



A Brief Review of a Regional Healthcare Clinical Practice Protocol: The ABCDEF Bundle

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Introduction

A brief review of a clinical practice protocol was performed with two purposes: to critically evaluate a clinical protocol in use to determine if it supports scholarly practice, and to address opportunities for change in practice to meet current guidelines.

The Society of Critical Care Medicine originated the intensive care unit (ICU) Liberation Bundle. The bundle was part of the Clinical Practice Guidelines for the Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption (PADIS) in Adult Patients in the ICU. Its purpose is to reduce the occurrence of delirium and weakness in adults during their stay and includes awakening and breathing trials for mechanically ventilated adult patients. This bundle was then adopted by a regional healthcare facility and rolled into their ABCDEF Bundle.

I. Purpose

A. To reduce the frequency of intensive care unit (ICU) acquired delirium and weakness in the adult population.

II. Policy

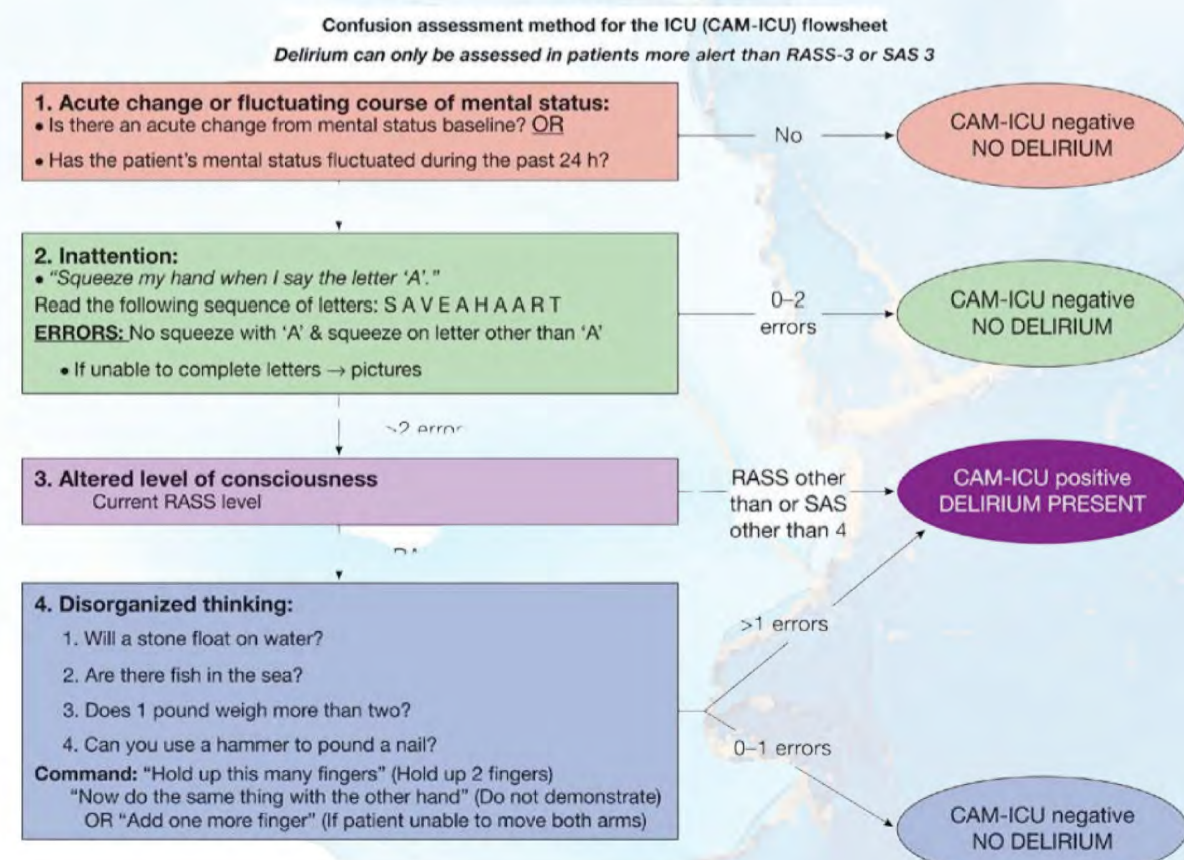
A. The ABCDEF protocol should be applied to every adult patient in the Intensive Care Unit (Addendum A).

B. If a Licensed Independent Prescriber (LIP) chooses to have a patient not participate in certain components of the ABCDEF protocol, an order stating this request should be documented.

C. The ABCDEF protocol is comprised of three distinct, yet highly interconnected, components including:

1. Awakening and breathing trial coordination for all ventilator patients.
2. Delirium monitoring and management
3. Early mobility

D. It is important to note that clinical judgment is should always be considered by clinicians of the ICU interdisciplinary team.



Methods

The review began with an interview of the facility's Associate Chief Nursing Officer, who assisted in the creation of the ABCDEF bundle. The purpose of this interview was to gain insight related to the development of a clinical practice protocol within an organization. The evaluation process included a comparison of current evidence-based practice for currency and accuracy.

Findings

Upon evaluating evidence-based research regarding the ABCDEF Bundle, the following was discovered:

- Light sedation demonstrated decreased mortality and time to extubation; there was no change in delirium outcomes.
- Patients and families preferences should be considered.
- Delirium-positive days decreased significantly with implementation of the ABCDEF bundle.
- Early detection can relieve distressing symptoms and provide prompt treatment. Appropriate delirium screenings include CAM-ICU, ICDSC and ICU-7.
- Weigh the benefits and risks before utilizing mobilization interventions with critically ill patients.
- Patients probably value the benefits of mobility even if they are not demonstrating large gains in outcomes. Early mobility showed changes with length of stay in the ICU decreased, but overall length of hospital stay did not change significantly. In general, when all parts of the bundle are applied, greater outcomes are achieved.

Updates Needed to ABCDEF Bundle to Meet Current Guidelines

Incorporate patient and family preferences.

Ensure incorporation of one of the following appropriate delirium screenings:

- CAM-ICU
- ICDSC
- ICU-7

Quality and Level of Evidence

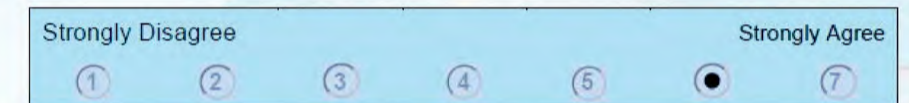
APPRAISAL OF GUIDELINES FOR RESEARCH & EVALUATION Global Rating Scale

OVERALL ASSESSMENT

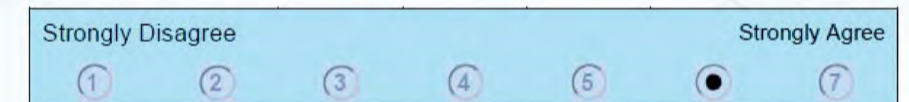
1. Rate the overall quality of this guideline.



2. I would recommend this guideline for use in practice.



3. I would make use of a guideline of this quality in my professional decisions.



The AGREE GRS rating scale was used to determine the validity of the current protocol. I found this protocol demonstrates validity for use with adult ICU patients. I provided an AGREE GRS rating of 6 recommending it for practice. I provided an AGREE GRS rating of 6 for overall quality, and for use of this protocol of this quality in my professional decisions related to current references. This protocol is consistent and logically sound with knowledge-based research.

Conclusion

Evaluation results indicated evidence met the needs of patients, but the protocol needed to be updated to meet current guidelines; these results were provided to the organization. The lesson gained from this review was that policies should be investigated for currency, accuracy, and validity before taking at face value.

References

Devlin, J. W., Skrobik, Y., Gélinas, C., Needham, D. M., Slooter, A. J., Pandharipande, P. P., Watson, P. L., Weinhouse, G. L., Nunnally, M. E., Rochwerg, B., Balas, M. C., van den Boogaard, M., Bosma, K. J., Brummel, N. E., Chanques, G., Denehy, L., Drouot, X., Fraser, G. L., Harris, J. E., ... Alhazzani, W. (2018). *Clinical practice guidelines for the prevention and management of pain, agitation/sedation, delirium, immobility, and sleep disruption in adult patients in the ICU. Critical Care Medicine, 46*(9), e825-e873. <https://doi.org/10.1097/CCM.0000000000003299>

Schallom, M., Tymkew, H., Vyers, K., Prentice, D., Sona, C., Norris, T., & Arroyo, C. (2020). *Implementation of an interdisciplinary AACN early mobility protocol. Critical Care Nurse, 40*(4), e7-e17. <https://doi.org/10.4037/ccn2020632>