

Trauma Center Practice Management Guideline
Iowa Methodist Medical Center — Des Moines

<i>Management of Pain, Agitation and Delirium in ICU Patients</i>	
ADULT	Effective: 04/2014
Practice Management Guideline	
Contact: Trauma Center Medical Director	Last Revised: 04/2017

PURPOSE

For pain, agitation and delirium in ICU patients.

PROCEDURE STATEMENTS

1. Pain

- A. Pain assessments should routine be performed in verbal and non-verbal ICU patients
- B. Clinical Pain Observation Tool (CPOT) should be the assessment tools of choice for non-verbal patients, as this corresponds to nursing cares in the ICU
- C. CPOT ≥ 3 suggests significant pain and requires treatment
- D. All IV narcotics are equally effective when titrated to effect and choice should depend on individual patient and their comorbidities
- E. Use of non-narcotic adjuncts may be considered based on patient
- F. Pain should be reassessed at 60 minutes after intervention
- G. Treat pain first before using sedative medications
- H. The utilization of drip versus IVP narcotic medications is patient dependent, but evidence does support a shorter length of mechanical ventilation if pain is adequately controlled with IVP instead of drip formulations.

2. Sedation (applies to intubated and non-intubated patients)

- A. Preferred sedation assessment tool is the Richmond Agitation-Sedation Scale
- B. Targeted sedation will be performed with a target of -2 to 0
- C. If patient under sedated (RASS > 0) assess and treat for pain first then use sedatives
- D. Non-benzodiazepine sedatives (Propofol, Precedex, Haldol) should be first line therapy unless patient is in ETOH or benzodiazepine withdrawal
- E. If over sedated (RASS < -2) hold sedation and **restart at 50%** of starting dose once target is reached
- F. Once patient is stable and at goal sedation level (RASS -2 to 0) daily Spontaneous Breathing Trials will be performed in conjunction with daily Spontaneous Awakening Trials.

3. Delirium

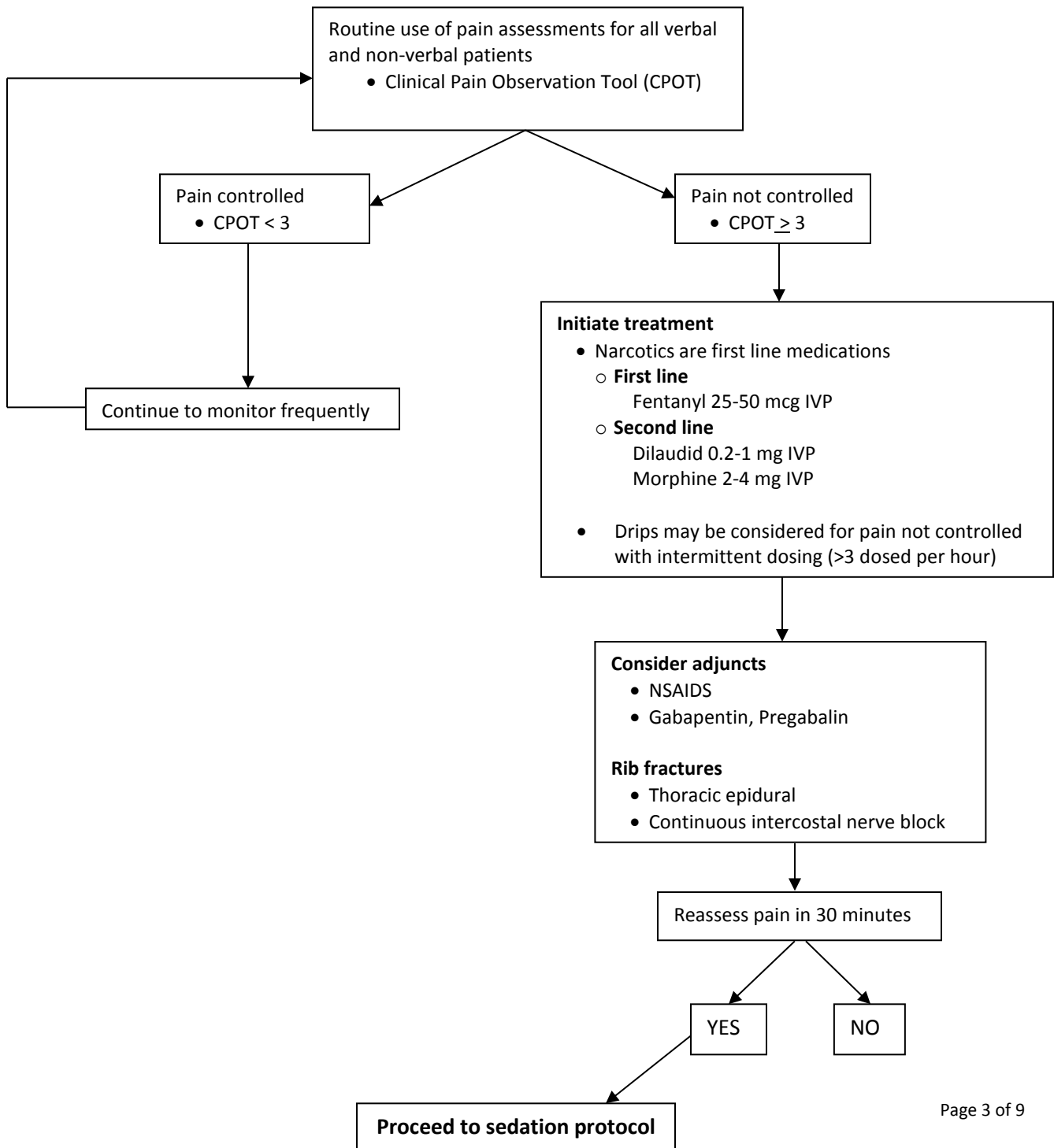
- A. Delirium should be assessed every shift by nursing or physician provider
- B. Preferred assessment tools are Confusion Assessment Method (CAM-ICU) or the Intensive Care Delirium Screening Checklist (ICDSC)
- C. Delirium is present if CAM-ICU is positive or ICDSC \geq to 4
- D. If positive, ensure adequate pain treatment first
- E. Use of reorientation, hearing aids, and eyeglasses should be emphasized
- F. Pharmacologic treatment should avoid benzodiazepines unless delirium is due to ETOH or benzodiazepine withdrawal.
- G. Avoid antipsychotics if patient has prolonged QT (> 450 ms) or other risk factors for torsades de pointes
- H. All patients will be enrolled in early mobility as their comorbidities and clinical status allows
- I. Melatonin is associated with lower risk of delirium at a dose 0.5 mg to 5 mg. We currently stock 3 mg tablets and 1 mg/dl solution.

Related References:

- Clinical Practice Guidelines for the Management of Pain, Agitation and Delirium SCCM 2013. Icdelirium.org
- Reade M, Finfer S. Sedation and Delirium in the Intensive Care Unit. New England Journal of Medicine 2014; 370:444-454
- Delirium and acute confusional states: Prevention, treatment, and prognosis. Joseph Francis, Jr, MD, MPH Section Editors: Michael J Aminoff, MD, DSc, Kenneth E Schmader, MD Deputy Editor: Janet L Wilterdink, MD. UpToDate.com. https://www.uptodate.com/contents/delirium-and-acute-confusional-states-prevention-treatment-and-prognosis?source=search_result&search=delirium&selectedTitle=2~150. Literature review current through: Mar 2017. | This topic last updated: Aug 13, 2014.

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Routine Use of Pain Control	
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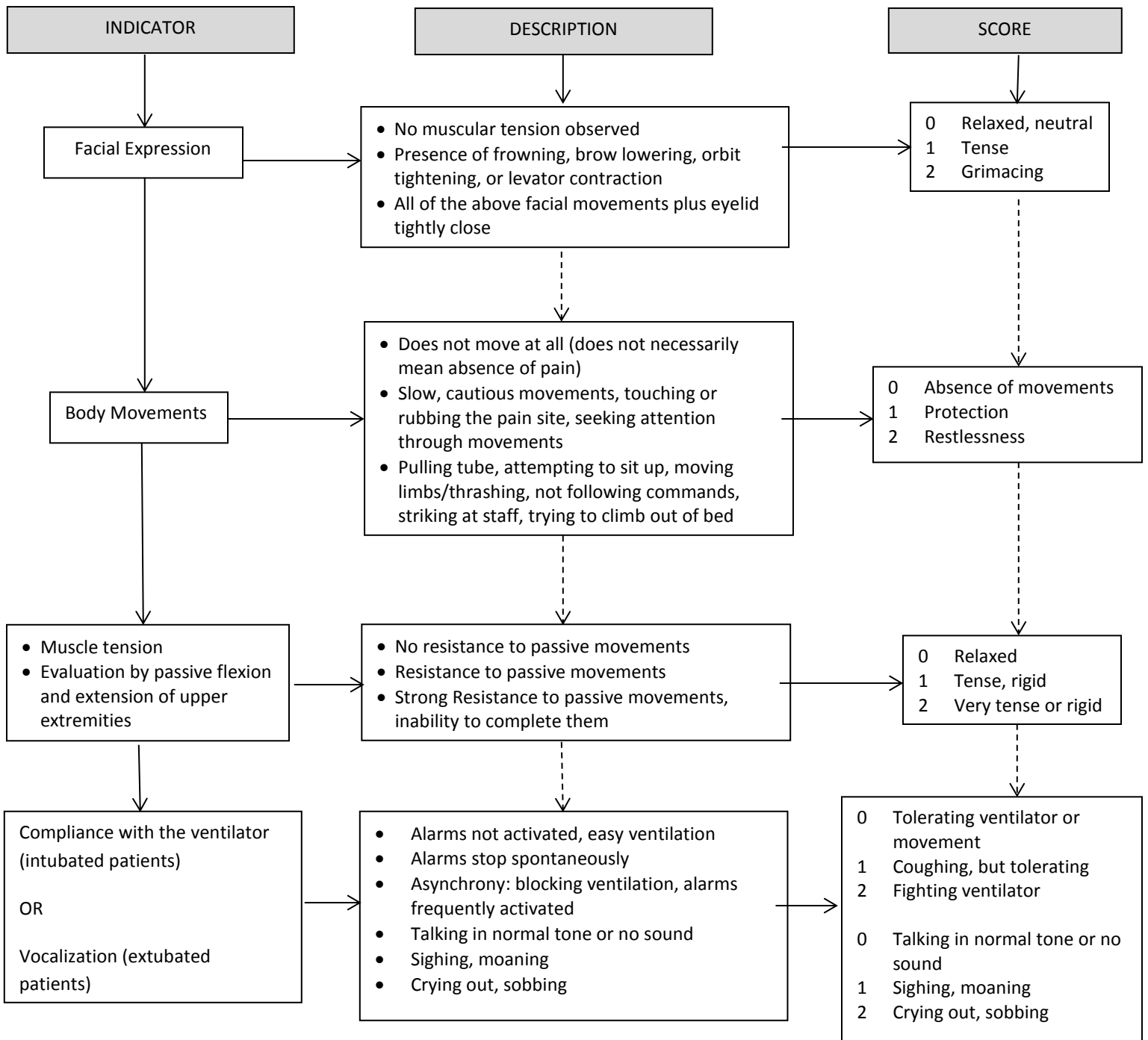


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Critical-Care Pain Observation Tool (CPOT)

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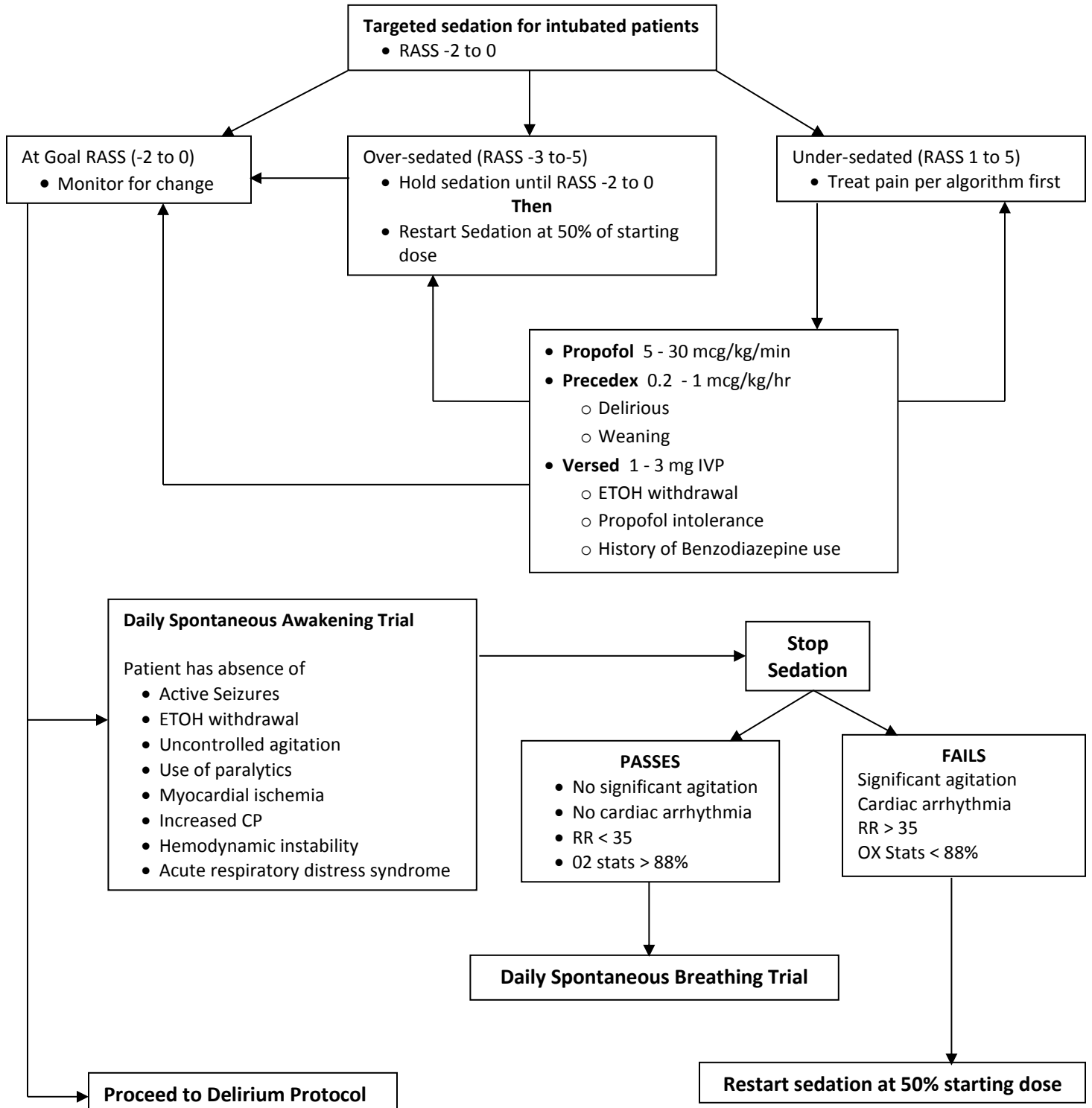
0-8 Total Range

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Targeted Sedation for Intubated Patients

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The Richmond Agitation-Sedation Scale

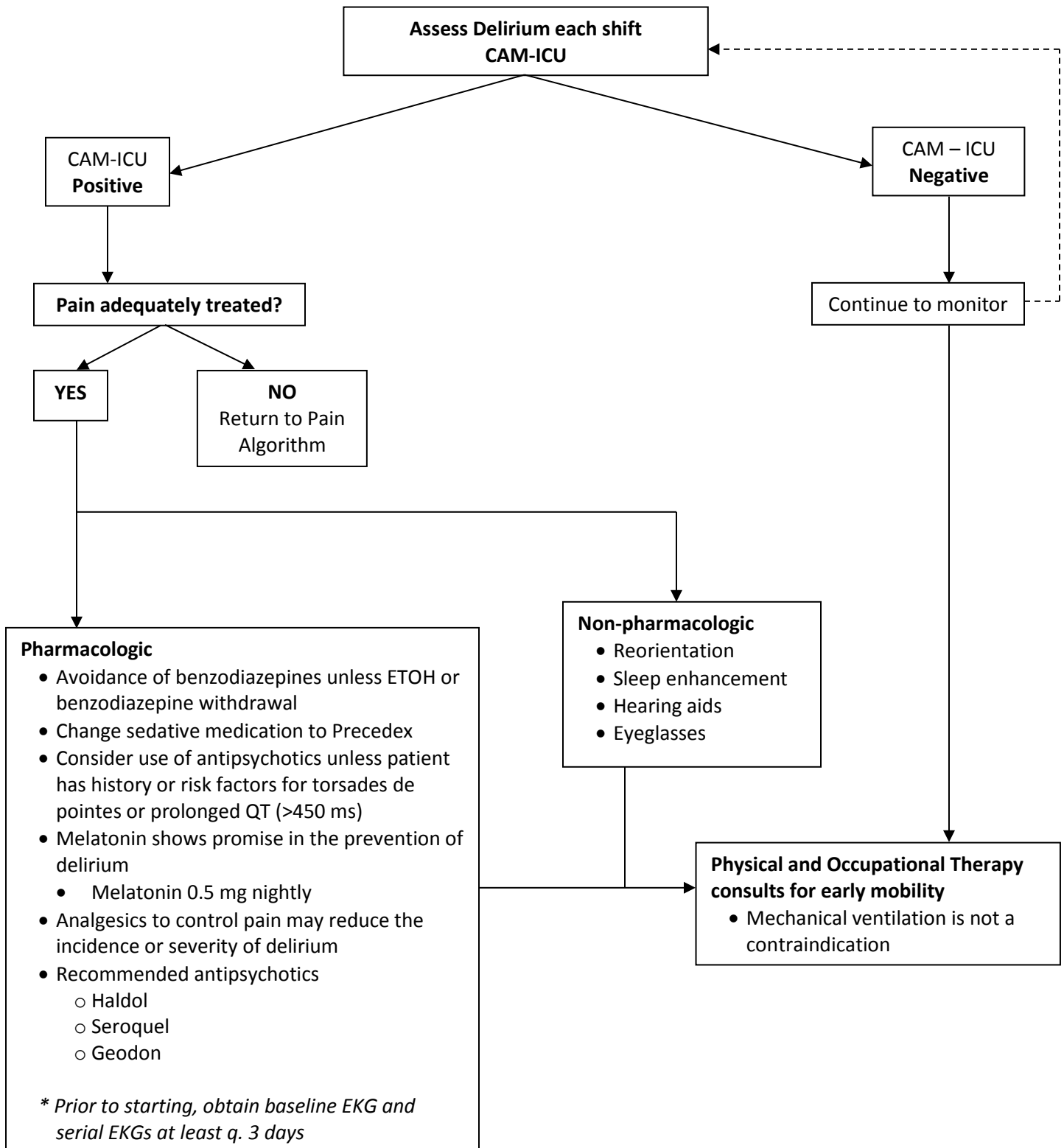
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Score	Behavior	Description
4	Combative	Combative, violent, immediate danger to staff
3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive
2	Agitated	Frequent non-purposeful movement; fights ventilator
1	Restless	Anxious, apprehensive, but movements not aggressive or
0	Alert and calm	Alert, calm
-1	Drowsy	Not fully alert, but has sustained awakening to voice (eye opening and contact > 10 seconds)
-2	Light sedation	Briefly awakens to voice (eye opening and contact < 10 seconds)
-3	Moderate sedation	Movement or eye opening to voice (but no eye contact)
-4	Deep	No response to voice, but movement or eye opening to physical stimulation
-5	Unarousable	No response to voice or physical stimulation

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Assessing Delirium (CAM-ICU)	
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Confusion Assessment Method for the ICU (CAM-ICU)

ADULT

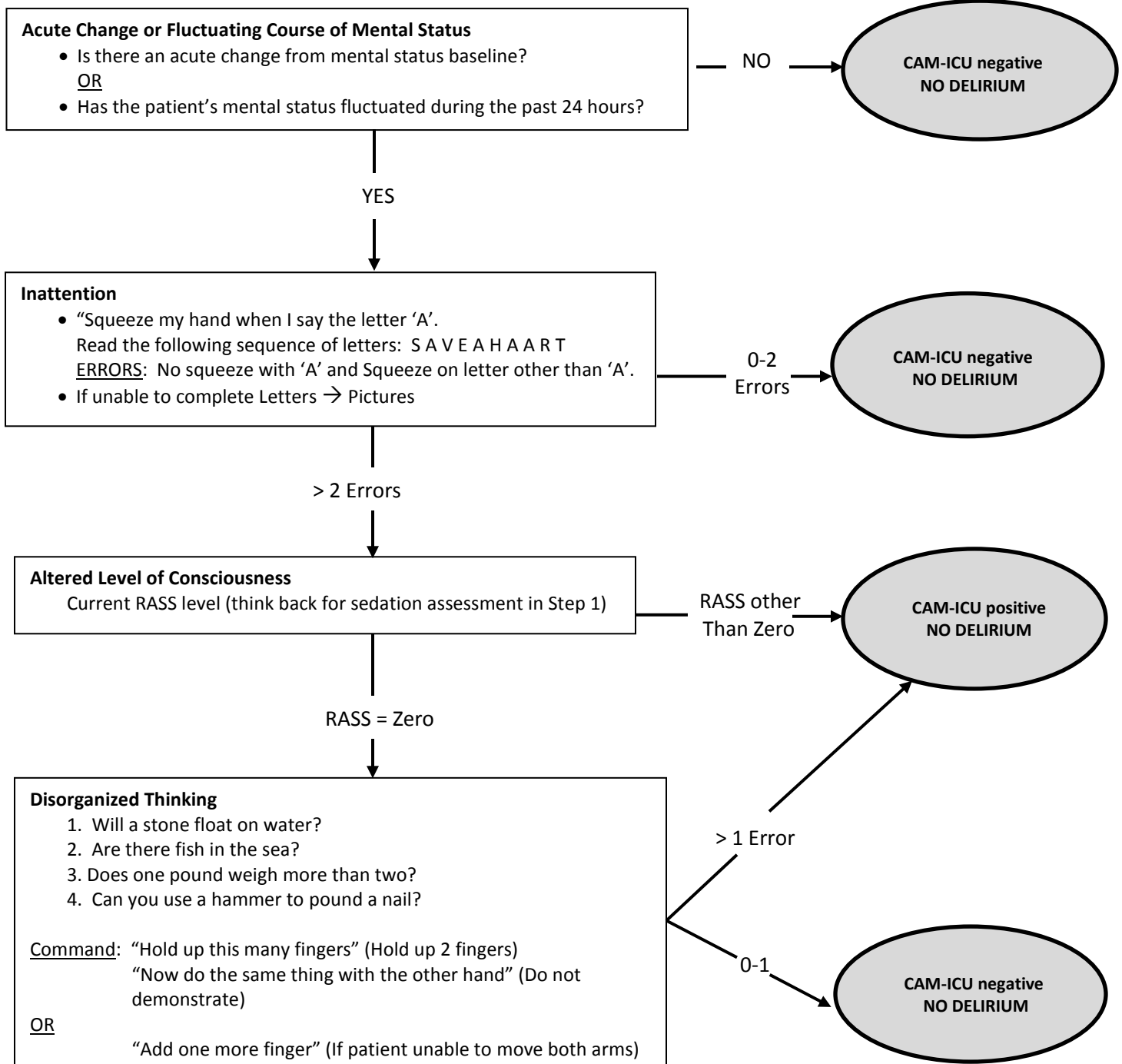
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Step 2 Delirium Assessment



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Intensive Care Delirium Screening Checklist

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PATIENT EVALUATION	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Altered level of consciousness* (A-E)					
If A or B do not complete patient evaluation for the period					
Inattention					
Disorientation					
Hallucination – Delusion – Psychosis					
Psychomotor agitation or retardation					
Inappropriate speech or mood					
Sleep/Wake cycle disturbance					
Symptom fluctuation					
TOTAL SCORE (0-8)					

		Score
Level of consciousness *	A No response	None
	B Response to intense and repeated stimulation (loud voice and pain)	None
	C Response to mild or moderate stimulation	1
	D Normal wakefulness	0
	E Exaggerated response to normal stimulation	1

SCORING SYSTEM:
The scale is completed based on information collected from each entire 8-hour shift or from the previous 24 hours. Obvious manifestation of an item = 1 point. No manifestation of an item or no assessment possible = 0 point. The score of each item is entered in the corresponding empty box and is 0 or 1.
1. Altered level of consciousness: A) No response or B) the need for vigorous stimulation in order to obtain any response signified a severe alteration in the level of consciousness precluding evaluation. If there is a coma (A) or stupor (B) most of the time period then a days (-) is entered and there is no further evaluation during that period. C) Drowsiness or requirement of a mild to moderate stimulation for a response implies an altered level of consciousness and scores 1 point. D) Wakefulness or sleeping state that could easily be aroused is considered normal and scores no point. E) Hyper vigilance is rated as a normal level of consciousness and scores 1 point.
2. Inattention: Difficulty in following a conversation or instructions. Easily distracted by external stimuli. Difficulty in shifting focuses. Any of these scores 1 point.
3. Disorientation: Any obvious mistake in time, place or person scores 1 point.
4. Hallucination, delusion or psychosis: The unequivocal clinical manifestation of hallucination or of behavior probably due to hallucination (e.g. trying to catch a non-existent object) or delusion. Gross impairment in reality testing. Any of these scores 1 point.
5. Psychomotor agitation or retardation: Hyperactivity requiring the use of additional sedative drugs or restraints in order to control potential dangerousness (e.g. pulling out IV lines, hitting staff). Hypoactivity or clinically noticeable psychomotor slowing. Any of these scores 1 point.
6. Inappropriate speech or mood: Inappropriate, disorganized or incoherent speech. Inappropriate display of emotion related to events or situation. Any of these scores 1 point.
7. Sleep/Wake cycle disturbance: Sleeping less than 4 hours or waking frequently at night (do not consider wakefulness initiated by medical staff or loud environment.) Sleeping during most of the day. Any of these scores 1 point.
8. Symptom fluctuation: Fluctuation of the manifestation of any item or symptom over 24 hours (e.g. from one shift to another) scores 1 point.