THE ROLLING REFRESHER CART: IMPROVING THE LEVEL OF PREPAREDNESS IN PACU NURSES WITH CARING FOR PATIENTS AND THEIR SPECIALIZED SURGICAL DRAINS

OR/ANESTHESIA SERVICES
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Introduction
Patients with specialized surgical drains can be a high-risk occurrence in the post anesthesia care unit (PACU) if PACU nurses (RNs) mishandle these drains. Disproportionate opportunities to care for particular patient drains have contributed to RNs feeling unprepared. Research studies have shown that frequent education has a positive impact on RN’s performance and preparedness level.

Identification of the Problem
Absence of frequent education sessions has negatively impacted PACU RNs’ level of preparedness to care for patients and their specialized drains.

QI Question/Purpose of Study
Will using a mobile teaching cart (aka RRC) that provides monthly opportunities to occur in the post anesthesia care unit (PACU) if PACU nurses (RNs) mishandle these drains. Disproportionate opportunities to care for particular patient drains have contributed to RNs feeling unprepared. Research studies have shown that frequent education has a positive impact on RN’s performance and preparedness level.

Methods

- **Intervention group selection:** Nurses who worked in 5-PACU, the only 24-hour PACU in the hospital, were invited to participate in this project.
- **Device selection:** A needs assessment questionnaire was used to identify the 3 surgical drains for this project.
- **RRC design:** Content for the RRC sessions were based on the hospital’s policies and input from content experts. Monthly 20-minute sessions were held on the 5 PACU unit for 11 months. Each session started with a brief lecture followed by a hands-on session. One drain was reviewed per month and repeated quarterly. Available nurses were invited to participate. An old utility cart was repurposed to store and transport the supplies for teaching: a mannequin, post-surgical drains, and patient care supplies. Participants were awarded a $5 coffee card after attending 3 sessions.
- **Data collection:** Pre and post data for the PACU nurses’ preparedness level were collected immediately before and after each session using a self-assessment questionnaire.

Results

**Figure 1** 5-PACU RNs: Self reported preparedness level to care for patients with lumbar drains

<table>
<thead>
<tr>
<th>Month</th>
<th>Pre RRC</th>
<th>Post RRC</th>
<th>Goal Met!</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2019</td>
<td>42%</td>
<td>84%</td>
<td>100%</td>
</tr>
<tr>
<td>Aug 2019</td>
<td>62%</td>
<td>84%</td>
<td>100%</td>
</tr>
<tr>
<td>Nov 2019</td>
<td>54%</td>
<td>64%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Figure 2** 5-PACU RNs: Self reported preparedness level to care for patients with chest tubes

<table>
<thead>
<tr>
<th>Month</th>
<th>Pre RRC</th>
<th>Post RRC</th>
<th>Goal Met!</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2019</td>
<td>71%</td>
<td>74%</td>
<td>100%</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>69%</td>
<td>74%</td>
<td>100%</td>
</tr>
<tr>
<td>Jan 2020</td>
<td>70%</td>
<td>71%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Figure 3** 5-PACU RNs: Self reported preparedness level to care for patients with extraventricular drains (EVD)

<table>
<thead>
<tr>
<th>Month</th>
<th>Pre RRC</th>
<th>Post RRC</th>
<th>Goal Met!</th>
</tr>
</thead>
<tbody>
<tr>
<td>July + Aug 2019</td>
<td>26%</td>
<td>36%</td>
<td>Goal Met!</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>36%</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>March 2020</td>
<td>36%</td>
<td>36%</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4** 5-PACU RNs: Participants’ willingness to participate in future RRC projects

- **Goal 50%**
  - Yes: 98%
  - Unsure: 2%
  - No: 0%

Outcomes/Results:
The goal was met. Self-reported data from PACU nurses show that monthly RRC sessions have increased the RNs’ preparedness level to manage specialized surgical drains by at least 15% (Fig. 1-3). 98% of the participants agreed to participate in future RRC sessions (Fig. 4).

Discussion:
Monthly RRC sessions were successful in improving the level of preparedness in PACU RNs. Buy-in from these RNs ensured future opportunities to use the RRC again for in-situ training.

Conclusion:
Results from this project highlight the promising role of RRC in improving and maintaining knowledge, preparedness level, and skills set in PACU nurses. The absence of a control group in this project limits the generalizations that can be made.

Implications for Perianesthesia RNs and Future Research:
The RRC is optimal for in-situ training because it is easily accessible, readily available, uses minimal space, and can be used for just-in-time training. The RRC should be considered for use in other departments for RN training sessions.

For any questions, please contact:
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