STS Data Analyst, determined that the STS database would be used as the method of data collection.
- McConnell led an interprofessional meeting to discuss the steps of the implementation. The group, which included cardiothoracic surgeons, a pharmacist, an anesthesiologist and members of the CTICU nurse management
team, agreed to proceed with full implementation of ERAS Cardiac in March 2017.

- McConnell developed patient education on ERAS Cardiac, which was approved by WakeMed’s Public Relations Department.
- McConnell presented the ERAS Cardiac protocol at the March 2017 Magnet Champions meeting.
- ERAS Cardiac was fully implemented in March 2017.

Outcomes
After the intervention period, 4th Quarter FY 2016 to 2nd Quarter FY 2017, the goal of reducing the ALOS for patients undergoing cardiothoracic surgery was met. ALOS decreased from the baseline of 64.3 hours to:

- 55.4 hours in 3rd Quarter FY 2017 (April-June)
- 54.7 hours in 4th Quarter FY 2017 (July-September)
- 50.1 hours in 1st Quarter FY 2018 (October-December)

![WakeMed Health & Hospitals Cardiothoracic Patient ALOS in CTICU in hours](image)

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>ALOS (in Hours)</th>
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<tbody>
<tr>
<td>FY 2016 Q3 (Apr-June)</td>
<td>64.3</td>
</tr>
<tr>
<td>FY 2016 Q4 (July-Sept)</td>
<td></td>
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<tr>
<td>FY 2017 Q1 (Oct-Dec)</td>
<td>55.4</td>
</tr>
<tr>
<td>FY 2017 Q2 (Jan-Mar)</td>
<td>54.7</td>
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<tr>
<td>FY 2017 Q3 (Apr-June)</td>
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<td>FY 2017 Q4 (July-Sept)</td>
<td>50.1</td>
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<tr>
<td>FY 2018 Q1 (Oct-Dec)</td>
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Evidence EP8EO-1, WakeMed Health & Hospitals, Cardiothoracic Patient ALOS in CTICU, in Hours

The ERAS Cardiac protocol was developed and implemented through McConnell’s diligence in leading interprofessional education. WakeMed’s culture of employing...
innovation to provide excellent care for its patients was crucial to the acceptance and sustainability of the ERAS Cardiac program. The use of the ERAS protocol for cardiothoracic surgery patients provided a standardized multimodal approach that improved patient outcomes.

Based on the success of the implementation of the ERAS Cardiac protocol, a manuscript about the protocol was accepted to the Nursing 2018 journal. In addition, posters were presented at the North Carolina Organization for Nurse Leaders (NCONL) conference in Greensboro in March 2018, the American Association of Thoracic Surgeons (AATS) conference in April 2018 and the National Teaching Institute (NTI) conference in May 2018.