

Introduction

- Delirium is a disturbance in mental abilities which can result in confused thinking and a decrease in awareness of the environment.
- Delirium is usually rapid; it can set in within hours or a few days.
- Delirium is often associated with a high-cost burden to the health care system along with a significant increase in 28-day and 90-day mortality rates of 17% and 21% respectively (Duprey et al., 2020).
- Health care costs in the United States (US) associated with delirium were approximately \$32.9 billion (Gou, et al., 2020).
- Delirium is associated with lengthy hospital stays and poor outcomes.
- Contributing factors for delirium in patients 65 years and above are cognitive impairment, severity of current illness, immobility, as well as assistance with activity of daily living (Bergjan, et al., 2020).
- Precipitating factors for delirium in the elderly are polypharmacy, infection, irregular lab results and physical restraints (Bergjan, et al., 2020).

Problem Statement

A Confusion Assessment Method (CAM) screening is not being conducted to assess for delirium in a nursing facility/rehabilitation center.

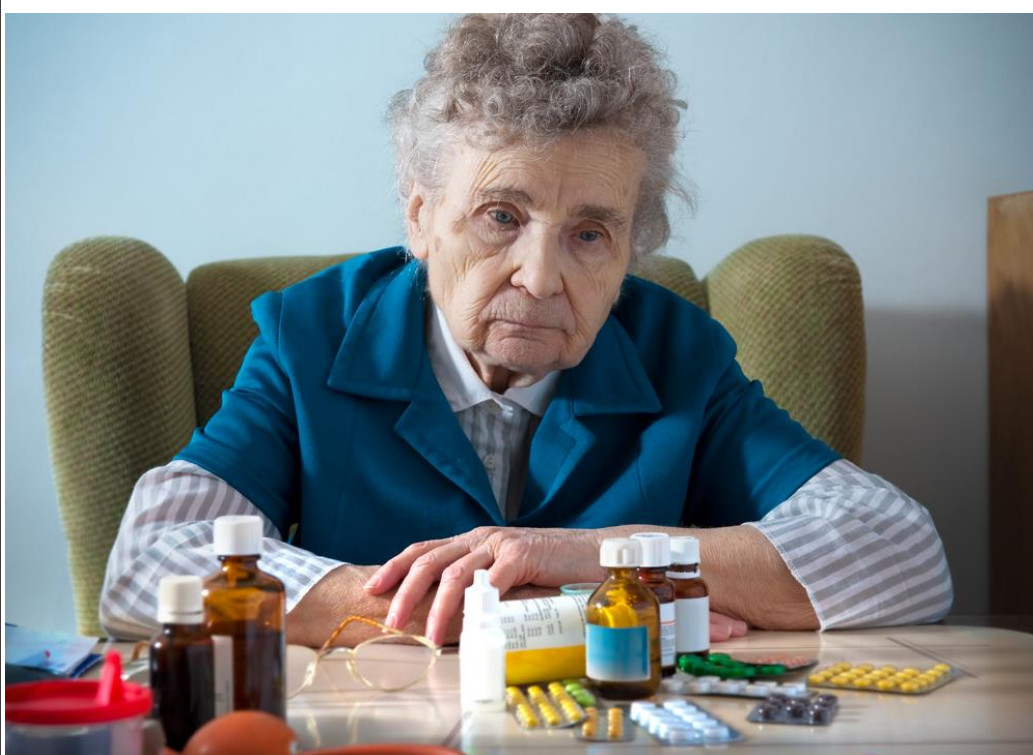


Photo: <https://www.alixarx.com/managing-delirium-older-adults/>

Project Aims

- Successful implementation of a delirium screening protocol in a skilled nursing facility and rehabilitation center will help detect early onset signs and symptoms of delirium in older adults.
- The screening tool will give the providers the opportunity to intervene early. An early intervention can help reduce costs and decrease mortality rates with better overall outcomes.
- The goal of this study is to implement a standardized protocol that calls for a delirium screening to be conducted at baseline/admission, every shift and as needed based on the patient's mental status.
- Early detection using a screening tool such as the CAM, will help an early cognitive decline from progressing to more advanced forms of cognitive impairment.

Measurable Outcomes

- Implementation of a CAM delirium screening protocol.
- Completion of CAM delirium screening tool for each in-patient.
- Total number of positive delirium screenings and referrals to provider for further

SHORT CONFUSION ASSESSMENT METHOD (SHORT CAM) WORKSHEET

Use this worksheet (completed) as an alternative to the Short CAM Questionnaire. Testing of alternative instruments should be discontinued prior to making such as sign forms, staff records, or records of your statements. This page is only for use on the patient's admission record. Please read all instructions and items carefully before using the CAM-4 instrument.

EVALUATOR: _____ DATE: _____

I. ACUTE ONSET AND FLUCTUATION IN THE COURSE

a) Is there evidence of an acute change in mental status (from the patient's baseline)?

NO _____ YES _____

b) Do the (personally) behavior fluctuations during the day, that is tend to come and go or increase and decrease in severity?

NO _____ YES _____

II. INATTENTION

Do the patient have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said?

NO _____ YES _____

III. DISORGANIZED THINKING

Was the patient's thinking disorganized or incoherent, such as rambling or incoherence, unclear or illogical flow of ideas, or uncharacteristic switching from subject to subject?

NO _____ YES _____

IV. ALTERED LEVEL OF CONSCIOUSNESS

Overall, how would you rate the patient's level of consciousness?

— Alert (normal)
— Mildly (slight)
— Moderate (obviously altered)
— Severe (difficult to arouse)
— Coma (unresponsive)

Do any three appear in the box above? NO _____ YES _____

If two items and at least one other item in Box I are checked (and at least one item in Box II is checked) a diagnosis of delirium is suggested.

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Photo: http://www.hospitalelderlifeprogram.org/uploads/disclaimers/Short_CAM_Instrument_8-29-2014.pdf

Processes and Methods

- This project intends to implement a protocol to assess delirium screening in a local skilled nursing facility in south Knoxville, Tennessee. Currently, this facility does not assess its patient population for delirium.
- The direct patient provider, a registered nurse (RN), will be trained on how to assess for signs and symptoms of delirium and administer the CAM.
- The project will assess male and female residents irrespective of their age.
- No race determination will be made for this project.
- The CAM is the most widely used delirium screening tool in the world. It has a great interrater reliability rate of 100% and a validity rating of 75-100% (Mulkey, et al., 2018).
- The CAM screening tool will be scored based on observations during a brief and formal cognitive testing or during brief mental status evaluations.
- Further evaluation and assessment and a referral to the provider (MD, NP, PMHNP) will be required upon a positive screening test.
- It was determined that the proposed activity is not research involving human subjects according to United States Department of Health and Human Services (DHHS) regulations by the university's Institutional Review Board (IRB).

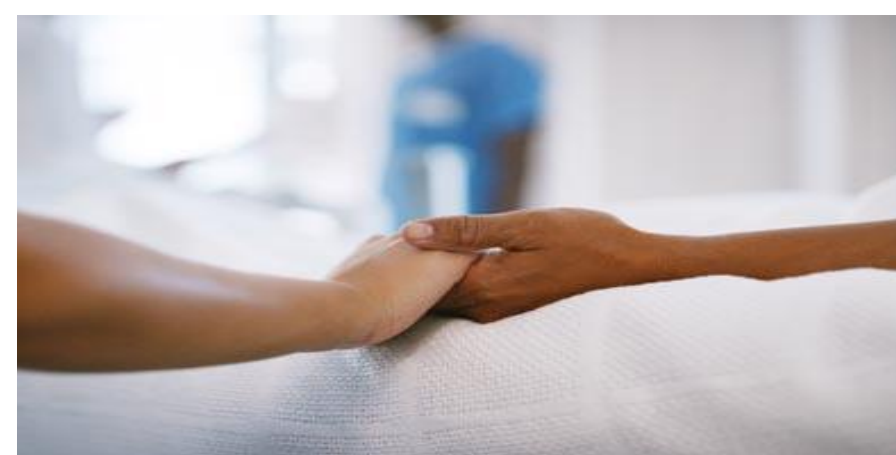


Photo: <https://www.nia.nih.gov/news/researchers-test-new-approaches-prevent-delirium-older-adults>

Results

The project is currently in the data collection phase.

Limitations

Refusal to participate either by the patient or family in the screening.

Conclusion

- Nearly 80% of delirium cases in an acute care setting go undetected or undiagnosed.
- Implementing a delirium screening protocol in a skilled nursing facility is imperative for early detection and intervention.



Photo: <https://crbhky.org/>

References

- Bergjan, M., Zilezinski, M., Schwalbach, T., Franke, C., Erdur, H., Audebert, H. J., & Haub, A. (2020). Validation of two nurse-based screening tools for delirium in elderly patients in general medical wards. *BMC nursing, 19*(1), 1-9.
- Duprey, M. S., van den Boogaard, M., van der Hoeven, J. G., Pickkers, P., Briesacher, B. A., Saczynski, J. S., Griffith, J. L., & Devlin, J. W. (2020). Association between incident delirium and 28- and 90-day mortality in critically ill adults: a secondary analysis. *Critical Care, 24*(1), 1–10. <https://doi.org/10.1186/s13054-020-02879-6>
- Gou, R. Y., Hshieh, T. T., Marcantonio, E. R., Cooper, Z., Jones, R. N., Trivison, T. G., Fong, T.G., Abdeen, A., Lange, J., Earp, B. and Schmitt, E.M., & SAGES Study Group. (2021). One-year Medicare costs associated with delirium in older patients undergoing major elective surgery. *JAMA surgery, 156*(5), 430-442.
- Mulkey, M. A., Roberson, D. W., Everhart, D. E., & Hardin, S. R. (2018). Choosing the right delirium assessment tool. *Journal of Neuroscience Nursing, 50*(6), 343-348.

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