

# Using the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU) to Decrease Length of Stay: A Scoping Review

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## Purpose

The purpose of this is to evaluate the current literature on the Confusion Assessment Method for the ICU (CAM-ICU) and its effect on the length of stay in the intensive care unit.

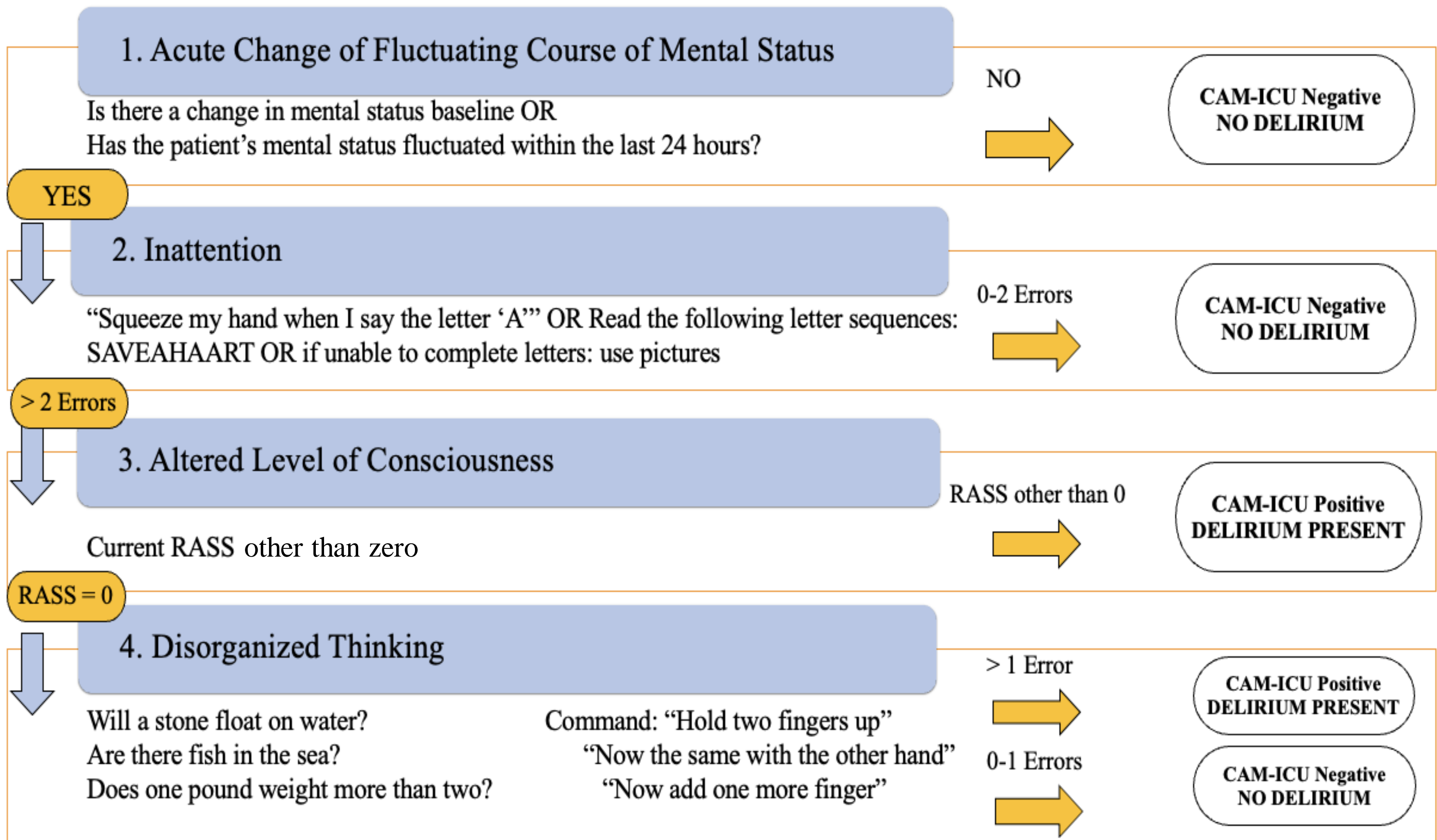
### Specific Aims:

- Evaluate the efficacy of the CAM-ICU in identifying delirium
- Determine the length of stay in the ICU when CAM-ICU is being implemented
- Analyze available data and synthesize results
- Discuss practice implications of using the CAM-ICU in identifying delirium and how it relates to length of stay

## Background

Delirium is a disturbance in attention and cognition that develops over a short time, not explained by a pre-existing cognitive disturbance diagnosis, decreased arousal, or changes in lab work or diagnostics.

- 30% of adults in the ICU experience delirium.
- Delirium is often underdiagnosed, especially when in a hypoactive state.
- Delirium leads to a decrease in cognitive ability, an increase in hospital costs, and an increase in overall mortality.
- Below is a CAM-ICU flowsheet used in the ICU. This assessment can be used in all patients, even those who are mechanically ventilated.



## Methods

### Eligibility Criteria

- Meta-analysis, Systematic Reviews, Controlled Trials, and Observational Studies published between 2018-2023 in English
- Patients over the age of 18 years old

### Information Sources

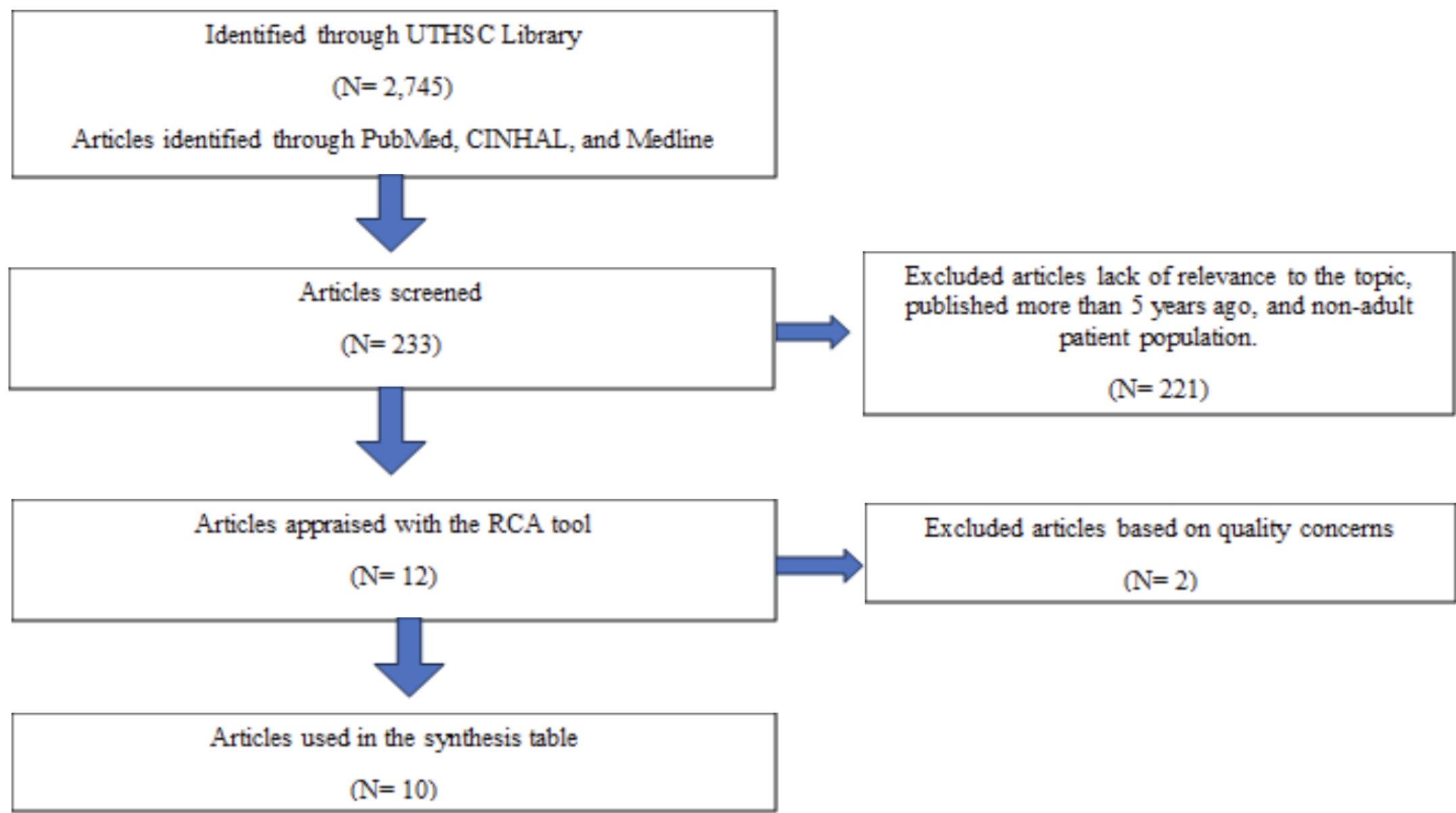
- CINHAL Complete, PubMed, Medline Ovid, and Clinical Key

### Search Terms

- Length of stay, CAM-ICU, delirium, adult, critical care, delirium bundle, Intensive Care Delirium Screening Checklist (ICDSC)

### Endpoint Data Items

- Data points extracted were ICU and hospital length of stay, duration of mechanical ventilation, use of restraints, ventilator-associated pneumonia rates, noninvasive ventilator failure, ICU mortality, overall hospital costs, and utilization of CAM-ICU for delirium detection.



## Results

- Three of ten studies demonstrated a **decrease in ICU length of stay associated with CAM-ICU** implementation, indicating its potential to expedite patient discharge from the ICU.
- Five articles indicated an increase in ICU length of stay when delirium was present, highlighting the **need for comprehensive delirium management strategies beyond CAM-ICU alone.**
- The observed decrease in ICU length of stay associated with CAM-ICU implementation suggests potential benefits for expediting patient discharge, contributing to more efficient healthcare resource utilization.
- Integration of CAM-ICU within broader delirium intervention bundles underscores the importance of multifaceted approaches to delirium management in improving patient outcomes in ICU settings.

## Implications for Practice

- Utilization of the CAM-ICU proves effective in promptly identifying delirium among critically ill adult patients in ICU settings.
- CAM-ICU offers a rapid diagnostic tool, with high sensitivity (94%) and specificity (89%), suitable for swift assessment even in mechanically ventilated patients.
- Early identification and prevention of delirium are crucial due to the absence of specific treatments, emphasizing the importance of interventions aimed at mitigating its' complications.
- Integration of CAM-ICU within holistic delirium management bundles shows promise in reducing ICU length of stay by facilitating timely identification and subsequent intervention for delirium.
- The scoping review highlights that **further research is needed** to isolate the impact of CAM-ICU on ICU length of stay independently, while also addressing confounding variables such as provider proficiency and subsequent interventions following CAM-ICU assessments.

Prevention with delirium bundles and early identification with CAM-ICU is KEY to decreasing ICU length of stay

## References

Scan the QR code to review the references

