Delirium Detectives: The Early Identification of Delirium Through the Use of the 4AT Delirium Detection Tool on a Medical/Surgical Unit

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BACKGROUND

DELIRIUM IN THE MEDICAL/SURGICAL DEPARTMENT

- Delirium is often unrecognized and undiagnosed in the Medical/Surgical department.
- Delirium effects 3%-29% of Medical/Surgical patients and 37%-46% of post-surgical patients.

THE IMPACT OF DELIRIUM

- Many patients who have developed delirium in the hospital settings often presented as AOx4 upon admission. However, due to changes in their environment, lack of sleep, and the impact of various medications, they become more confused and disoriented during their stay. Because this change is gradual, many staff often miss these subtle changes.
- Higher mortality, long-term cognitive deficits, longer length of stay, falls, restraint use, and higher morbidity are other risks that are increased in a patient with delirium.
- Directly, up to \$152 billion have been attributed to delirium nationwide. Though it is easy to want to put everything in dollars, one must also consider the indirect costs associated with delirium, which include its effects on the families and staff who care for these patient patients, a higher risk for long-term cognitive impairment, and other psychiatric comorbidities.

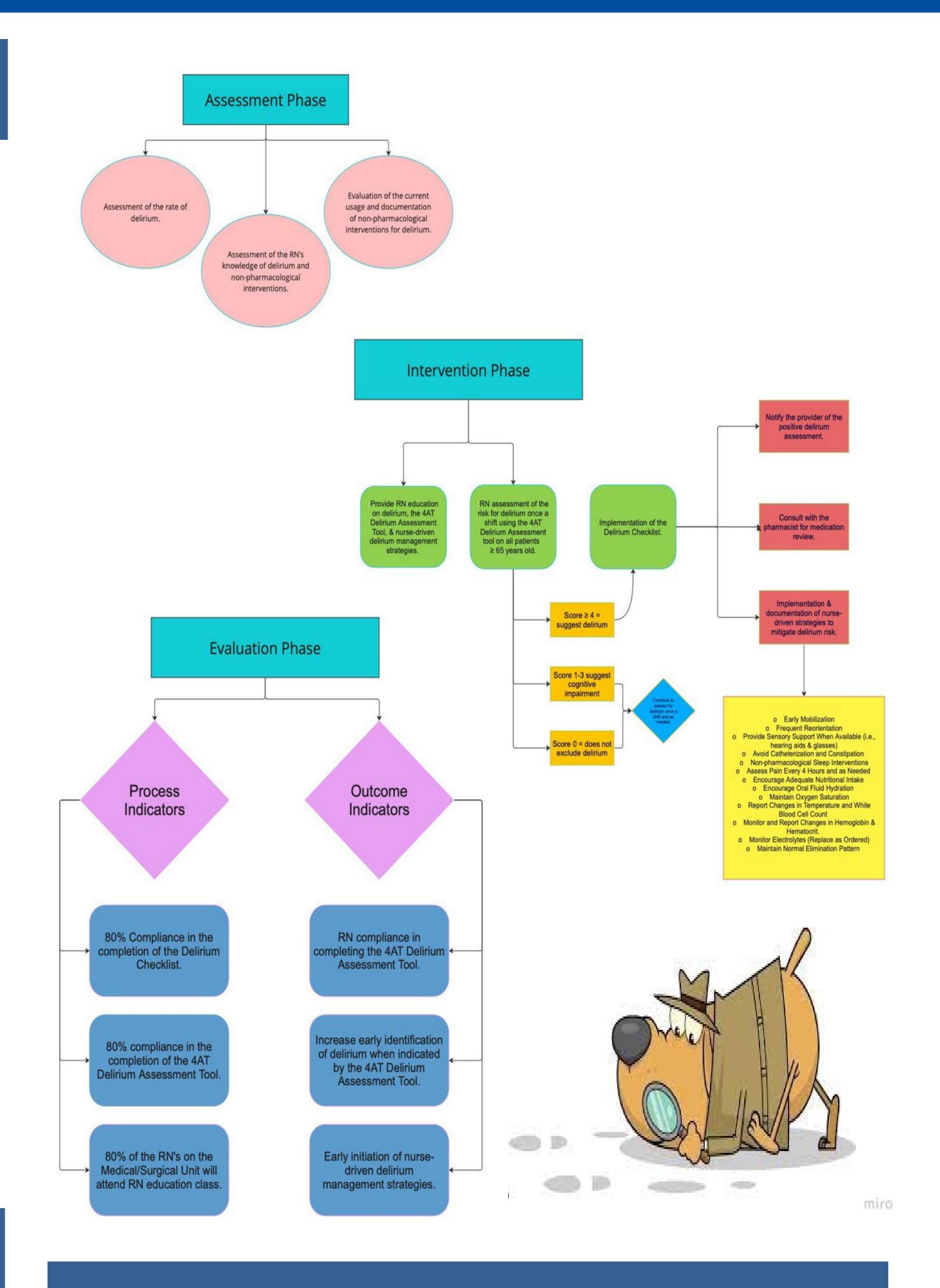
CURRENT PRACTICES IN THE MEDICAL/SURGICAL DEPARTMENT AT THE UNIVERSITY MEDICAL CENTER OF SOUTHERN NEVADA (UMC)

- Current evidence supports the use of a validated delirium detection tool as an effective intervention in the early identification of delirium. This recommendation is supported by the National Institute for Health and Care Excellence's guidelines on delirium.
- Although delirium assessment is performed at the IMC and ICU level of care using the CAM-ICU, screening for delirium is not routinely done in the Medical/Surgical department.

PICO QUESTION

Based on the current practices in the Medical/Surgical department, the following PICO question was developed:

• In nurses working on a Medical/Surgical unit, will implementing the 4AT delirium detection tool and a delirium checklist result in early identification of delirium, RN compliance in completing the 4AT delirium assessment tool, and early initiation of delirium management strategies as compared to current practice strategies?



CONCLUSIONS

• To date, delirium assessment is not a current practice in the Medical/Surgical department at UMC. Research has demonstrated that the 4AT delirium detection tool is an effective intervention in the early identification of delirium. For patients who score high on the 4AT delirium detection tool, non-pharmacological multi-component intervention is recommended in hospitalized patients. In order to translate research into practice, an evidence-based protocol was developed.

THE PROTOCOL

In order to translate research into practice, an evidence-based protocol was developed.

- Assessment Phase: During the assessment phase, the researcher will gather data to assess the rates of delirium in a Medical/Surgical unit and RN knowledge about delirium. During this time, the researcher will also need to evaluate the current utilization and documentation of non-pharmacological interventions for delirium.
- Intervention Phase: During the intervention phase, staff education will be provided regarding the 4AT delirium detection tool and prevention strategies. After completing education, the tool will be trialed on a Medical/Surgical unit. Based on the 4AT delirium detection score, staff will implement and document non-pharmacological invitations recommended on the evidence-based delirium checklist.
- **Evaluation Phase:** After trialing the intervention on a unit, the researcher must evaluate the initiative's impact through process and outcome indicators.

RESULTS

- The search for evidence was conducted using Pub Med & CINHL databases. Although research regarding the 4AT delirium detection tool is limited in the Medical/Surgical setting, 18 articles were found and utilized to review the evidence.
- •Research findings demonstrated that the 4AT delirium detection tool is an effective and valuable way to identify patients at risk for delirium with a sensitivity of 76-87% and specification of 80-95%. The brevity of the tool and the lack of need for training allows for the tool to be efficiently utilized, especially in time-sensitive settings.
- •If the patient is identified as at high risk for delirium, implementing and documenting nurse-driven strategies are recommended. These strategies will include early mobilization, frequent reorientation, the provision of sensory devices such as hearing aids and glasses when available, avoidance of catheterization and constipation, the use of nonpharmacological sleep interventions, pain reassessment every 4 hours, adequate nutritional intake, oral fluid hydration, maintenance of oxygen saturation, monitoring and reporting elevated temperature and WBC, reporting changes in hemoglobin and hematocrit, monitoring electrolytes and replacing as ordered, and the maintenance of a regular elimination pattern.

REFERENCES

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