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

Project Chair/Principal Investigator: Ann D. Bagchi, PhD, DNP, FNP-C, APN, Co-Investigator/DNP Student: Evelyn Murillo, BSN, RN, Team Member: Kathleen Evanovich Zavotsky, PhD, RN, CCRN, CEN, ACNS-BC, FAEN, FCNS

Introduction

- Physical restraints are the use of any physical method that prevents body movement.[6]
- 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

1

Intervention (1)

	Mean	Wilcoxon Statistic Score (z)	p-value
Pre-Test Scores	59.9		
Post-Test Scores	72.0		
		-7.443	p < .0001

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.

Confusion Assessment Method for the ICU (CAM-ICU*)

- Delirium
- Recommended CAM-ICU score to re-evaluate patients for physical restraints removal
  - score of zero = no delirium.

Glasgow Coma Scale (GCS*)

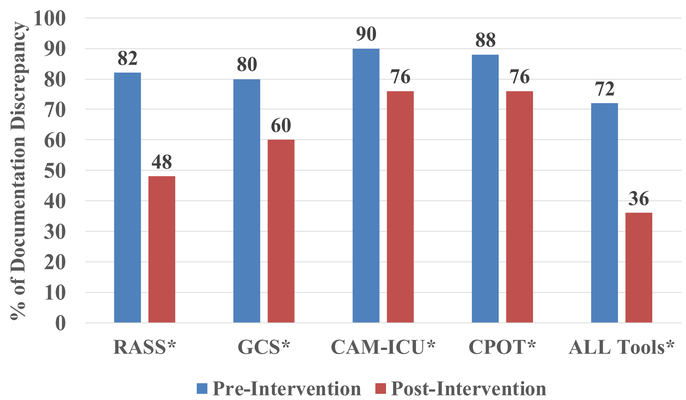
- Level of Consciousness
- Recommended GCS score to re-evaluate patients for physical restraints removal
  - Scores between 3-8 = severe impaired consciousness

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]

2

Unjustifiable Nursing Documentation/Assessment "Documentation Discrepancy"



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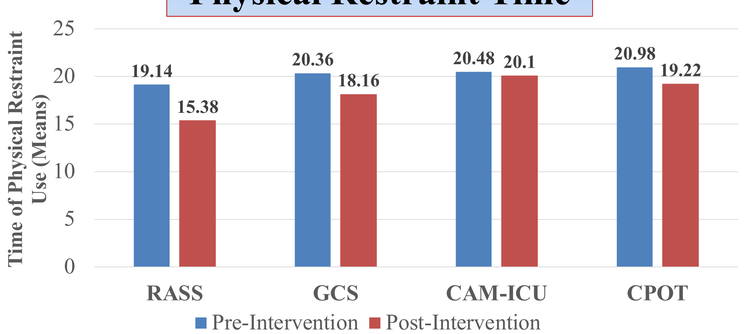
Physical Restraint Time



Note. 23% (n = 40) completed the survey

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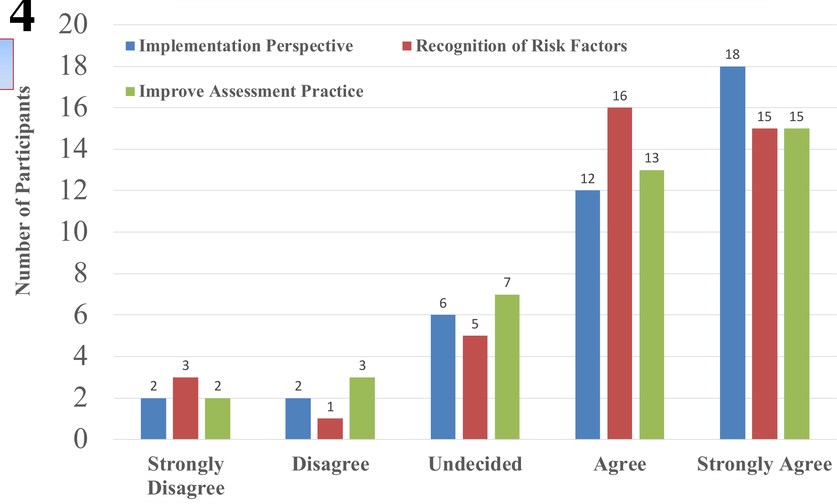
Final Project Evaluation Survey



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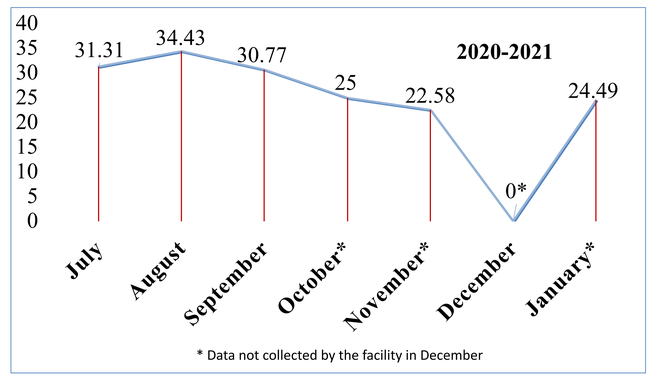
NDNQI-ICU Physical Restraint Prevalence



Project Findings: **(1)** After the intervention, the participants' knowledge significantly increased by 25%. **(2)** There was significant decrease of 36% in documentation discrepancy. **(3)** Patients spent less time in using physical restraints. **(4)** The majority of responding nurses (75-77%) "Agreed/Strongly Agreed" that implementing this project helped in recognizing preventable risk factors and improving their current assessment practice to minimize the use of physical restraints. **(5)** There was a decrease in prevalence during the implementation of this project.

Implications & Conclusion

- Adopting this new assessment practice can help decrease the prevalence of physical restraints, harmful adverse events, length of hospital stay, providers 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.

References/ Contact Information: Scan QR code located next to the tittle