Using Critical Care Assessment Tools As An Assessment Practice To Minimize Documentation Discrepancy And Physical Restraints in Critical Care

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Introduction

- Physical restraints are the use of any physical method that prevents body movement.5
- Limb restraints are mostly used in the vulnerable critical care population, in the hospital setting,1,6,7,17
- Physical restraints are only justified in emergencies.5,6

Background/Significance

- Highly linked to harmful adverse events and longer days of hospital stay.1,14,15
- Preventable risk factors are documented but contradict justifiable reasons to maintain patients on restraints, resulting in documentation discrepancy and increasing the use of restraints.4,8,9,10,11,12
- There is no guideline to minimize the use of restraints specific to the critical care population.
- The hospital’s benchmark indicated an increased prevalence of physical restraint use before the project’s implementation.

Methodology

- **Design:** A quality improvement project.
- **Setting & Population:** A level-one trauma, urban, hospital in Central New Jersey. A total of 168 critical care participants (nurses). A total of 100 chart reviews, 50 pre- and post- education periods.
- **Intervention:** (1) Supplementary education, and (2) a cut-off critical care assessment guideline to minimize documentation discrepancy and restraints.
- **Measures:** (1) Pre-/posttest questions (20 questions), (2) 50 pre and 50 post chart reviews: 1 month before and intermittently during 2 months after the intervention.
- **Data Analysis:** Wilcoxon signed-rank test (pre-/posttest and “unjustifiable” timing of restraints); McNemar test (documentation discrepancy/nurse’s assessment).
- **Evaluation Plan:** A final project evaluation survey consisted of three Likert-scale and four open-ended questions.

Results & Discussion

**Intervention (1)**

<table>
<thead>
<tr>
<th>Mean</th>
<th>Wilcoxon Statistical Score ($)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test Scores</td>
<td>59.9</td>
<td></td>
</tr>
<tr>
<td>Post-Test Scores</td>
<td>72.0</td>
<td>-7.443 p &lt; 0.0001</td>
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</tbody>
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**Intervention (2)- Assessment Guideline**

- **Richmond Agitation-Sedation Scale (RASS)**
  - Sedation/Agitation
  - RASS scores to re-evaluate patients for physical restraints removal
  - Score of ≤ 0 (e.g., -1, -2, -3, -4, or -5) = patient is not agitated or properly sedated.

- **Glasgow Coma Scale (GCS)**
  - Level of Consciousness
  - Recommended GCS score to re-evaluate patients for physical restraints removal
  - Scores between 3-8 = severe impaired consciousness

- **Critical Care Pain Observation Tool (CPOT)**
  - Pain
  - Recommended CPOT score to re-evaluate patients for physical restraints removal
  - score < 2 = patient not in pain, 2,3,8,10,11,13,16,18

**Results & Discussion**

- **Uncitable Nursing Documentation/Assessment “Documentation Discrepancy”**
- **Physical Restraint Time**

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**Implications & Conclusion**

- Adopting this new assessment practice can help decrease the prevalence of physical restraints, harmful adverse events, length of hospital stay, provides liability, increase the institution’s revenue through reduced insurance reimbursement/penalties, and improve patient’s quality of care.1,4,14,15
- The results of this project revealed that when using supplementary tailored knowledge, and a ‘decision making’ guideline has helped nurses make a knowledgeable decision to discontinue physical restraints, based on a new assessment practice.