AGS CoCare: HELP

DELIRIUM ASSESSMENT – TRAINING VIDEOS Patient 2 Day 2

Note on cognitive testing: The Long CAM [9 features] and Short CAM [4 features] may be scored on the basis of many different cognitive tests.   In practice, some of the measures that are currently in widespread use include (among many others) the Short Portable Mental Status Questionnaire (SPMSQ), Mini-Cog, Abbreviated Mental Test, and the Montreal Cognitive Assessment (MoCA). On page 6 of this document, we refer to how to score the severity of various CAM items based on the performance on specific cognitive tests administered in the videos. These may be applicable if you choose to use this cognitive assessment in your own work. Otherwise, please customize your scoring to the assessment you plan to use for coding the Short/Long CAM.

PAIN

[If participant gives a lower score for Q3 than for Q1 or Q2, ask for clarification]

1. **On a scale from 0 to 10, 0 being no pain and 10 being the worst pain imaginable, how much pain do you presently have at rest?**

Score: __02_

REF – 77

DK -- 88

2. **On a scale from 0 to 10, 0 being no pain and 10 being the worst pain imaginable, how much pain do you have with movement in bed or with walking?**

Score: _05__

REF - 77

DK -- 88

3. **On a scale from 0 to 10, 0 being no pain and 10 being the worst pain imaginable, what is the maximum amount of pain you have had in the last 24 hours?**

Score: __06_

REF – 77

DK -- 88

DISTURBANCE OF SLEEP

1. **Did you have any problems with your sleep last night, like trouble falling asleep, waking up and having trouble falling back to sleep, waking up too early in the morning, being sleepy during the day, or having nightmares that were intense or bothersome?**

GO TO NEXT SECTION [CF] ← No – 1

Yes – 2

REF - 7

DK – 8

2. **Is this something new that you have experienced only in the hospital, or is it something that you experienced at home?** (*If previously experienced code new if worse than usual*)

Old - 1

New or Worse- 2

REF - 7

DK - 8

COGNITIVE FUNCTION

Now I'd like to ask you some questions to check your memory. Don't worry if you don't know the answers.
[YOU MAY REPEAT EACH QUESTION ONCE]
(WRITE PATIENT'S ANSWERS TO ALL QUESTIONS AND CIRCLE NUMBER AS INDICATED)

REGISTRATION
I am going to name 3 objects. Please wait until I have said <u>all</u> three of them, and then I want you to repeat them back to me. Remember what they are because I am going to ask you to name them again in a few minutes. The three items are:

"Car". . . "Mountain" . . . "Window"

[RECORD ANSWERS HERE BASED ON <u>FIRST</u> REPETITION]

		CORRECT	ERROR	REF	DK
1.	CAR	1	2	7	8
2.	MOUNTAIN	1	2	7	8
3.	WINDOW	1	2	7	8

[REPEAT ALL THREE OBJECTS UNTIL LEARNED, UP TO 3 TIMES.]

DAYS OF WEEK BACKWARDS

Can you tell me the days of the week backwards? Say Saturday as your first day.
(May prompt with: "what is the day before Saturday? or if subject stops with Day X, say " what is the day before day X? …." This prompt may be used 2 times in total. If participant starts reciting days forward repeat overall instructions.

Day		Response	Correct	Error	REF	DK
1.	Saturday	Saturday	1	2	7	8
2.	Friday	missed	1	2	7	8
3.	Thursday	Thursday	1	2	7	8
4.	Wednesday	Wednesday	1	2	7	8
5.	Tuesday	Tuesday	1	2	7	8
6.	Monday	Monday	1	2	7	8
7.	Sunday	Sunday	1	2	7	8

Record response verbatim
Coding Instructions: If the subject leaves one day out, total recorded = 6, if 2 days are reversed, total recorded = 5

MONTHS OF YEAR BACKWARDS

Can you tell me the months of the year backwards? Say December as your first month?
 (*May prompt with: "what is the month before December? or if the subject stops with Month X, " say
 what is the month before Month X? …." This prompt may be used 2 times in total. If participant
 starts reciting months forward repeat overall instructions*)

Month	Response	Correct	Error	REF	DK
1. December	December	1	2	7	8
2. November	____Jan_____	1	2	7	8
3. October	____March_____	1	2	7	8
4. September	_____Feb_____	1	2	7	8
5. August	_____Dec_____	1	2	7	8
6. July	_____Oct_____	1	2	7	8
7. June	_____Feb_____	1	2	7	8
8. May	_____	1	2	7	8
9. April	_____	1	2	7	8
10. March	_____	1	2	7	8
11. February	_____	1	2	7	8
12. January	_____	1	2	7	8

Record response verbatim.
*Coding Instructions: If the subject leaves one month out, total recorded = 11, if the months are reversed,
total recorded = 10*

RECALL

Now, what are the 3 objects I asked you to remember? *[DO NOT GIVE CUES]*

		CORRECT	ERROR	REF	DK
1.	CAR	1	2	7	8
2.	MOUNTAIN	1	2	7	8
3.	WINDOW	1	2	7	8

[CODE CORRECT EVEN IF NOT REPEATED IN ORDER LISTED]

DIGIT SPAN

Now I am going to say some numbers. Please repeat them back to me.

[SAY DIGITS AT RATE OF ONE PER SECOND]

DIGITS FORWARD	Response	Correct	Error	Unable	REF
2 - 9 - 1	_2__ - _9__ - __1_	1	2	6	7
3 – 5 – 7 - 4	_3__ - _5__ - _7__ - _3__	1	2	6	7
6 - 1 - 9 - 2 - 7	___ - ___ - ___ - ___ - ___	1	2	6	7

Now I am going to read some more numbers, but I want you to repeat them in backwards order from the way I read them to you. So for example if I said 6-4, you would say 4-6.

[SAY DIGITS AT RATE OF ONE PER SECOND]

DIGITS BACKWARD	Response	Correct	Error	Unable	REF
7 - 4 - 2	_2__ - _4__ - _7__	1	2	6	7
5 - 3 - 8 - 4	_4__ - _8__ - _3__ - _5__	1	2	6	7

ORIENTATION	CORRECT	ERROR	REF	DK
1. **What year is it now**? _____1914_____	1	2	7	8
2. **What is the season**? ____Fall_____	1	2	7	8
3. **What date is it today**? ___17th_____	1	2	7	8
(*SCORE AS CORRECT: IF DATE IS CORRECT OR OFF BY ONE DAY*)				
4. **What day of the week is it today**? ___Fri___	1	2	7	8
5. **What is the month**? _____July_____	1	2	7	8
6. **Can you tell me where we are**? Place w/ppl in it_	1	2	7	8
(PROMPT: What is the name of this place?)				
[SCORE AS CORRECT: IF CORRECT HOSPITAL NAME MENTIONED]				
7. **What city are we in**? _____Boston_____	1	2	7	8
8. **What state are we in**? _____MA_____	1	2	7	8
9. **What county are we in**? ___Middlesex_____	1	2	7	8
10. **What floor of the hospital are we on**? ____5___	1	2	7	8

DELIRIUM SYMPTOM INTERVIEW

[If the respondent answers yes to any of the following questions, probe him/her for more details and note responses, e.g. Frequency If the respondent's answers are nonsensical, code as 8.]

Now I am going to ask you some questions about how you have been thinking during the past day.

Disorientation

1. **During the past day did you think that you were not really [at home]/[in (name of facility)]?**

   1 - Yes   2 - No   7 - REF   8 – DK/Uncertain

2. **Have you felt confused at any time during the past day?**

   1 - Yes   2 - No   7 - REF   8 – DK/Uncertain

Perceptual Disturbance

3. **During the past day, did you see things that were not really there?** If yes, probe for any other unusual sensations for example tactile hallucinations (If patient is blind skip and code 9)

   1 – Yes   2 - No   7 - REF   8 – DK/Uncertain   9 – NA → Skip to Q4

4. **During the past day, did you hear things that were not really there?**

   1 - Yes   2 - No   7 - REF   8 – DK/Uncertain

5. **During the past day, did you misinterpret a sound or object that was not what it seemed to be?**

   1 - Yes   2 - No   7 - REF   8 – DK/Uncertain

6. **During the last day, did things look distorted or strange to you, for example, looking smaller or bigger than they actually were?** (If patient is blind skip and code 9)

   1 – Yes   2 - No   7 - REF   8 – DK/Uncertain   9 – NA → Skip to Q7

7. **During the last day, did you think things were moving that were not really moving or that seemed to be moving in slow motion?** (If patient is blind skip and code 9)

   1 – Yes   2 - No   7 - REF   8 – DK/Uncertain   9– NA → Skip to Q8

Delusions

8. **During the last day, did you think that people were trying to harm you? (when they really weren't)**

   1 - Yes   2 - No   7 - REF   8 – DK/Uncertain

End of Patient Interview

Thank you so much for your time.

Proceed to area for completion of interview observation items and final coding.
INTERVIEW END TIME: ___ ___ : ___ ___ \ ___ ___
                                                        H   H   M   M   AM/PM

OBSERVATIONS BY INTERVIEWER

Interviewer: *Immediately after completing the interview, answer the following questions based on what you observed during the entire interview, including informal contact and formal cognitive testing.*

Short/Long CAM scoring guidance for <u>this</u> set of cognitive questions [adapt as needed for the specific cognitive test you choose to use]. For the Long CAM, score all features on questionnaire; for short CAM, score four core features:
-Acute Onset - Can be triggered by the patient endorsing any of the DSI items 1-8
-Inattention – Seven formal items include: Digit Span (forward and backward), Days of the week backward and Months of the Year backwards. One formal error allowed (out of the 7 items). Mild inattention can be scored if >1 error is made on these 7 items. Additional informal evidence is needed to be scored 'marked'.
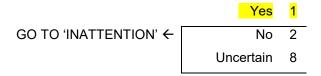*-Orientation – Formal items include: Orientation items 1-10. This CAM feature can be scored by using a combination of the 10 formal orientation items and informal evidence of orientation. For this feature, we do not have a cut off score for formal items due to the highly variable level of difficulty of orientation items.*
-Memory Impairment – Formal items include: 3-item recall. Mild memory impairment can be scored if >0 error is made on recall. Additional informal evidence is needed to be scored 'marked'.

CONFUSION ASSESSMENT METHOD (CAM)

ACUTE ONSET

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

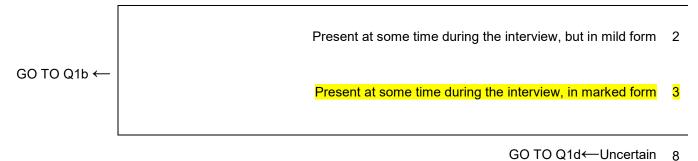|		
	Yes	1
GO TO 'INATTENTION' ←	No	2
	Uncertain	8

d. (IF YES or UNCERTAIN) Please describe change and source of information.

_____ New features: Altered Level of Consciousness, increased and decreased psychomotor activity, inattention, hallucinations

_____
_____
_____

INATTENTION

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

GO TO Q2←Not present at any time during interview   1

Present at some time during the interview, but in mild form   2

GO TO Q1b ←

==Present at some time during the interview, in marked form==   **3**

GO TO Q1d←Uncertain   8

[IF 1a = 8, THEN 1b/c=9]

b. (IF PRESENT) Did this behavior fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

==Yes==	**1**
USED FOR SCORING	No	2
	Uncertain	8
	NA	9

c. (IF PRESENT OR UNCERTAIN) Please describe this behavior:
_____ Missed 4/7 formal attention items (DOW and MOY backwards, 4 and 5 digits forward), needed questions repeated, fluctuation occurred within digit span task – got the more difficult tasks correct (backwards) and missed easier task of forwards

_____

_____

_____

DISORGANIZED THINKING

2. a. Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

GO TO Q3←Not present at any time during interview   1

GO TO Q2b←

Present at some time during the interview, but in mild form   2

Present at some time during the interview, in marked form   3

GO TO Q2d←Uncertain   8

[IF 2a = 8, THEN 2b/c=9]

b. (IF PRESENT) Did this behavior fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

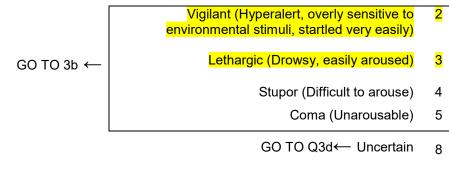|		
	Yes	1
USED FOR SCORING	No	2
	Uncertain	8
	NA	9

c. (IF PRESENT OR UNCERTAIN) Please describe this behavior:

_____ Thought he had to be somewhere when he really didn't, thought hallucinations were real, thought he could take off the oxygen **can argue either way for fluctuation but leaning towards 'yes' since there were clearly times when it was worse than others

_____

ALTERED LEVEL OF CONSCIOUSNESS

3. a. Overall, how would you rate this patient's level of consciousness? Circle all that apply

GO TO Q4←	Alert (Normal)	1
	==Vigilant (Hyperalert, overly sensitive to environmental stimuli, startled very easily)==	==2==
GO TO 3b ←	==Lethargic (Drowsy, easily aroused)==	==3==
	Stupor (Difficult to arouse)	4
	Coma (Unarousable)	5
GO TO Q3d←	Uncertain	8

[IF 3a = 8, THEN 3b/c=9]

b. (IF OTHER THAN ALERT OR UNCERTAIN) Did this behavior fluctuate during

the interview, that is, tend to come and go or increase and decrease in severity?

==Yes==	==1==
No	2
Uncertain	8
NA	9

USED FOR SCORING

c. (IF OTHER THAN ALERT) Please describe this behavior:

_____Fell asleep at beginning (2x) and then hypervigilant towards the end (too startled by the sound of the door closing)

_____

_____

_____

DISORIENTATION

4. a. Was the patient disoriented at any time during the interview, such as thinking he/she was somewhere other than the hospital, using the wrong bed, or misjudging the time of day?

GO TO Q5←   Not present at any time during interview   1

GO TO Q4b←   <mark>Present at some time during the interview, but in mild form</mark>   2

Present at some time during the interview, in marked form   3
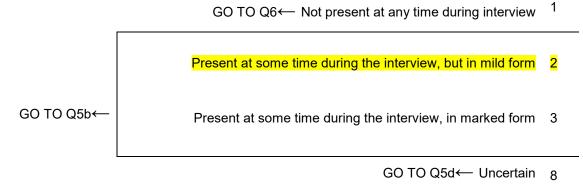
GO TO Q4d←   Uncertain   8

[IF 4a = 8, THEN 4b/c=9]

b.

c. (IF PRESENT OR UNCERTAIN) Please describe this behavior:

_____Missed 4/10 orientation items; informal disorientation of needing to get to a doctor's appointment_____

9

MEMORY IMPAIRMENT

5. a.   Did the patient demonstrate any memory problems during the interview, such as inability to remember events in the hospital or difficulty remembering instructions?
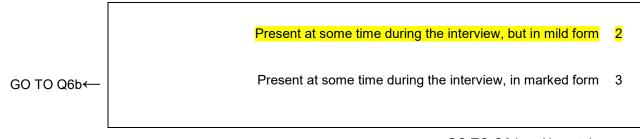
GO TO Q6← Not present at any time during interview   1

GO TO Q5b←   <mark>Present at some time during the interview, but in mild form</mark>   2

Present at some time during the interview, in marked form   3

GO TO Q5d← Uncertain   8

[IF 5a = 8, THEN 5b/c=9]

b.

c.   (IF PRESENT OR UNCERTAIN) Please describe this behavior:

_____Missed 2/3 on word recall

_____

_____

_____

PERCEPTUAL DISTURBANCES

6. a.   Did the patient have, or report, any evidence of perceptual disturbances, for example, hallucinations, illusions, or misinterpretations (such as thinking something was moving when it was not)?

GO TO Q7← Not present at any time during interview   1

Present at some time during the interview, but in mild form   2

GO TO Q6b←   Present at some time during the interview, in marked form   3

GO TO Q6d← Uncertain   8

[IF 6a = 8, THEN 6b/c=9]

b.

c.   (IF PRESENT OR UNCERTAIN) Please describe these perceptual changes:

_____ Pt report: significant ant hallucination and misrepresentation of a pile of clothes on a chair
_____
_____
_____

PSYCHOMOTOR AGITATION

7. a. At any time during the interview, did the patient have an unusually increased level of motor activity, such as restlessness, picking at bedclothes, tapping fingers, or making frequent sudden changes of position?

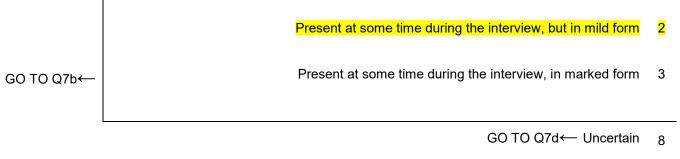GO TO Q8←   Not present at any time during interview   1

==Present at some time during the interview, but in mild form==   ==2==

GO TO Q7b←   Present at some time during the interview, in marked form   3

GO TO Q7d←   Uncertain   8

[IF 7a = 7, THEN 7b/c=9]

b. (IF PRESENT) Did this behavior fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

         ==Yes==   ==1==

USED FOR SCORING   No   2

         Uncertain   8

         NA   9

c. (IF PRESENT OR UNCERTAIN) Please describe this behavior:

_____ Lots of restlessness and large exaggerated movements towards the end of the interview

_____

_____

_____

PSYCHOMOTOR RETARDATION

8. a.   At any time during the interview, did the patient have an unusually decreased level of motor activity, such as sluggishness, staring into space, staying in one position for a long time, or moving very slowly?

GO TO Q9← Not present at any time during interview   1

==Present at some time during the interview, but in mild form==   ==2==

GO TO Q8b←   Present at some time during the interview, in marked form   3

GO TO Q8d← Uncertain   8

b.   (IF PRESENT) Did this behavior fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

==Yes==   ==1==

USED FOR SCORING   No   2

Uncertain   8

NA   9

c.   (IF PRESENT OR UNCERTAIN) Please describe this behavior:

_____Not moving much but just at the beginning of the interview

_____

_____

_____

ALTERED SLEEP-WAKE CYCLE

9. a. Did the patient have any evidence of disturbance of the sleep-wake cycle, such as excessive daytime sleepiness with insomnia at night?

GO TO Q10← Not present at any time during the interview and no reports of sleep disturbance. **1**

Present, mild. Drowsy during interview but easily awakened; <u>OR</u> any reports of mild sleep disturbance **2**

Present, marked. Frequent napping, aroused only with strong stimuli; <u>OR</u> reports of repeated or prolonged awakening during night. **3**

GO TO Q9d← Uncertain **8**

[IF 9a = 8, THEN 9b/c=9]

b. (IF YES OR UNCERTAIN) Please describe the disturbance:

_____ Fell asleep twice other than initial wake up

_____

_____

_____

CONFUSION

1. On a scale from 0 to 10, with 0 being 'Not confused' and 10 being 'Severely confused', please rate the patient's overall level of confusion today:

__06__

CAM RATING

SUMMARY OF CAM OBSERVER RATINGS

1-☒ Check this box if Evidence of ACUTE CHANGE is coded 1, Yes, and/or BEHAVIOR FLUCTUATIONS items 1, 2, 3, 7 or 8 sub-item b is coded 1, yes.

2-☒ Check this box if OBS item 1a (inattention) is coded 2 or 3 (present-mild or present-marked)

3-☒ Check this box if OBS item 2a (disorganized thinking) is coded 2 or 3 (present-mild to present-marked)

4-☒ Check this box if OBS item 3a (altered level of consciousness) is coded 2 or 3 (present-mild to present-marked)

5-☐ None of the above CAM features present

DELIRIUM IS PRESENT IF THE FOLLOWING ARE PRESENT:

Feature 1 - Acute Change or Fluctuation
AND
Feature 2 - Inattention

AND EITHER
Feature 3 – Disorganized Thinking
OR
Feature 4 - Altered Level of Consciousness

CAM-S DELIRIUM SEVERITY SCORING

The CAM can be used to determine both a CAM-S Long Form and CAM-S Short Form delirium severity score.

Feature	Severity Score		
Scoring the CAM-S: Rate each symptom of delirium listed in the CAM as absent (0), mild (1), marked (2). Acute onset or fluctuation is rated as absent (0) or present (1). Add these scores into a composite. Higher scores indicate more severe delirium.			
	Not Present	**Present (mild)**	**Present (marked)**
1. ACUTE ONSET & FLUCTUATING COURSE	0	1	
2. INATTENTION	0	1	2
3. DISORGANIZED THINKING	0	1	2
4. ALTERED LEVEL OFCONSCIOUSNESS	0	*vigilant/lethargic:* 1	*stupor or coma:* 2
5. DISORIENTATION	0	1	2
6. MEMORY IMPAIRMENT	0	1	2
7. PERCEPTUAL DISTURBANCES	0	1	2
8. PSYCHOMOTOR AGITATION	0	1	2
9. PSYCHOMOTOR RETARDATION	0	1	2
10. ALTERED SLEEP-WAKE CYCLE	0	1	2
Short Form SEVERITY SCORE:	Add the scores in rows 1-4. Range is 0-7. 6		
Long Form SEVERITY SCORE:	Add the scores in rows 1-10. Range is 0-19. 12		

Reference: Inouye SK et al. The CAM-S: Development and Validation of a New Scoring System for Delirium Severity in 2 Cohorts. Ann Intern Med. 2014; 160:526-533.