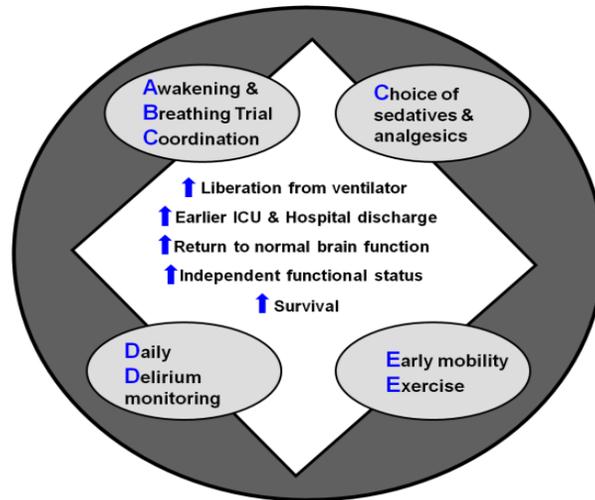


TOP 10 Teaching Tips for Delirium Monitoring

*A component of the ABCDEs of Critical Care*¹⁻²



Why? 60-80% of mechanically ventilated patients & 20-60% of lower severity ICU patients develop delirium.³⁻⁵

Patient Perspective: "The time I spent seems like it was in a huge, empty gray space, sort of like a monstrous underground parking garage with no cars, only me, floating or seeming to float, on something. Every once in a while I would get to an edge of something horrible and I thought, "if I just let go, then this horror will be over."" SB

1. **Assessment is FAST:** 90% of RASS/CAM-ICU assessments take <1 minute. The other 10% take only a few minutes. Speed and ease of use make this feasible on a large scale multiple times daily (often done q8 h).
2. **RASS & CAM-ICU:** Implementing RASS without CAM-ICU (sedation scale without delirium tool) leaves only half of consciousness assessed (arousal, not content), is clinically unsatisfying, and hurts compliance.
3. **Tailor Exam:** You don't have to do every CAM-ICU feature if you get your answers via a brief exam sooner
4. **Starting with Features 1 and 3:** Feature 1 is comparing folks to their "baseline MS" and Feature 3 is about their "LOC right now." Since many ICUs repeat sedation scale assessment q2-4 h, these data are readily available. A quick mantra: "***Is patient at his/her baseline or fluctuating +RASS now + Inattention test.***"
5. **Inattention (Feature 2):** This is THE cardinal feature and must be present to diagnose delirium. F2 is quick and simple. 95% of evaluations are done using only "hand squeezes" on correct letters or numbers. We need the picture method of screening for inattention in <5%, who are often very interesting patients.
6. **Hand Squeezing:** In the absence of other specific neurological diagnoses, a patient who squeezes on all letters, squeezes on NO letters, or misses >2 letters/numbers/pictures is *inattentive and F2 positive*. With a RASS other than "0," he/she is delirious from many possible causes (e.g.: sepsis, sedatives, CHF).
7. **UTA:** The term 'Unable to Assess' is only recorded when patients are in stupor/coma (RASS -4/-5).
8. **Rare F4:** It is only necessary to proceed to Disorganized Thinking (F4 in new training manual) when a patient is F2 positive (inattentive) and Awake and Alert (RASS 0) at the time of CAM-ICU evaluation.
9. **Subsyndromal Delirium:** Patients may have some features *without* the full syndrome of delirium (e.g., F2 only or F1&4 only). This is a (subsyndromal) intermediate state of badness between normal and delirium. Reassess with CAM-ICU frequently to determine the clinical course of his/her emerging brain dysfunction.
10. **Key to Success:** MDs and RNs must be on the same page. The TEAM must understand the definition of delirium, its prognostic implications, modifiable causes, and treatment options. Enthusiasm is destroyed when physicians do not respond to nurses who report that a patient is CAM-ICU positive. Overcome this implementation barrier by engaging and educating all members of the ICU team and having experts.

BONUS POINTS: Delirium = organ dysfunction. Recognizing delirium is like a "burglar alarm" or the "canary in the coal mine" (early signals of danger). There are many potential causes of this organ dysfunction and therefore many routes to correct treatment for a given patient. Do NOT automatically link delirium monitoring with a specific drug treatment. Just as the CIWA (a tool for Alcohol Withdrawal Hyperactive Delirium) should not automatically lead to a knee-jerk prescription for benzodiazepine, so the use of a delirium tool should not lead directly to antipsychotics treatment. These well-validated and highly reliable tools aid clinical practice to allow a more systematic and widespread monitoring of the presence or absence of brain organ dysfunction. The CAM-ICU is a complement to the neuro exam. It represents a streamlined way for non-neurologically and non-psychiatrically trained ICU team members to conduct what is for many (but not all) patients the most important/relevant piece of the neuro exam. The POSITIVE CAM-ICU or ICDSC must trigger a list of thoughts about the differential diagnosis of why the brain went "down" and how to get it back "up" again. For a delirious patient, we should **THINK** first about: (see **THINK** mnemonic at <http://www.mc.vanderbilt.edu/icudelirium/terminology.html>)

Toxic situations

- reversal and aggressive treatment of underlying cause(s) such as CHF and shock
- stopping unnecessary deliriogenic agents that may be impairing brain function

Hypoxemia, or consider giving **Haloperidol** or other antipsychotics

Infection/sepsis, or **Immobilization**

Nonpharmacological interventions such as eyeglasses, hearing aids, reorientation, and sleep hygiene

K⁺ medical management other than new drugs (e.g., correction of electrolyte disorders)

ONLY after the above considerations should we add new agents that the patient is not on, such as antipsychotics (pending ongoing clinical trials to inform us of safety efficacy of these and other agents).

BRAIN ROAD MAP FOR INTERDISCIPLINARY COMMUNICATION

Investigate the following:

Where is the patient going? (i.e., sedation targets/goals)

Where is the patient now? (i.e., current RASS/CAM-ICU)

How did they get there? (i.e., sepsis, drug exposures)

State the following (only takes 10 seconds!):

1. Target RASS
2. Actual RASS
3. CAM-ICU
4. Drugs

Skipping any of these steps will leave the clinical team wanting more information!

¹ Morandi A et al. Curr Opin Crit Care, 2011;17:43-49

² Vasilevskis E et al. Chest 2010;138:1224-33

³ Ely EW et al. JAMA 2001;286:2703-2710

⁴ Ely EW et al. CCM 2001;29:1370-79

⁵ Thomason JW CC 2005;9:375-81