

Richmond Agitation Sedation Scale (RASS) *

Score	Term	Description	
+4	Combative	Overtly 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 but movements not aggressive vigorous	
0	Alert and calm		
-1	Drowsy	Not fully alert, but has sustained awakening (eye-opening/eye contact) to <i>voice</i> (≥ 10 seconds)	} Verbal Stimulation
-2	Light sedation	Briefly awakens with eye contact to <i>voice</i> (< 10 seconds)	
-3	Moderate sedation	Movement or eye opening to <i>voice</i> (but no eye contact)	
-4	Deep sedation	No response to voice, but movement or eye opening to <i>physical</i> stimulation	} Physical Stimulation
-5	Unarousable	No response to <i>voice</i> or <i>physical</i> stimulation	

Procedure for RASS Assessment

1. Observe patient
 - a. Patient is alert, restless, or agitated. (score 0 to +4)
2. If not alert, state patient's name and *say* to open eyes and look at speaker.
 - b. Patient awakens with sustained eye opening and eye contact. (score -1)
 - c. Patient awakens with eye opening and eye contact, but not sustained. (score -2)
 - d. Patient has any movement in response to voice but no eye contact. (score -3)
3. When no response to verbal stimulation, physically stimulate patient by shaking shoulder and/or rubbing sternum.
 - e. Patient has any movement to physical stimulation. (score -4)
 - f. Patient has no response to any stimulation. (score -5)

* Sessler CN, Gosnell M, Grap MJ, Brophy GT, O'Neal PV, Keane KA et al. The Richmond Agitation-Sedation Scale: validity and reliability in adult intensive care patients. *Am J Respir Crit Care Med* 2002; 166:1338-1344.

* Ely EW, Truman B, Shintani A, Thomason JWW, Wheeler AP, Gordon S et al. Monitoring sedation status over time in ICU patients: the reliability and validity of the Richmond Agitation Sedation Scale (RASS). *JAMA* 2003; 289:2983-2991.

STEPS IN PACU USING CAM-ICU

Feature 1 ALL PATIENTS in the PACU are feature 1 positive due to the anesthesia exposure therefore,
START BY assessing your patient's RASS score

If RASS -4, or -5, stop you are unable to assess
CONTINUE ONLY if RASS -3 or higher
Feature 2 Inattention (Have pt squeeze your hand on "A")
 Say these letters: S-A-V-E-A-H-A-A-R-T
 (If greater than 2 errors = positive for inattention)
CONTINUE ONLY if >2 errors

Feature 3 Altered LOC: If RASS is anything other than a "0", pt is positive for altered Level of Consciousness, and is CAM-ICU positive/delirious
CONTINUE ONLY if RASS 0

Feature 4 Disorganized Thinking:
 Ask these yes/no ? (worth 1 point each)

- Will a stone float on water?
- Are there fish in the sea?
- Does one pound weigh more than two pounds?
- Can you use a hammer to pound a nail?

Two part command (worth 1 point)
 Ask the patient "Hold up this many fingers"
 Then "Now do the same thing with your other hand"

(If >1 question/command is wrong, feature 4 is positive and patient is CAM-ICU positive/delirious)
 Card, RN 2011

RASS (Richmond Agitation-Sedation scale)

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+2	Agitated	Frequent non-purposeful movements, fights the ventilator
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0	Alert and calm	
-1	Drowsy	Not fully alert, but has sustained awakening to voice (eye opening & contact >10 seconds)
-2	Light sedation	Briefly awakens to voice (eye opening & contact <10 seconds)
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-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation
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4 Features of Delirium:
 Feature 1 Acute onset or fluctuating course of mental status within the last 24 hours
 Feature 2 Inattention
 Feature 3 Altered level of Consciousness at moment of testing
 Feature 4 Disorganized Thinking
Must have features 1 and 2 AND either 3 or 4 to be positive for delirium

Statement on delirium's effect on PACU discharge

Presently PACU discharge is evaluated using a modified Aldrete score of at least 8.

In addition to Aldrete the following criteria is assessed before a patient is discharged from PACU

1. Vital signs are within baseline range
2. Neurologic function has returned to preoperative status
3. Oxygen saturation at pre-op level
4. If foley present, urine output normal
5. Labs post op are normal or appropriate
6. Temperature is within normal or pre-op level
7. Other Discharge from PACU: Physician will assess pt. prior to discharge

The CAM-ICU tool was developed for the detection of delirium in the ICU, it does not replace the Aldrete score in the above discharge criteria of the EMA patient.

In the event of a same day surgery patient testing positive for delirium (assuming this is new), then he/she does not meet discharge criteria by above discharge criteria (see number 2). These patients should be managed in the same manner prior to use of the CAM-ICU tool.

PACU case study#1:

Mr. M is a 22 year-old Asian male; MVA who went into the OR for Left Open Treatment, Anterior Acetabular Wall Fx, W/ Int Fixation. He arrived into your PACU slot from the OR with a nasal trumpet in use, very sedated still. Vital signs stable, monitor shows NSR, SpO2 100% on 40% Aerosol face tent. His eyes are closed and he does not respond to voice, but with tactile stimulation his eyes flutter briefly. He was awake, alert and appropriate in the ER prior to going to the OR.

Start by assessing his RASS score using the RASS chart below:

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What RASS score did you place him at? _____

In order to assess him for delirium using the CAM-ICU method, you know a patient must be at least at a RASS of -3. Can you assess this patient? YES NO

PACU case study#2:

You have been caring for Mr. M in PACU, a 22 year-old Asian male; MVA who went into the OR for Left Open Anterior Acetabular Fx, W/ Internal Fixation. He is now 30 minutes into his recovery period, and slowly begins moving and moaning. His movements are not aggressive, and when you speak to him he opens his eyes briefly, making eye contact for 2 to 3 seconds before closing them again. Vital signs stable, NSR, SpO2 100% on room air. He was awake, alert and appropriate prior to going to the OR. You assess your patient for his ability to focus by having him squeeze your hand when he hears you say the letter "A". You say the following letters: S-A-V-E-A-H-A-A-R-T He makes 3 mistakes on the letters.

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Start by assessing your patient's RASS score. Where did you place him at? _____

In order to assess him for delirium using the CAM-ICU method, you know a patient must be at least at a RASS of -3. Can you assess this patient? YES NO

Feature 1 is a change in mental status/LOC in the past 24 hours: You understand that all patients in the PACU have received some type of anesthesia and have had a change in their mental status due to the anesthesia and therefore Feature 1 is present.

Feature 2 Inattention:

Letters > 2 errors? YES NO

Is the patient positive for inattention (feature 2)? YES NO

Do you continue your assessment for delirium? YES NO

Feature 3 Altered Level Of Consciousness:

What was your patient's RASS score at the exact moment of testing? Is it ANY RASS score other than a RASS of 0 (awake and alert)

Is patient positive for altered Level of Consciousness (Feature 3)? YES NO

Do you need to continue your assessment for delirium? YES NO

Feature 4 Disorganized Thinking:

Combined number of errors > 1? YES NO

Is disorganized thinking positive (feature 4)? YES NO Did not assess

Overall CAM-ICU Score:

Positive for delirium (features 1 and 2 MUST be positive WITH either feature 3 or 4)

Negative for delirium

PACU case study#3:

You have been caring for Mr. M in PACU, a 22 year-old Asian male; MVA status post Left Open Anterior Acetabular Fx, W/ Internal Fixation. He is now 45 minutes into his recovery period. He is resting with his eyes closed, he awakens to voice and is very anxious, mumbling he has intense pain, wanting to be pulled up in bed. His movements are not aggressive, He is not pulling at his IV line or EKG leads. Vital signs stable, NSR, SpO2 100% on room air. You assess your patient for his ability to focus by having him squeeze your hand when he hears you say the letter "A".
 You say the following letters: S-A-V-E-A-H-A-A-R-T He makes 4 mistakes on the letters.

RASS (Richmond Agitation-Sedation scale)

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-5	Unarousable	No response to voice or physical stimulation

Start by assessing your patient's RASS score. Where did you place him at? _____

In order to assess him for delirium using the CAM-ICU method, you know a patient must be at least at a RASS of -3. Can you assess this patient? YES NO

Feature 1 is a change in mental status/LOC in the past 24 hours: You understand that all patients in the PACU have received some type of anesthesia and have had a change in their mental status due to the anesthesia and therefore Feature 1 is present.

Feature 2 Inattention:

Letters > 2 errors? YES NO
 Is the patient positive for inattention (feature 2)? YES NO

Do you continue your assessment for delirium? YES NO

Feature 3 Altered Level Of Consciousness:

What was your patient's RASS score at the exact moment of testing? Is it ANY RASS score other than a RASS of 0 (awake and alert)? Is feature 2 present?
 Is patient positive for altered Level of Consciousness (Feature 3)? YES NO

Do you need to continue your assessment for delirium? YES NO

Feature 4 Disorganized Thinking:

Combined number of errors > 1? YES NO
 Is disorganized thinking positive (feature 4)? YES NO Did not assess

Overall CAM-ICU Score:

- Positive for delirium (features 1 and 2 MUST be positive WITH either feature 3 or 4)
- Negative for delirium

PACU case study#4:

You have been caring for Mrs. J. in PACU, a 72 year-old Caucasian female, who is status post right nephrectomy. She is now 60 minutes into her recovery period. She is resting with her eyes closed, she awakens to voice and maintains eye contact as you explain you are going to assess her mental status with a quick puzzle (this takes about 12 or 15 seconds). You assess your patient for her ability to focus by having her squeeze your hand with the letter "A". You say the following letters: S-A-V-E-A-H-A-A-R-T She makes 3 mistakes on the letters. She answers 3 out of the 4 questions correctly and follows both parts of the command correctly.

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Start by assessing your patient's RASS score. Where did you place her at? _____

In order to assess her for delirium using the CAM-ICU method, you know a patient must be at least at a RASS of -3. Can you assess this patient? YES NO

Feature 1 is a change in mental status/LOC in the past 24 hours: You understand that all patients in the PACU have received some type of anesthesia and have had a change in their mental status due to the anesthesia and therefore Feature 1 is present.

Feature 2 Inattention:

Letters > 2 errors? YES NO
Is the patient positive for inattention (feature 2)? YES NO

Do you continue your assessment for delirium? YES NO

Feature 3 Altered Level Of Consciousness:

What was your patient's RASS score at the exact moment of testing? Is it ANY RASS score other than a RASS of 0 (awake and alert)?

Is patient positive for altered Level of Consciousness (Feature 3)? YES NO

Do you need to continue your assessment for delirium? YES NO

Feature 4 Disorganized Thinking:

Combined number of errors > 1? YES NO
Is disorganized thinking positive (feature 4)? YES NO Did not assess

Overall CAM-ICU Score:

- Positive for delirium (features 1 and 2 MUST be positive WITH either feature 3 or 4)
- Negative for delirium

PACU case study#5:

You have been caring for Mrs. T. in PACU, a 52 year-old Hispanic female status post laparoscopic appendectomy. She is now 15 minutes into her recovery period. She is resting with her eyes closed, she awakens to voice but she can not maintain eye contact for more than a second or two. Vital signs stable, NSR, SpO2 100% on aerosol face tent. You assess your patient for her ability to focus by having her squeeze your hand when she hears you say the letter "A".
 You say the following letters: S-A-V-E-A-H-A-A-R-T She makes 1 mistake on the letters.

RASS (Richmond Agitation-Sedation scale)

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+2	Agitated	Frequent non-purposeful movements, fights the ventilator
+1	Restless	Anxious, apprehensive but movements are not aggressive or vigorous
0	Alert and calm	
-1	Drowsy	Not fully alert, but has sustained awakening to voice (eye opening & contact >10 seconds)
-2	Light sedation	Briefly awakens to voice (eye opening & contact <10 seconds)
-3	Moderate sedation	Movement or eye opening to voice, but no eye contact
-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation
-5	Unarousable	No response to voice or physical stimulation

Start by assessing your patient's RASS score. Where did you place him at? _____

In order to assess him for delirium using the CAM-ICU method, you know a patient must be at least at a RASS of -3. Can you assess this patient? YES NO

Feature 1 is a change in mental status/LOC in the past 24 hours: You understand that all patients in the PACU have received some type of anesthesia and have had a change in their mental status due to the anesthesia and therefore Feature 1 is present.

Feature 2 Inattention:

Letters > 2 errors? YES NO
 Is the patient positive for inattention (feature 2)? YES NO

Do you continue your assessment for delirium? YES NO

Feature 3 Altered Level Of Consciousness:

What was your patient's RASS score at the exact moment of testing? Is it ANY RASS score other than a RASS of 0 (awake and alert)?

Is patient positive for altered Level of Consciousness (Feature 3)? YES NO

Do you need to continue your assessment for delirium? YES NO

Feature 4 Disorganized Thinking:

Combined number of errors > 1? YES NO
 Is disorganized thinking positive (feature 4)? YES NO Did not assess

Overall CAM-ICU Score:

- Positive for delirium (features 1 and 2 MUST be positive WITH either feature 3 or 4)
- Negative for delirium