

Interactive CAM Training

Edward Marcantonio, MD, SM

Jackie Gallagher, MS

CAM Diagnostic Algorithm

(1) acute onset and fluctuating course

-and-

(2) inattention

-and either-

(3) disorganized thinking

-or-

(4) altered level of consciousness

Should be performed AFTER cognitive testing

Ref: Inouye SK, et. al. Ann Intern Med. 1990, 113: 941-8

2

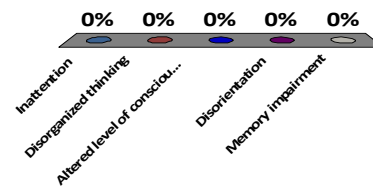
Additional CAM Items

- Disorientation
- Memory Impairment
- Perceptual Disturbances
- Psychomotor Agitation
- Psychomotor Retardation
- Sleep/Wake Cycle Disturbance

CAM PRETEST

You ask the respondent for his phone number. After probing, it is clear he doesn't know.

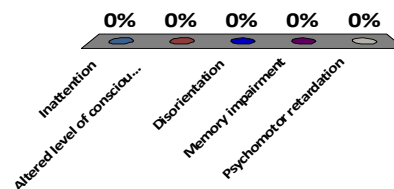
- A. Inattention
- B. Disorganized thinking
- C. Altered level of consciousness
- D. Disorientation
- ★ E. Memory impairment



5

During the interview, the respondent dozes off while you are asking questions.

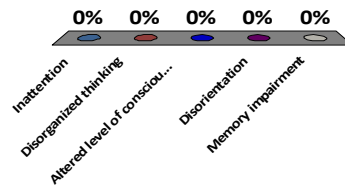
- A. Inattention
- ★ B. Altered level of consciousness
- C. Disorientation
- D. Memory impairment
- E. Psychomotor retardation



6

You ask the respondent, “What year is it?” and she responds with “2013”. You then ask “What is the date today” and she repeats “2013”. You repeat the question again clearly, yet she continues to repeat “2013” (It is 2013)

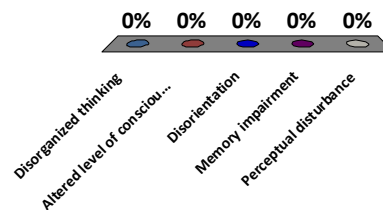
- ★ A. Inattention
- ★ B. Disorganized thinking
- C. Altered level of consciousness
- D. Disorientation
- E. Memory impairment



7

The respondent’s breakfast tray comes in. She asks, “why are they bringing me eggs for dinner?”

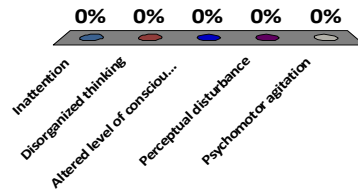
- A. Disorganized thinking
- B. Altered level of consciousness
- ★ C. Disorientation
- D. Memory impairment
- E. Perceptual disturbance



8

The respondent startles easily at any sound or touch. His eyes are wide open.

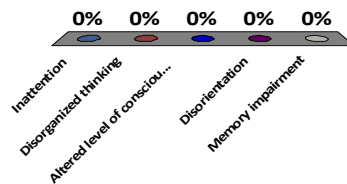
- A. Inattention
- B. Disorganized thinking
- ★ C. Altered level of consciousness
- D. Perceptual disturbance
- E. Psychomotor agitation



9

You ask the respondent to tell you the reason he is admitted to the hospital. He responds, "I've gotta get to the Yellow Brick road."

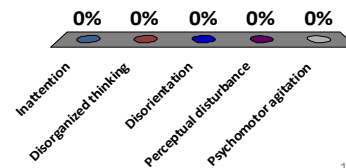
- A. Inattention
- ★ B. Disorganized thinking
- C. Altered level of consciousness
- D. Disorientation
- E. Memory impairment



10

As you interview the respondent, she keeps looking over at the bedside. Suddenly, she blurts out, “What is that man doing there?” (There’s no one there.)

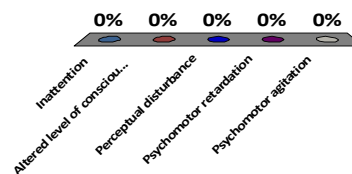
- A. Inattention
- B. Disorganized thinking
- C. Disorientation
- ★ D. Perceptual disturbance
- E. Psychomotor agitation



11

As you begin the interview, the respondent’s eyes are roving around the room. You call the respondent’s name and touch her arm. She looks at you momentarily, but does not acknowledge your presence. You repeat a question several times without response.

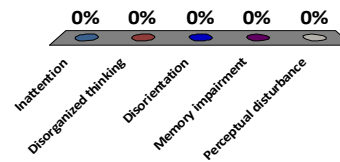
- ★ A. Inattention
- B. Altered level of consciousness
- C. Perceptual disturbance
- D. Psychomotor retardation
- E. Psychomotor agitation



12

You walk into the hospital room and introduce yourself to the respondent, and he asks, “What are you doing in my home?”

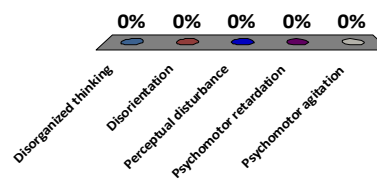
- A. Inattention
- B. Disorganized thinking
- ★ C. Disorientation
- D. Memory impairment
- E. Perceptual disturbance



13

The respondent complains about all the birds flying around in the room. (There are no birds in the room)

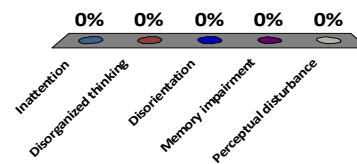
- A. Disorganized thinking
- B. Disorientation
- ★ C. Perceptual disturbance
- D. Psychomotor retardation
- E. Psychomotor agitation



14

The respondent wonders why she has not received her insulin shots for the last three days. You check the Med Sheets and see she has received one each day.

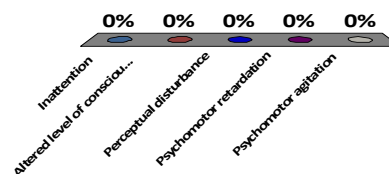
- A. Inattention
- B. Disorganized thinking
- C. Disorientation
- ★ D. Memory impairment
- E. Perceptual disturbance



15

During the interview, the respondent is continuously rolling over in bed, sitting up, covering/uncovering himself.

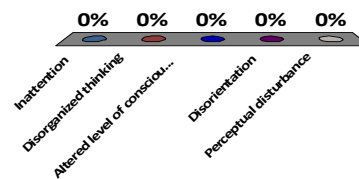
- A. Inattention
- B. Altered level of consciousness
- C. Perceptual disturbance
- D. Psychomotor retardation
- ★ E. Psychomotor agitation



16

Between questions, the respondent seems to be carrying on a conversation with her husband (who is not present).

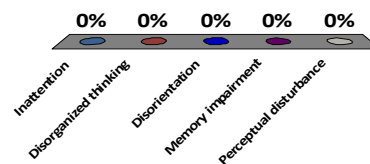
- A. Inattention
- B. Disorganized thinking
- C. Altered level of consciousness
- D. Disorientation
- ★ E. Perceptual disturbance



17

During the interview, the respondent picks up her can of ginger ale and puts it in her flower arrangement. When you inquire as to what she's doing she remarks, "I'm trying to water the turkey plants!"

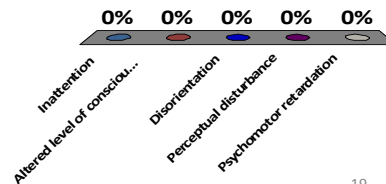
- A. Inattention
- ★ B. Disorganized thinking
- C. Disorientation
- D. Memory impairment
- E. Perceptual disturbance



18

Half way through the interview, you ask a question and the respondent just stares into space and says nothing. Surprised, you wonder if you suddenly weren't speaking loudly enough and you repeat the question clearly. She continues to stare and says nothing. You take a step closer, ask if she is okay and she shifts her position and says, "Yes I'm fine, thanks." You repeat the question and she answers with no hesitation.

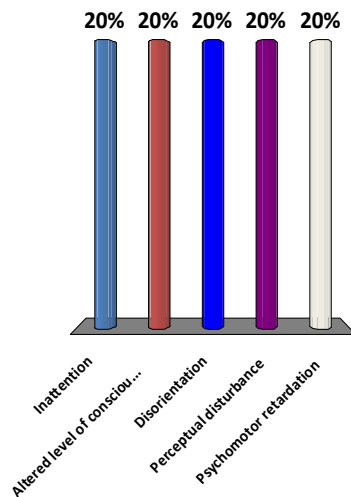
- ★ A. Inattention
- B. Altered level of consciousness
- C. Disorientation
- D. Perceptual disturbance
- E. Psychomotor retardation



19

The respondent remains in bed motionless throughout the interview. He moves very slowly to do the performance tasks.

- A. Inattention
- B. Altered level of consciousness
- C. Disorientation
- D. Perceptual disturbance
- ★ E. Psychomotor retardation



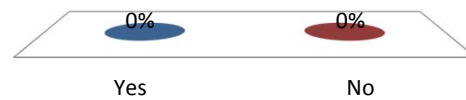
20

Long CAM – First video

Please code the item for
Acute change

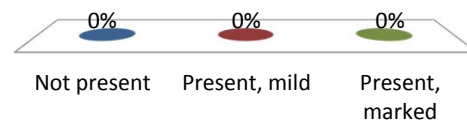
A. Yes

★ B. No



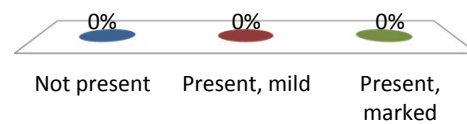
Please code the item for Inattention

- ★ A. Not present
- B. Present, mild
- C. Present, marked



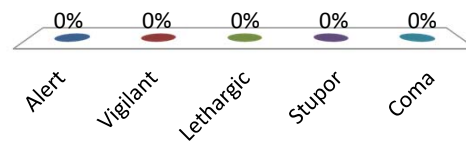
Please code the item for Disorganized Thinking

- ★ A. Not present
- B. Present, mild
- C. Present, marked



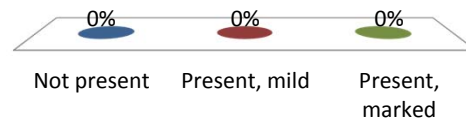
Please code the item for
Altered Level of Consciousness
(Select all that apply)

- ★ A. Alert
- B. Vigilant
- C. Lethargic
- D. Stupor
- E. Coma



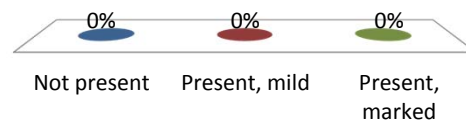
Please code the item for
Disorientation

- A. Not present
- ★ B. Present, mild
- C. Present, marked



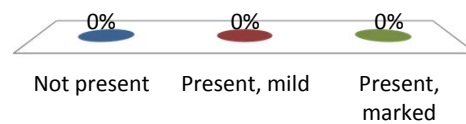
Please code this item for Memory Impairment

- A. Not present
- ★ B. Present, mild
- C. Present, marked



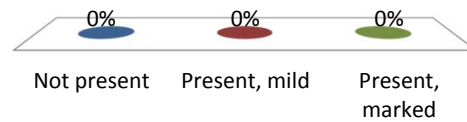
Please code this item for Perceptual Disturbances

- ★ A. Not present
- B. Present, mild
- C. Present, marked



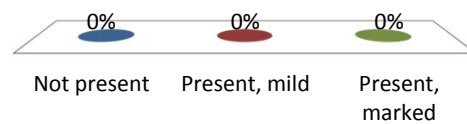
Please code this item for Psychomotor Agitation

- ★ A. Not present
- B. Present, mild
- C. Present, marked



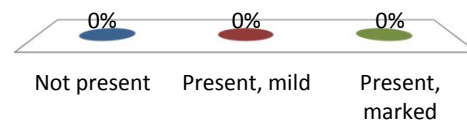
Please code this item for Psychomotor Retardation

- ★ A. Not present
- B. Present, mild
- C. Present, marked



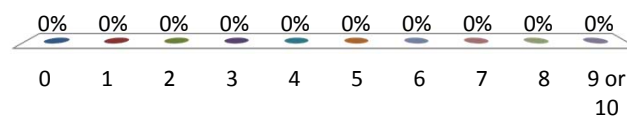
Please code this item for Sleep-Wake Cycle Disturbance

- ★ A. Not present
- B. Present, mild
- C. Present, marked



Overall confusion rating

- A. 0
- B. 1
- ★ C. 2
- D. 3
- E. 4
- F. 5
- G. 6
- H. 7
- I. 8
- J. 9 or 10



Is delirium present?

A. Yes

★ B. No



Long CAM – Second video

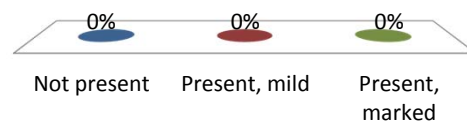
Please code the item for Acute change

- ★ A. Yes
- B. No



Please code the item for Inattention

- A. Not present
- B. Present, mild
- ★ C. Present, marked



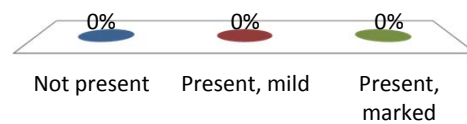
Did the Inattention fluctuate?

- ★ A. Yes
- B. No



Please code the item for Disorganized Thinking

- A. Not present
- B. Present, mild
- ★ C. Present, marked



Did the Disorganized Thinking fluctuate?

A. Yes

★ B. No



Please code the item for
Altered Level of Consciousness
(Select all that apply)

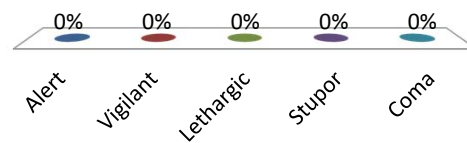
A. Alert

★ B. Vigilant

★ C. Lethargic

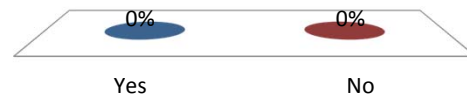
D. Stupor

E. Coma



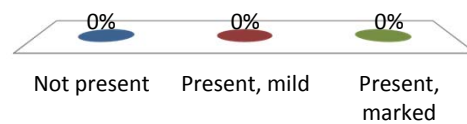
Did LOC fluctuate?

- ★ A. Yes
- B. No



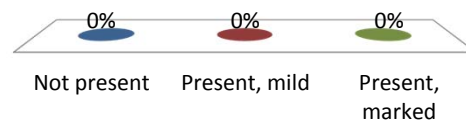
Please code the item for Disorientation

- A. Not present
- B. Present, mild
- ★ C. Present, marked



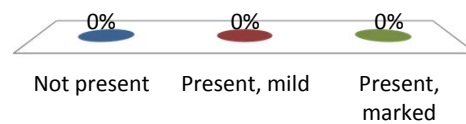
Please code this item for Memory Impairment

- A. Not present
- ★ B. Present, mild
- C. Present, marked



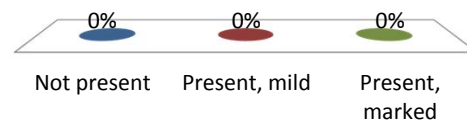
Please code this item for Perceptual Disturbances

- A. Not present
- ★ B. Present, mild
- C. Present, marked



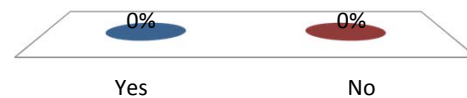
Please code this item for Psychomotor Agitation

- A. Not present
- B. Present, mild
- ★ C. Present, marked



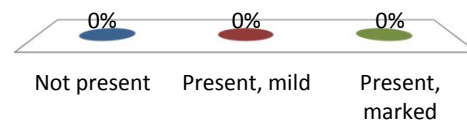
Did the Psychomotor Agitation fluctuate?

- ★ A. Yes
- B. No



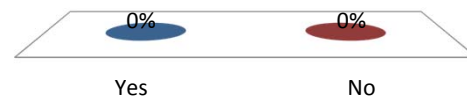
Please code this item for Psychomotor Retardation

- A. Not present
- ★ B. Present, mild
- C. Present, marked



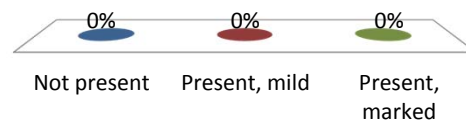
Did the Psychomotor Retardation fluctuate?

- ★ A. Yes
- B. No



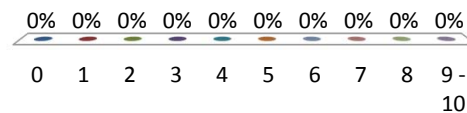
Please code this item for Sleep-Wake Cycle Disturbance

- A. Not present
- ★ B. Present, mild
- C. Present, marked



Overall confusion rating

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5
- ★ G. 6
- H. 7
- I. 8
- J. 9 - 10



Is Delirium present?

- ★ A. Yes
- B. No

