

# Improving Nursing Assessment using the Richmond Agitation Sedation Scale (RASS): A Doctor of Nursing Practice Project.

Amanda J. Golino, DNP, RN, CCRN, CCNS, PMGT-BC, TCRN



SCHOOL of NURSING

## Background

- Delirium is a **significant and common problem** found in critically ill patients (Kotfis et al., 2018; Vasilevskis et al., 2018). Delirium is a form of **acute brain dysfunction**; it is characterized by inattention, fluctuations in thought, varying levels of consciousness, and decreased clarity of cognition (Krewulak et al., 2018; Vasilevskis et al., 2018).
- Delirium prevalence ranges from **60-80% of mechanically ventilated patients and 20-50% of non-ventilated patients** in the Intensive Care Unit (ICU) (Ely et al., 2001; Krewulak et al., 2018).
- An analysis of the literature revealed three themes, documentation of nursing assessment skills, team member training, and intent to **act. These themes informed this Quality Improvement (QI) project.**
- A nursing practice gap was identified: **a lack of in person education about delirium** during onboarding and **lack of opportunity to practice using assessment tools.**

## Project Design

- Theoretical Framework: Jean Watson's Human Caring Theory (Watson, 2008).
- Plan, Do, Study, Act Model from Institute for Healthcare Improvement (IHI, 2022).
- Micro-education: Back to Basics delirium education sessions including didactic, patient experience and simulation conducted in Fall 2022 (Gagne et al., 2019).
- Use of the Nursing Knowledge Delirium Questionnaire during education sessions-pre and post to measure knowledge (Hare et al., 2008).
- Validation of nursing assessment skills using the RASS by the DNP student investigator upon completion of education sessions.

## Demographics

15 total novice critical care nurses participated.

**Age ranges:** 5 ages 18-24, 5 ages 25-34, 5 ages 35-44.

**Gender identity:** 14 identified as female, 1 identified as male

**Unit:** 4 Intermediate Care, 7 Surgical-Trauma ICU, 4 Medical ICU

**Highest Degree:** 12 Bachelors in Nursing, 3 Associates in Nursing

**How long in nursing:**

8: 0-1 years in nursing

5: 1-5 years in nursing

1: 5-10 years in nursing

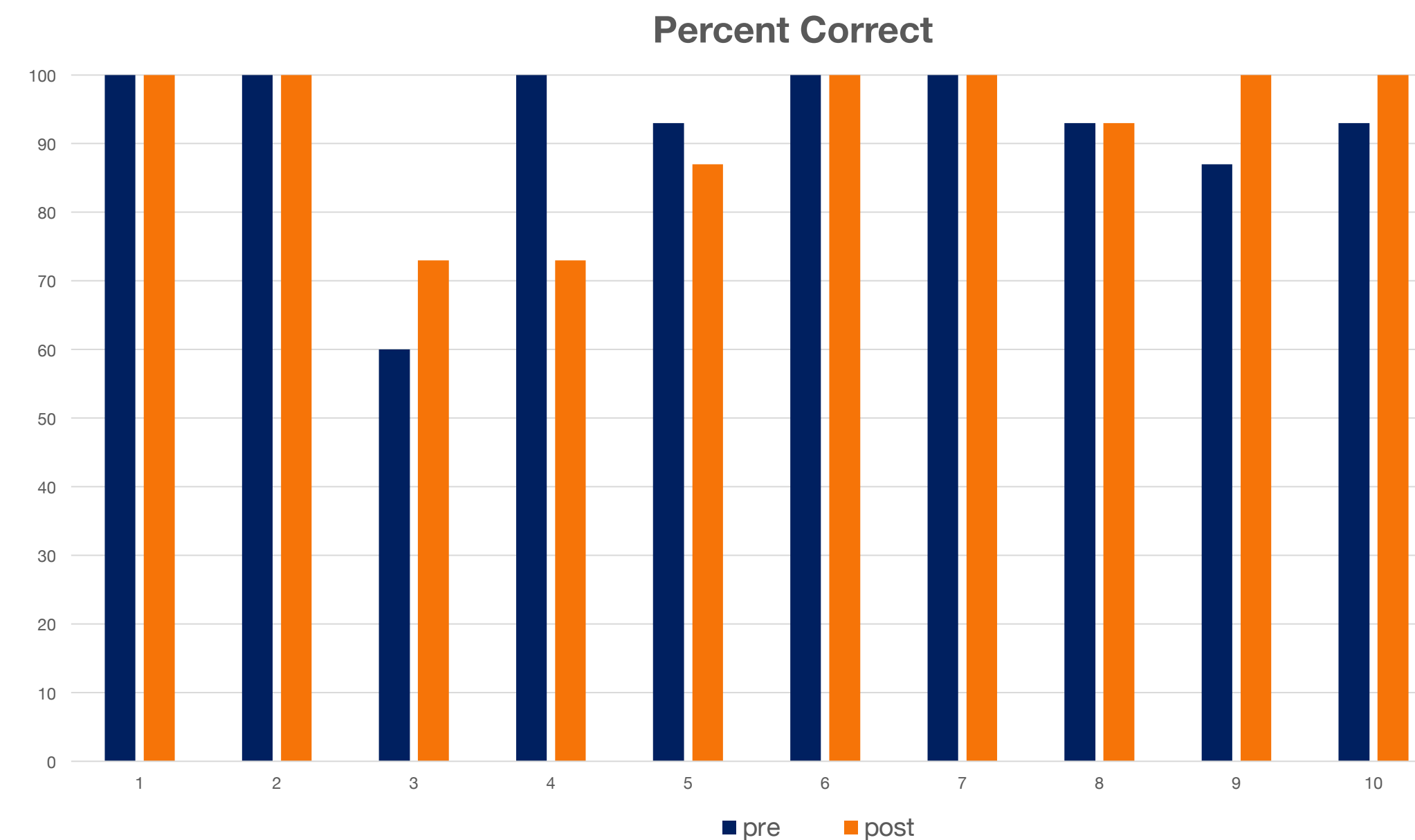
1: 10 or more years in nursing

**How long in Critical Care:**

8: 0-3 months in CC

7: 3-6 months in CC

## Back to Basics: Pre/Post Test



Pre and post test results revealed that participants did not have a knowledge gap about delirium and had a high degree of knowledge prior to attending.

Four questions were 100% correct pre and post, two questions (4, 5) had a decrease post.

## Validation of Skills

- Pre project implementation, the DNP student investigator (DSI) conducted an audit across three units revealing 40% (10) accuracy of RASS assessment.
- Post education, accuracy of nursing assessment skill using the RASS was 100% (15).
- Of the 15 total nurses validated, 9 worked on night shift and 5 on day shift.
- Novice nurses reported their assessments **did not match** their experienced peers.
- Patients were noted to be outside the range of 0 to -2 on the RASS scale in 46% of the validation sessions. As a result, nurses either titrated down on their sedation or notified the provider to adjust their order range.

## Recommendations for Practice

- This QI project identified that nurses at this practice site did not have a knowledge gap about delirium, they had an experience using delirium assessment tools.
- Results of this QI project informed the organizations onboarding practices for novice nurses and annual education for experienced nurses.
- Length of stay decreased for the MICU during the period post project implementation and increased slightly for the STICU.
- Ongoing QI efforts related to delirium assessment may improve nursing practice and patient outcomes.

## References



### Acknowledgements:

The DSI would like to thank the following individuals for their support and guidance: Advisor: Dr. Regina DeGennaro, 2<sup>nd</sup> Reviewer: Dr. Richard Ridge, Project Mentor: Dr. Mary Ann Friesen, Statistician: Dr. Ivora Hinton, Delirium expertise: Dr. Cheri Blevins as well as the Critical Care Nurse Mentor: Adriene Simms and the three nursing unit directors: Amira Letona, Amy Gillam, and Kristelle Toone and the novice nurses that participated.