# **SECTION C: COGNITIVE PATTERNS**

**Intent:** The items in this section are intended to determine the resident's attention, orientation and ability to register and recall new information and whether the resident has signs and symptoms of delirium. These items are crucial factors in many care-planning decisions.

# C0100: Should Brief Interview for Mental Status Be Conducted?

C0100. Should Brief Interview for Mental Status (C0200-C0500) be Conducted? Attempt to conduct interview with all residents

Enter Code

0. No (resident is rarely/never understood)  $\rightarrow$  Skip to and complete C0700-C1000, Staff Assessment for Mental Status

1. **Yes**  $\rightarrow$  Continue to C0200, Repetition of Three Words

# Item Rationale

# Health-related Quality of Life

- Most residents are able to attempt the Brief Interview for Mental Status (BIMS), a structured cognitive interview.
- A structured cognitive test is more accurate and reliable than observation alone for observing cognitive performance.
  - Without an attempted structured cognitive interview, a resident might be mislabeled based on their appearance or assumed diagnosis.
  - Structured interviews will efficiently provide insight into the resident's current condition that will enhance good care.

### **Planning for Care**

- Structured cognitive interviews assist in identifying needed supports.
- The structured cognitive interview is helpful for identifying possible delirium behaviors (C1310).

## **Steps for Assessment**

- 1. Interact with the resident using their preferred language (See A1110). Be sure they can hear you and/or have access to their preferred method for communication. If the resident needs or requires an interpreter, complete the interview with an interpreter. If the resident appears unable to communicate, offer alternatives such as writing, pointing, sign language, or cue cards.
- Determine if the resident is rarely/never understood verbally, in writing, or using another method. If rarely/never understood, skip to C0600, Should the Staff Assessment for Mental Status be Conducted?, unless the assessment being completed is a stand-alone Part A PPS Discharge; if that is the case, then skip to C1310. Signs and Symptoms of Delirium.

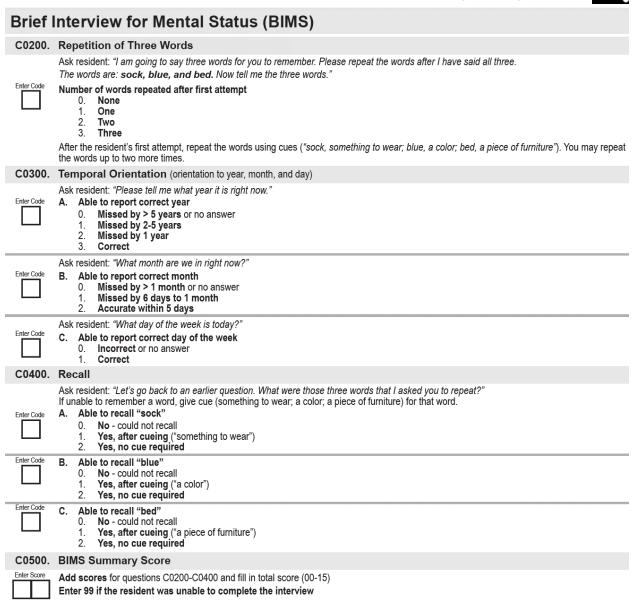
# C0100: Should Brief Interview for Mental Status Be Conducted? (cont.)

# **Coding Instructions**

- **Code 0, no:** if the interview should not be conducted because the resident is rarely/never understood; cannot respond verbally, in writing, or using another method; or an interpreter is needed but not available.
- **Code 1, yes:** if the interview should be conducted because the resident is at least sometimes understood verbally, in writing, or using another method, and if an interpreter is needed, one is available.

# **Coding Tips**

- Attempt to conduct the interview with ALL residents. This interview is conducted during the look-back period of the Assessment Reference Date (ARD) and is not contingent upon item B0700, Makes Self Understood.
- If the resident needs an interpreter, including a resident who uses American Sign Language (ASL), every effort should be made to have an interpreter present for the BIMS. If it is not possible for a needed interpreter to participate on the day of the interview, code C0100 = 0 to indicate interview not attempted and complete C0600-C1000, Staff Assessment for Mental Status.
- If the resident interview was not conducted within the look-back period (preferably the day before or the day of) the ARD, item C0100 must be coded 1, Yes, and the standard "no information" code (a dash "-") entered in the resident interview items.
- Do not complete the Staff Assessment for Mental Status items (C0700-C1000) if the resident interview should have been conducted but was not done.
- Because a PDPM cognitive level is utilized in the speech language pathology (SLP) payment component of PDPM, **only** in the case of PPS assessments, staff may complete the Staff Assessment for Mental Status for an interviewable resident when the resident is unexpectedly discharged from a Part A stay prior to the completion of the BIMS. In this case, the assessor should enter 0, No in C0100: Should Brief Interview for Mental Status Be Conducted? and proceed to the Staff Assessment for Mental Status.



# Item Rationale

# Health-related Quality of Life

- Direct or performance-based testing of cognitive function decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.
- Cognitively intact residents may appear to be cognitively impaired because of extreme frailty, hearing impairment or lack of interaction.
- Some residents may appear to be more cognitively intact than they actually are.
- If cognitive impairment is incorrectly diagnosed or missed, appropriate communication, worthwhile activities and therapies may not be offered.
- The BIMS is an opportunity to observe residents for signs and symptoms of delirium.

## Planning for Care

- Assessment of a resident's mental state provides a direct understanding of resident function that may:
  - enhance future communication and assistance and
  - direct nursing interventions to facilitate greater independence such as posting or providing reminders for self-care activities.
- A resident's performance on cognitive tests can be compared over time.
  - An abrupt change in cognitive status may indicate delirium and may be the only indication of a potentially life-threatening illness.
  - If performance worsens, then an assessment for delirium and/or depression should be considered, as a decline in mental status may also be associated with a mood disorder.
- Awareness of possible impairment may be important for maintaining a safe environment and providing safe discharge planning.

### Steps for Assessment: Basic Interview Instructions for BIMS (C0200-C0500)

- 1. Refer to Appendix D for a review of basic approaches to effective interviewing techniques.
- 2. Interview any resident not screened out by Should Brief Interview for Mental Status Be Conducted? (Item C0100).
- 3. Conduct the interview in a private setting, if possible.
- 4. Be sure the resident can hear you.
  - Residents with hearing impairment should be tested using their usual communication devices/techniques, as applicable.
  - Try an external assistive device (headphones or hearing amplifier) if you have any doubt about hearing ability.
  - Minimize background noise.

- 5. Sit so that the resident can see your face. Minimize glare by directing light sources away from the resident's face.
- 6. Give an introduction before starting the interview.

Suggested language: "I would like to ask you some questions. We ask everyone these same questions. This will help us provide you with better care. Some of the questions may seem very easy, while others may be more difficult."

- 7. If the resident expresses concern that you are testing their memory, they may be more comfortable if you reply: "We ask these questions of everyone so we can make sure that our care will meet your needs."
- 8. Directly ask the resident each item in C0200 through C0400 at one sitting and in the order provided.
- 9. If the resident chooses not to answer a particular item, accept their refusal and move on to the next questions. For C0200 through C0400, code refusals as incorrect/no answer or could not recall.

# **Coding Instructions**

See coding instructions for individual items.

# **Coding Tips**

- If the interviewer is unable to articulate or pronounce any cognitive interview items clearly, for any reason (e.g., accent or speech impairment), have a different staff member conduct the BIMS.
- Rules for stopping the BIMS before it is complete:
  - Stop the interview after completing (C0300C) "Day of the Week" if:
    - 1. all responses up to this point have been nonsensical (i.e., any response that is unrelated, incomprehensible, or incoherent; not informative with respect to the item being rated), OR

### DEFINITION

### **COMPLETE INTERVIEW**

The BIMS is considered complete if the resident attempted and provided relevant answers to at least four of the questions included in C0200-C0400C. Relevant answers do not have to be correct but do need to be related to the question that was asked.

- 2. there has been no verbal or written response to any of the questions up to this point, OR
- 3. there has been no verbal or written response to some questions up to this point and for all others, the resident has given a nonsensical response.

- If the interview is stopped, do the following:
  - 1. Code (—), dash in C0400A, C0400B, and C0400C.
  - 2. Code **99** in the BIMS Summary Score (C0500), and if the assessment being completed is a stand-alone Part A PPS Discharge, continue to C1310. Signs and Symptoms of Delirium. Otherwise, proceed to step 3.
  - 3. Code **1**, **yes** in C0600, Should the Staff Assessment for Mental Status be Conducted?
  - 4. Complete the Staff Assessment for Mental Status.
- If all responses to C0200, C0300A, C0300B, and C0300C are coded 0 because answers are incorrect, continue interview.
- When staff identify that the resident's primary method of communication is in written format, the BIMS can be administered in writing. The administration of the BIMS in writing should be limited to only this circumstance.
- See Appendix E for details regarding how to administer the BIMS in writing.

### DEFINITION

### NONSENSICAL RESPONSE

Any response that is unrelated, incomprehensible, or incoherent; it is not informative with respect to the item being rated.

• Code 0 is used to represent three types of responses: incorrect answers (unless the item itself provides an alternative response code), nonsensical responses, and questions the resident chooses not to answer (or "refusals"). Since 0s resulting from these three situations are treated differently when coding the BIMS Summary Score in C0500, the interviewer may find it valuable to track the reason for each 0 response to aid in accurately calculating the summary score.

## **Examples of Incorrect and Nonsensical Responses**

1. Interviewer asks resident to state the year. The resident replies that it is 1935. This answer is incorrect but related to the question.

**Coding:** This answer is **coded 0, incorrect** but would NOT be considered a nonsensical response.

**Rationale:** The answer is wrong, but it is logical and relates to the question.

2. Interviewer asks resident to state the year. The resident says, "Oh what difference does the year make when you're as old as I am?" The interviewer asks the resident to try to name the year, and the resident shrugs.

**Coding:** This answer is **coded 0, incorrect** but would NOT be considered a nonsensical response.

**Rationale:** The answer is wrong because refusal is considered a wrong answer, but the resident's comment is logical and clearly relates to the question.

3. Interviewer asks the resident to name the day of the week. Resident answers, "Sylvia, she's my daughter." The interviewer asks the resident the question again to confirm the resident is not hearing the question incorrectly, and the resident answers with the same response.

**Coding:** The answer is **coded 0**, **incorrect**; the response is illogical and nonsensical. **Rationale:** The answer is wrong, and the resident's comment clearly does not relate to the question; it is nonsensical.

# C0200: Repetition of Three Words

#### C0200. Repetition of Three Words

Ask resident: "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: **sock, blue, and bed.** Now tell me the three words."

#### Number of words repeated after first attempt

- 0. None 1. One
- 1. One 2. Two
- 3. Three

After the resident's first attempt, repeat the words using cues ("sock, something to wear; blue, a color; bed, a piece of furniture"). You may repeat the words up to two more times.

## **Item Rationale**

Enter Code

# Health-related Quality of Life

- Inability to repeat three words on first attempt may indicate:
  - a memory impairment,
  - a hearing impairment,
  - a language barrier, or
  - inattention that may be a sign of delirium or another health issue.

### **Planning for Care**

- A cue can assist learning.
- Cues may help residents with memory impairment who can store new information in their memory but who have trouble retrieving something that was stored (e.g., not able to remember someone's name but can recall if given part of the first name).
- Staff can use cues when assisting residents with learning and recall in therapy, and in daily and restorative activities.



# C0200: Repetition of Three Words (cont.)

# **Steps for Assessment**

*Basic BIMS interview instructions are shown on pages C-4 and C-5. In addition, for repetition of three words:* 

- 1. Say to the resident: "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: sock, blue, and bed." Interviewers need to use the words and related category cues as indicated. If the interview is being conducted with an interpreter present, the interpreter should use the equivalent words and similar, relevant prompts for category cues.
- 2. Immediately after presenting the three words, say to the resident: "Now please tell me the three words."

DEFINITION

### CATEGORY CUE

Phrase that puts a word in context to help with learning and to serve as a hint that helps prompt the resident. The category cue for sock is "something to wear." The category cue for blue is "a color." For bed, the category cue is "a piece of furniture."

- 3. After the resident's first attempt to repeat the items:
  - If the resident correctly stated all three words, say, "That's right, the words are sock, something to wear; blue, a color; and bed, a piece of furniture" [category cues].
  - Category cues serve as a hint that helps prompt residents' recall ability. Putting words in context stimulates learning and fosters memory of the words that residents will be asked to recall in item C0400, even among residents able to repeat the words immediately.
  - If the resident recalled two or fewer words, say to the resident: "Let me say the three words again. They are sock, something to wear; blue, a color; and bed, a piece of furniture. Now tell me the three words." If the resident still does not recall all three words correctly, you may repeat the words and category cues one more time.
  - If the resident does not repeat all three words after three attempts, re-assess ability to hear. If the resident can hear, move on to the next question. If they are unable to hear, attempt to maximize hearing (alter environment, use hearing amplifier) before proceeding.

# **Coding Instructions**

# *Record the maximum number of words that the resident correctly repeated on the first attempt. This will be any number between 0 and 3.*

- The words may be recalled in any order and in any context. For example, if the words are repeated back in a sentence, they would be counted as repeating the words.
- Do not score the number of repeated words on the second or third attempt. These attempts help with learning the item, but only the number correct on the first attempt go into the total score. Do not record the number of attempts that the resident needed to complete.
- **Code 0, none:** if the resident did not repeat any of the 3 words on the first attempt.
- **Code 1, one:** if the resident repeated only 1 of the 3 words on the first attempt.
- **Code 2, two:** if the resident repeated only 2 of the 3 words on the first attempt.
- **Code 3, three:** if the resident repeated all 3 words on the first attempt.



# C0200: Repetition of Three Words (cont.)



# **Examples**

1. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The resident replies, "Bed, sock, and blue." The interviewer repeats the three words with category cues, by saying, "That's right, the words are sock, something to wear; blue, a color; and bed, a piece of furniture."

**Coding:** C0200 would be **coded 3, three** words correct. **Rationale:** The resident repeated all three items on the first attempt. The order of repetition does not affect the score.

2. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The resident replies, "Sock, bed, black." The interviewer repeats the three words plus the category cues, saying, "Let me say the three words again. They are sock, something to wear; blue, a color; and bed, a piece of furniture. Now tell me the three words." The resident says, "Oh yes, that's right, sock, blue, bed."

**Coding:** C0200 would be **coded 2, two** of three words correct. **Rationale:** The resident repeated two of the three items on the first attempt. Residents are scored based on the first attempt.

3. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The resident says, "Blue socks belong in the dresser." The interviewer codes according to the resident's response. Then the interviewer repeats the three words plus the category cues, saying, "Let me say the three words again. They are sock, something to wear; blue, a color; and bed, a piece of furniture. Now tell me the three words." The resident says, "Oh yes, that's right, sock, blue, bed."

Coding: C0200 would be coded 2, two of the three words correct.

**Rationale:** The resident repeated two of the three items—blue and sock on the first attempt. The resident put the words into a sentence, resulting in the resident repeating two of the three words.

4. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The resident replies, "What were those three words?" The resident's response is coded, and then the interviewer repeats the three words plus the category cues.

**Coding:** C0200 would be **coded 0, none** of the words correct. **Rationale:** The resident did not repeat any of the three words after the first time the interviewer said them.

# C0300: Temporal Orientation (Orientation to Year, Month, and Day)



C0300.	Temporal Orientation (orientation to year, month, and day)
Enter Code	<ul> <li>Ask resident: "Please tell me what year it is right now."</li> <li>A. Able to report correct year</li> <li>0. Missed by &gt; 5 years or no answer</li> <li>1. Missed by 2-5 years</li> <li>2. Missed by 1 year</li> <li>3. Correct</li> </ul>
Enter Code	<ul> <li>Ask resident: "What month are we in right now?"</li> <li>B. Able to report correct month <ol> <li>Missed by &gt; 1 month or no answer</li> <li>Missed by 6 days to 1 month</li> <li>Accurate within 5 days</li> </ol> </li> </ul>
Enter Code	Ask resident: "What day of the week is today?" C. Able to report correct day of the week 0. Incorrect or no answer

#### Incorrect or no answer

Correct

## Item Rationale

# **Health-related Quality of Life**

- A lack of temporal orientation may lead to decreased ٠ communication or participation in activities.
- Not being oriented may be frustrating or frightening.

### Planning for Care

### DEFINITION

### **TEMPORAL** ORIENTATION

In general, the ability to place oneself in correct time. For the BIMS, it is the ability to indicate the correct date in current surroundings.

- If staff know that a resident has a problem with orientation, they can provide reorientation aids and verbal reminders that may reduce anxiety and encourage resident participation in activities.
- Reorienting those who are disoriented or at risk of disorientation may be useful in treating symptoms of delirium and cognitive problems associated with other medical conditions.
- Residents who are not oriented may need further assessment for delirium, especially if this fluctuates or is recent in onset.

### Steps for Assessment

### Basic BIMS interview instructions are shown on pages C-4 and C-5.

- 1. Ask the resident each of the three questions in Item C0300 separately.
- 2. Allow the resident up to 30 seconds for each answer and do not provide clues.
- 3. If the resident specifically asks for clues (e.g., "Is it bingo day?") respond by saying, "I need to know if you can answer this question without any help from me."

# C0300: Temporal Orientation (Orientation to Year, Month, and Day) (cont.)



# Coding Instructions for C0300A, Able to Report Correct Year

- Code 0, missed by >5 years or no answer: if the resident's answer is incorrect and is greater than 5 years from the current year or the resident chooses not to respond or the answer is nonsensical.
- **Code 1, missed by 2-5 years:** if the resident's answer is incorrect and is within 2 to 5 years from the current year.
- **Code 2, missed by 1 year:** if the resident's answer is incorrect and is within one year from the current year.
- **Code 3, correct:** if the resident states the correct year.

### **Examples**

1. The date of interview is May 5, 2023. The resident, responding to the statement, "Please tell me what year it is right now," states that it is 2023.

```
Coding: C0300A would be coded 3, correct.
Rationale: 2023 is the current year at the time of this interview.
```

2. The date of interview is June 16, 2023. The resident, responding to the statement, "Please tell me what year it is right now," states that it is 2020.

**Coding:** C0300A would be **coded 1, missed by 2-5 years. Rationale:** 2020 is within 2 to 5 years of 2023.

3. The date of interview is January 10, 2023. The resident, responding to the statement, "Please tell me what year it is right now," states that it is 1923.

**Coding:** C0300A would be **coded 0, missed by more than 5 years. Rationale:** Even though the '23 part of the year would be correct, 1923 is more than 5 years from 2023.

4. The date of interview is April 1, 2023. The resident, responding to the statement, "Please tell me what year it is right now," states that it is "23". The interviewer asks, "Can you tell me the full year?" The resident still responds "23," and the interviewer asks again, "Can you tell me the full year, for example, nineteen-eighty-two." The resident states, "2023."

### Coding: C0300A would be coded 3, correct.

**Rationale:** Even though '23 is partially correct, the only correct answer is the exact year. The resident must state "2023," not "'23" or "1823" or "1923."

# C0300: Temporal Orientation (Orientation to Year, Month, and Day) (cont.)



# Coding Instructions for C0300B, Able to Report Correct Month

Count the current day as day 1 when determining whether the response was accurate within 5 days or missed by 6 days to 1 month.

- Code 0, missed by >1 month or no answer: if the resident's answer is incorrect by more than 1 month or if the resident chooses not to answer the item or the answer is nonsensical.
- Code 1, missed by 6 days to 1 month: if the resident's answer is accurate within 6 days to 1 month.
- Code 2, accurate within 5 days: if the resident's answer is accurate within 5 days, count current date as day 1.

# **Coding Tips**

• In most instances, it will be immediately obvious which code to select. In some cases, you may need to write the resident's response in the margin and go back later to count days if you are unsure whether the date given is within 5 days.

# Examples

1. The date of interview is June 25, 2023. The resident, responding to the question, "What month are we in right now?" states that it is June.

**Coding:** C0300B would be **coded 2, accurate within 5 days. Rationale:** The resident correctly stated the month.

2. The date of interview is June 28, 2023. The resident, responding to the question, "What month are we in right now?" states that it is July.

**Coding:** C0300B would be **coded 2, accurate within 5 days. Rationale:** The resident correctly stated the month within 5 days, even though the correct month is June. June 28th (day 1) + 4 more days is July 2nd, so July is within 5 days of the interview.

3. The date of interview is June 25, 2023. The resident, responding to the question, "What month are we in right now?" states that it is July.

### Coding: C0300B would be coded 1, missed by 6 days to 1 month.

**Rationale:** The resident missed the correct month by six days. June 25th (day 1) + 5 more days = June 30th. Therefore, the resident's answer is incorrect within 6 days to 1 month.

# C0300: Temporal Orientation (Orientation to Year, Month, and Day) (cont.)



4. The date of interview is June 30, 2023. The resident, responding to the question, "What month are we in right now?" states that it is August.

**Coding:** C0300B would be **coded 0, missed by more than 1 month**. **Rationale:** The resident missed the month by more than 1 month.

# Coding Instructions for C0300C. Able to Report Correct Day of the Week

- **Code 0, incorrect, or no answer:** if the answer is incorrect or the resident chooses not to answer the item or the answer is nonsensical.
- Code 1, correct: if the answer is correct.

# Examples

1. The day of interview is Monday, June 27, 2023. The interviewer asks: "What day of the week is it today?" The resident responds, "It's Monday."

**Coding:** C0300C would be **coded 1, correct**. **Rationale:** The resident correctly stated the day of the week.

2. The day of interview is Monday, June 27, 2023. The resident, responding to the question, "What day of the week is it today?" states, "Tuesday."

**Coding:** C0300C would be **coded 0, incorrect**. **Rationale:** The resident incorrectly stated the day of the week.

3. The day of interview is Monday, June 27, 2023. The resident, responding to the question, "What day of the week is it today?" states, "Today is a good day."

**Coding:** C0300C would be **coded 0, incorrect**. **Rationale:** The resident did not answer the question correctly.

# C0400: Recall



C0400.	Recall
Enter Code	Ask resident: "Let's go back to an earlier question. What were those three words that I asked you to repeat?" If unable to remember a word, give cue (something to wear; a color; a piece of furniture) for that word. A. Able to recall "sock" 0. No - could not recall 1. Yes, after cueing ("something to wear") 2. Yes, no cue required
Enter Code	<ul> <li>B. Able to recall "blue"</li> <li>0. No - could not recall</li> <li>1. Yes, after cueing ("a color")</li> <li>2. Yes, no cue required</li> </ul>
Enter Code	C. Able to recall "bed" O. No - could not recall 1. Yes, after cueing ("a piece of furniture")

2. Yes, no cue required

### **Item Rationale**

# Health-related Quality of Life

- Many persons with cognitive impairment can be helped to recall if provided cues.
- Providing memory cues can help maximize individual function and decrease frustration for those residents who respond.

### **Planning for Care**

• Care plans should maximize use of cueing for resident who respond to recall cues. This will enhance independence.

### **Steps for Assessment**

### Basic BIMS interview instructions are shown on pages C-4 and C-5.

- 1. Ask the resident the following: "Let's go back to an earlier question. What were those three words that I asked you to repeat?"
- 2. Allow up to 5 seconds for spontaneous recall of each word.
- 3. For any word that is not correctly recalled after 5 seconds, provide a category cue (refer to "Steps for Assessment," page C-8 for the definition of category cue). Category cues should be used only after the resident is unable to recall one or more of the three words.
- 4. Allow up to 5 seconds after category cueing for each missed word to be recalled.

## **Coding Instructions**

For **each** of the three words the resident is asked to remember:

- **Code 0, no—could not recall:** if the resident cannot recall the word even after being given the category cue or if the resident responds with a nonsensical answer or chooses not to answer the item.
- **Code 1, yes, after cueing:** if the resident requires the category cue to remember the word.
- **Code 2, yes, no cue required:** if the resident correctly remembers the word spontaneously without cueing.

# C0400: Recall (cont.)



# **Coding Tips**

- If on the first try (without cueing), the resident names multiple items in a category, one of which is correct, they should be coded as correct for that item.
- If, however, the interviewer gives the resident the cue and the resident then names multiple items in that category, the item is coded as could not recall, even if the correct item was in the list.

## **Examples**

1. The resident is asked to recall the three words that were initially presented. The resident chooses not to answer the question and states, "I'm tired, and I don't want to do this anymore."

**Coding:** C0400A-C0400C would be **coded 0, no—could not recall**, could not recall for each of the three words.

**Rationale:** Choosing not to answer a question often indicates an inability to answer the question, so refusals are **coded 0**, **no**—**could not recall**. This is the most accurate way to score cognitive function, even though, on occasion, residents might choose not to answer for other reasons.

2. The resident is asked to recall the three words. The resident replies, "Socks, shoes, and bed." The examiner then cues, "One word was a color." The resident says, "Oh, the shoes were blue."

Coding: C0400A, sock, would be coded 2, yes, no cue required.

**Rationale:** The resident's initial response to the question included "sock." They are given credit for this response, even though they also listed another item in that category (shoes), because they were answering the initial question, without cueing.

Coding: C0400B, blue, would be coded 1, yes, after cueing.

**Rationale:** The resident did not recall spontaneously but did recall after the category cue was given. Responses that include the word in a sentence are acceptable.

Coding: C0400C, bed, would be coded 2, yes, no cue required.

**Rationale:** The resident independently recalled the item on the first attempt.

3. The resident is asked to recall the three words. The resident answers, "I don't remember." The assessor then says, "One word was something to wear." The resident says, "Clothes." The assessor then says, "OK, one word was a color." The resident says, "Blue." The assessor then says, "OK, the last word was a piece of furniture." The resident says, "Couch."

Coding: C0400A, sock, would be coded 0, no—could not recall. Rationale: The resident did not recall the item, even with a cue. Coding: C0400B, blue, would be coded 1, yes, after cueing. Rationale: The resident did recall after being given the cue. Coding: C0400C, bed, would be coded 0, no—could not recall. Rationale: The resident did not recall the item, even with a cue.

# C0400: Recall (cont.)



4. The resident is asked to recall the three words. The resident says, "I don't remember." The assessor then says, "One word was something to wear." The resident says, "Hat, shirt, pants, socks, shoe, belt."

### Coding: C0400A, sock, would be coded 0, no-could not recall.

**Rationale:** After getting the category cue, the resident named more than one item (i.e., a laundry list of items) in the category. The resident's response is coded as incorrect, even though one of the items was correct, because the resident did not demonstrate recall and likely named the item by chance.

# C0500: BIMS Summary Score

C0500. BIMS Summary Score

Add scores for questions C0200-C0400 and fill in total score (00-15) Enter 99 if the resident was unable to complete the interview

# **Item Rationale**

Enter Score

# Health-related Quality of Life

- The total score:
  - Allows comparison with future and past performance.
  - Decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.
  - Provides staff with a more reliable estimate of resident function and allows staff interactions with residents that are based on more accurate impressions about resident ability.

## **Planning for Care**

• The BIMS is a brief screener that aids in detecting cognitive impairment. It does not assess all possible aspects of cognitive impairment. A diagnosis of dementia should only be made after a careful assessment for other reasons for impaired cognitive performance. The final determination of the level of impairment should be made by the resident's physician or mental health care specialist; however, these practitioners can be provided specific BIMS results and the following guidance:

The BIMS total score is highly correlated with Mini-Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975) scores. Scores from a carefully conducted BIMS assessment where residents can hear all questions and the resident is not delirious suggest the following distributions:

13-15: cognitively intact

- 8-12: moderately impaired
- 0-7: severe impairment

# C0500: BIMS Summary Score (cont.)

- Abrupt changes in cognitive status (as indicative of a delirium) often signal an underlying potentially life-threatening illness and a change in cognition may be the only indication of an underlying problem.
- Care plans can be more individualized based upon reliable knowledge of resident function.

## **Steps for Assessment**

*After completing C0200-C0400:* 

- 1. Add up the values for all questions from C0200 through C0400.
- 2. Do not add up the score while you are interviewing the resident. Instead, focus your full attention on the interview.

# **Coding Instructions**

### Enter the total score as a two-digit number. The total possible BIMS score ranges from 00 to 15.

- If the resident chooses not to answer a specific question(s), that question is coded as incorrect and the item(s) counts in the total score. If, however, the resident chooses not to answer four or more items, then the interview is coded as incomplete and the Staff Assessment for Mental Status is completed.
- To be considered a completed interview, the resident had to attempt and provide relevant answers to at least four of the questions included in C0200-C0400. To be relevant, a response only has to be related to the question (logical); it does not have to be correct. See general coding tips below for residents who choose not to participate at all.
- **Code 99, unable to complete interview:** if (a) the resident chooses not to participate in the BIMS, (b) if four or more items were coded 0 because the resident chose not to answer or gave a nonsensical response, *or* (c) if any but not all of the BIMS items are coded with a dash (—).
  - Note: a 0 score does not mean the BIMS was incomplete. For the BIMS to be incomplete, a resident must choose not to answer or must give completely unrelated, nonsensical responses to four or more items. If one or more of the 0s in C0200– C0300 are due to incorrect answers, the interview should continue.

# **Coding Tips**

- Occasionally, a resident can communicate but chooses not to participate in the BIMS and therefore does not attempt any of the items in the section. This would be considered an incomplete interview; enter 99 for C0500, **BIMS Summary Score**, and complete the Staff Assessment for Mental Status.
- If all of the BIMS items are coded with a dash, then C0500, BIMS Summary Score must also be coded with a dash.

# C0500: BIMS Summary Score (cont.)

### Examples

1. The resident's scores on items C0200-C0400 were as follows:

C0200 (repetition)	3
C0300A (year)	2
C0300B (month)	2
C0300C (day)	1
C0400A (recall "sock")	2
C0400B (recall "blue")	2
C0400C (recall "bed")	0

**Coding:** C0500 would be **coded 12** (Sum of C0200–C0400C). C0600. Should the Staff Assessment for Mental Status be Conducted? is **coded as 0, No,** and the skip pattern is followed.

2. The resident's scores on items C0200–C0400C were as follows:

C0200 (repetition)	2
C0300A (year)	2
C0300B (month)	2
C0300C (day)	1
C0400A (recall "sock")	0
C0400B (recall "blue")	0
C0400C (recall "bed")	0

**Coding:** C0500 would be **coded 07** (Sum of C0200–C0400C). C0600. Should the Staff Assessment for Mental Status be Conducted? is **coded as 0, No,** and the skip pattern is followed.

3. The resident's score on items C0200–C0400C were as follows:

C0200 (repetition)	0 (no response provided)
C0300A (year)	0 (nonsensical response provided)
C0300B (month)	0 (nonsensical response provided)
C0300C (day)	0 (no response provided and the interview was stopped)
C0400A (recall "sock")	()
C0400B (recall "blue")	()
C0400C (recall "bed")	(—)

Coding: C0500 would be coded 99, resident was unable to complete the interview.

**Rationale:** The interview was stopped because the resident did not respond to two questions and provided nonsensical responses to two questions. Since the resident did not attempt to answer two questions and did not provide relevant answers to two questions, the BIMS interview is considered incomplete.

# C0600: Should the Staff Assessment for Mental Status (C0700-C1000) Be Conducted?

C0600. Should the Staff Assessment for Mental Status (C0700 - C1000) be Conducted?

Enter Code

No (resident was able to complete Brief Interview for Mental Status) → Skip to C1310, Signs and Symptoms of Delirium

1. Yes (resident was unable to complete Brief Interview for Mental Status) -> Continue to C0700, Short-term Memory OK

# Item Rationale

# Health-related Quality of Life

- Direct or performance-based testing of cognitive function using the BIMS is preferred as it decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium. However, a minority of residents are unable or unwilling to participate in the BIMS.
- Mental status can vary among persons unable to communicate or who do not complete the interview.
  - Therefore, report of observed behavior is needed for persons unable to complete the BIMS interview.
  - When cognitive impairment is incorrectly diagnosed or missed, appropriate communication, activities, and therapies may not be offered.

## **Planning for Care**

- Abrupt changes in cognitive status (as indicative of delirium) often signal an underlying potentially life-threatening illness and a change in cognition may be the only indication of an underlying problem.
  - This remains true for persons who are unable to communicate or to complete the BIMS.
- Specific aspects of cognitive impairment, when identified, can direct nursing interventions to facilitate greater independence and function.

# **Steps for Assessment**

1. Review whether **BIMS Summary Score** item (C0500), is **coded 99**, unable to complete interview.

# C0600: Should the Staff Assessment for Mental Status (C0700-C1000) Be Conducted? (cont.)

### **Coding Instructions**

- Code 0, no: if the BIMS was completed and scored between 00 and 15. Skip to C1310.
- **Code 1, yes:** if the resident chooses not to participate in the BIMS or if four or more items were **coded 0** because the resident chose not to answer or gave a nonsensical response. Continue to C0700, Short-term Memory OK, to perform the Staff Assessment for Mental Status. Note: C0500 should be **coded 99**.

# **Coding Tips**

• If a resident is scored 00 on C0500, the Staff Assessment for Mental Status should not be completed. **00** is a legitimate value for C0500 and indicates that the interview was complete. To have an incomplete interview, a resident had to choose not to answer or had to give completely unrelated, nonsensical responses to four or more BIMS items.

# C0700-C1000: Staff Assessment of Mental Status Item

Staff As	Staff Assessment for Mental Status		
Do not co	Do not conduct if Brief Interview for Mental Status (C0200-C0500) was completed		
C0700.	Short-term Memory OK		
Enter Code	Seems or appears to recall after 5 minutes 0. Memory OK 1. Memory problem		
C0800.	Long-term Memory OK		
Enter Code	Seems or appears to recall long past 0. Memory OK 1. Memory problem		
C0900.	Memory/Recall Ability		
$\downarrow$	Check all that the resident was normally able to recall		
	A. Current season		
	B. Location of own room		
	C. Staff names and faces		
	D. That they are in a nursing home/hospital swing bed		
	Z. None of the above were recalled		
C1000.	Cognitive Skills for Daily Decision Making		
Enter Code	Made decisions regarding tasks of daily life         0.       Independent - decisions consistent/reasonable         1.       Modified independence - some difficulty in new situations only         2.       Moderately impaired - decisions poor; cues/supervision required		

3. Severely impaired - never/rarely made decisions

# C0700-C1000: Staff Assessment of Mental Status Item (cont.)

### **Item Rationale**

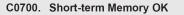
## Health-related Quality of Life

- Cognitive impairment is prevalent among some groups of residents, but not all residents are cognitively impaired.
- Many persons with memory problems can function successfully in a structured, routine environment.
- Residents may appear to be cognitively impaired because of communication challenges or lack of interaction but may be cognitively intact.
- When cognitive impairment is incorrectly diagnosed or missed, appropriate communication, worthwhile activities, and therapies may not be offered.

### **Planning for Care**

- Abrupt changes in cognitive status (as indicative of a delirium) often signal an underlying potentially life-threatening illness and a change in cognition may be the only indication of an underlying problem.
- The level and specific areas of impairment affect daily function and care needs. By identifying specific aspects of cognitive impairment, nursing interventions can be directed toward facilitating greater function.
- Probing beyond first, perhaps mistaken, impressions is critical to accurate assessment and appropriate care planning.

# C0700: Short-term Memory OK





#### Seems or appears to recall after 5 minutes 0. Memory OK

1. Memory problem

## **Item Rationale**

# Health-related Quality of Life

- To assess the mental state of residents who cannot be interviewed, an intact 5-minute recall ("short-term memory OK") indicates greater likelihood of normal cognition.
- An observed "memory problem" should be taken into consideration in Planning for Care.

# C0700: Short-term Memory OK (cont.)

# Planning for Care

- Identified memory problems typically indicate the need for:
  - Assessment and treatment of an underlying related medical problem (particularly if this is a new observation) or adverse medication effect, or
  - possible evaluation for other problems with thinking
  - additional nursing support
  - at times frequent prompting during daily activities
  - additional support during recreational activities.

### **Steps for Assessment**

- 1. Determine the resident's short-term memory status by asking them:
  - to describe an event 5 minutes after it occurred if you can validate the resident's response, or
  - to follow through on a direction given 5 minutes earlier.
- 2. Observe how often the resident has to be re-oriented to an activity or instructions.
- 3. Staff members also should observe the resident's cognitive function in varied daily activities.
- 4. Observations should be made by staff across all shifts and departments and others with close contact with the resident.
- 5. Ask direct care staff across all shifts and family or significant others about the resident's short-term memory status.
- 6. Review the medical record for clues to the resident's short-term memory during the lookback period.

## **Coding Instructions**

Based on all information collected regarding the resident's short-term memory during the 7-day look-back period, identify and code according to the most representative level of function.

- Code 0, memory OK: if the resident recalled information after 5 minutes.
- **Code 1, memory problem:** if the most representative level of function shows the absence of recall after 5 minutes.

# **Coding Tips**

• If the test cannot be conducted (resident will not cooperate, is non-responsive, etc.) and staff members were unable to make a determination based on observing the resident, use the standard "no information" code (a dash, "-") to indicate that the information is not available because it could not be assessed.

# C0700: Short-term Memory OK (cont.)

### Example

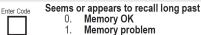
1. A resident has just returned from the activities room where they and other residents were playing bingo. You ask them if they enjoyed themself playing bingo, but they return a blank stare. When you ask them if they were just playing bingo, they say, "no." **Code 1, memory problem.** 

### Coding: C0700, would be coded 1, memory problem.

**Rationale:** The resident could not recall an event that took place within the past 5 minutes.

# C0800: Long-term Memory OK

C0800. Long-term Memory OK



### **Item Rationale**

## Health-related Quality of Life

- An observed "long-term memory problem" may indicate the need for emotional support, reminders, and reassurance. It may also indicate delirium if this represents a change from the resident's baseline.
- An observed "long-term memory problem" should be taken into consideration in Planning for Care.

### **Planning for Care**

- Long-term memory problems indicate the need for:
  - Exclusion of an underlying related medical problem (particularly if this is a new observation) or adverse medication effect, or
  - possible evaluation for other problems with thinking
  - additional nursing support
  - at times frequent prompting during daily activities
  - additional support during recreational activities.

### **Steps for Assessment**

- 1. Determine resident's long-term memory status by engaging in conversation, reviewing memorabilia (photographs, memory books, keepsakes, videos, or other recordings that are meaningful to the resident) with the resident or observing response to family who visit.
- 2. Ask questions for which you can validate the answers from review of the medical record, general knowledge, the resident's family, etc.
  - Ask the resident, "Are you married?" "What is your spouse's name?" "Do you have any children?" "How many?" "When is your birthday?"

# C0800: Long-term Memory OK (cont.)

- 3. Observe if the resident responds to memorabilia or family members who visit.
- 4. Observations should be made by staff across all shifts and departments and others with close contact with the resident.
- 5. Ask direct care staff across all shifts and family or significant others about the resident's memory status.
- 6. Review the medical record for clues to the resident's long-term memory during the look-back period.

## **Coding Instructions**

- Code 0, memory OK: if the resident accurately recalled long past information.
- **Code 1, memory problem:** if the resident did not recall long past information or did not recall it correctly.

## **Coding Tips**

• If the test cannot be conducted (resident will not cooperate, is non-responsive, etc.) and staff were unable to make a determination based on observation of the resident, use the standard "no information" code (a dash, "-"), to indicate that the information is not available because it could not be assessed.

# C0900: Memory/Recall Ability

C0900.	Memory/Recall Ability
$\downarrow$	Check all that the resident was normally able to recall
	A. Current season
	B. Location of own room
	C. Staff names and faces
	D. That they are in a nursing home/hospital swing bed
	Z. None of the above were recalled

# **Item Rationale**

# Health-related Quality of Life

- An observed "memory/recall problem" with these items may indicate:
  - cognitive impairment and the need for additional support with reminders to support increased independence; or
  - delirium, if this represents a change from the resident's baseline.

## **Planning for Care**

- An observed "memory/recall problem" with these items may indicate the need for:
  - Exclusion of an underlying related medical problem (particularly if this is a new observation) or adverse medication effect; or
  - possible evaluation for other problems with thinking;
  - additional signs, directions, pictures, verbal reminders to support the resident's independence;

# C0900: Memory/Recall Ability (cont.)

- an evaluation for acute delirium if this represents a change over the past few days to weeks;
- an evaluation for chronic delirium if this represents a change over the past several weeks to months; or
- additional nursing support;
- the need for emotional support, reminders and reassurance to reduce anxiety and agitation.

# **Steps for Assessment**

- 1. Ask the resident about each item. For example, "What is the current season? Is it fall, winter, spring, or summer?" "What is the name of this place?" If the resident is not in their room, ask, "Will you show me to your room?" Observe the resident's ability to find the way.
- 2. For residents with limited communication skills, in order to determine the most representative level of function, ask direct care staff across all shifts and family or significant other about recall ability.
  - Ask whether the resident gave indications of recalling these subjects or recognizing them during the look-back period.
- 3. Observations should be made by staff across all shifts and departments and others with close contact with the resident.
- 4. Review the medical record for indications of the resident's recall of these subjects during the look-back period.

# **Coding Instructions**

For each item that the resident recalls, check the corresponding answer box. If the resident recalls none, check **none of above.** 

- **Check C0900A, current season:** if resident is able to identify the current season (e.g., correctly refers to weather for the time of year, legal holidays, religious celebrations, etc.).
- **Check C0900B, location of own room:** if resident is able to locate and recognize own room. It is not necessary for the resident to know the room number, but they should be able to find the way to the room.
- **Check C0900C, staff names and faces:** if resident is able to distinguish staff members from family members, strangers, visitors, and other residents. It is not necessary for the resident to know the staff member's name, but they should recognize that the person is a staff member and not the resident's child, etc.
- **Check C0900D, that they are in a nursing home/hospital swing bed:** if resident is able to determine that they are currently living in a nursing home. To check this item, it is not necessary that the resident be able to state the name of the nursing home, but they should be able to refer to the nursing home by a term such as a "home for older people," a "hospital for the elderly," "a place where people who need extra help live," etc.
- Check C0900Z, none of above was recalled.

# C1000: Cognitive Skills for Daily Decision Making

#### C1000. Cognitive Skills for Daily Decision Making

#### Enter Code Made decisions regarding tasks of daily life



- 0. Independent decisions consistent/reasonable
- 1. **Modified independence** some difficulty in new situations only
- 2. **Moderately impaired** decisions poor; cues/supervision required
- 3. Severely impaired never/rarely made decisions

### **Item Rationale**

## Health-related Quality of Life

- An observed "difficulty with daily decision making" may indicate:
  - underlying cognitive impairment and the need for additional coaching and support or
  - possible anxiety or depression.

## **Planning for Care**

- An observed "difficulty with daily decision making" may indicate the need for:
  - a more structured plan for daily activities and support in decisions about daily activities,
  - encouragement to participate in structured activities, or
  - an assessment for underlying delirium and medical evaluation.

### DEFINITION

### DAILY DECISION MAKING

Includes: choosing clothing; knowing when to go to meals; using environmental cues to organize and plan (e.g., clocks, calendars, posted event notices); in the absence of environmental cues, seeking information appropriately (i.e. not repetitively) from others in order to plan the day; using awareness of one's own strengths and limitations to regulate the day's events (e.g., asks for help when necessary); acknowledging need to use appropriate assistive equipment such as a walker.

## **Steps for Assessment**

- 1. Review the medical record. Consult family and direct care staff across all shifts. Observe the resident.
- 2. Observations should be made by staff across all shifts and departments and others with close contact with the resident.
- 3. The intent of this item is to record what the resident is doing (performance). Focus on whether or not the resident is actively making these decisions and not whether staff believes the resident might be capable of doing so.
- 4. Focus on the resident's actual performance. Where a staff member takes decision-making responsibility away from the resident regarding tasks of everyday living, or the resident does not participate in decision making, whatever their level of capability may be, the resident should be coded as impaired performance in decision making.

# C1000: Cognitive Skills for Daily Decision Making (cont.)

### **Coding Instructions**

Record the resident's actual performance in making everyday decisions about tasks or activities of daily living. Enter one number that corresponds to the most correct response.

- **Code 0, independent:** if the resident's decisions in organizing daily routine and making decisions were consistent, reasonable and organized reflecting lifestyle, culture, values.
- **Code 1, modified independence:** if the resident organized daily routine and made safe decisions in familiar situations, but experienced some difficulty in decision making when faced with new tasks or situations.
- **Code 2, moderately impaired:** if the resident's decisions were poor; the resident required reminders, cues, and supervision in planning, organizing, and correcting daily routines.
- **Code 3, severely impaired:** if the resident's decision making was severely impaired; the resident never (or rarely) made decisions.

# **Coding Tips**

- If the resident "rarely or never" made decisions, despite being provided with opportunities and appropriate cues, Item C1000 would be **coded 3**, **severely impaired**. If the resident makes decisions, although poorly, **code 2**, **moderately impaired**.
- A resident's considered decision to exercise their right to decline treatment or recommendations by interdisciplinary team members should **not** be captured as impaired decision making in Item C1000, **Cognitive Skills for Daily Decision Making**.

## **Examples**

- 1. Resident B seems to have severe cognitive impairment and is non-verbal. They usually clamp their mouth shut when offered a bite of food.
- 2. Resident C does not generally make conversation or make their needs known, but replies "yes" when asked if they would like to take a nap.

# **Coding:** For the above examples, Item C1000 would be **coded 3**, severe impairment.

**Rationale:** In both examples, the residents are primarily non-verbal and do not make their needs known, but they do give basic verbal or non-verbal responses to simple gestures or questions regarding care routines. More information about how the residents function in the environment is needed to definitively answer the questions. From the limited information provided it appears that their communication of choices is limited to very particular circumstances, which would be regarded as "rarely/never" in the relative number of decisions a person could make during the course of a week on the MDS. If such decisions are more frequent or involved more activities, the resident may be only moderately impaired or better.

# C1000: Cognitive Skills for Daily Decision Making (cont.)

3. A resident makes their own decisions throughout the day and is consistent and reasonable in their decision-making except that they constantly walk away from the walker they have been using for nearly 2 years. Asked why they don't use their walker, they reply, "I don't like it. It gets in my way, and I don't want to use it even though I know all of you think I should."

### Coding: C1000 would be coded 0, independent.

**Rationale:** This resident is making and expressing understanding of their own decisions, and their decision is to decline the recommended course of action – using the walker. Other decisions they made throughout the look-back period were consistent and reasonable.

4. A resident routinely participates in coffee hour on Wednesday mornings, and often does not need a reminder. Due to renovations, however, the meeting place was moved to another location in the facility. The resident was informed of this change and was accompanied to the new location by the activities director. Staff noticed that the resident was uncharacteristically agitated and unwilling to engage with other residents or the staff. They eventually left and were found sitting in the original coffee hour room. Asked why they came back to this location, they responded, "the aide brought me to the wrong room, I'll wait here until they serve the coffee."

### Coding: C1000 would be coded 1, modified independent.

**Rationale:** The resident is independent under routine circumstances. However, when the situation was new or different, they had difficulty adjusting.

5. Resident G enjoys congregate meals in the dining room and is friendly with the other residents at their table. Recently, they have started to lose weight. They appear to have little appetite, rarely eat without reminders and willingly give their food to other residents at the table. Resident G requires frequent cueing from staff to eat and supervision to prevent them from sharing their food.

### Coding: C1000 would be coded 2, moderately impaired.

**Rationale:** The resident is making poor decisions by giving their food away. They require cueing to eat and supervision to be sure that they are eating the food on their plate.

Delirium	
C1310. Signs and Symptoms of Delirium (from CAM©)	
Code after completing Brief Interview for Mental Status or Staff Assessment, and reviewing medical record	
A. Acute Onset Mental Status Change	
Enter Code Is there evidence of an acute change in mental status from the resident's baseline? 0. No 1. Yes	
Coding:         0.       Behavior not present         1.       Behavior continuously present, does not fluctuate         2.       Behavior present, fluctuates (comes and goes, changes in severity)	
Enter Codes in Boxes	
B. Inattention - Did the resident have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said?	
C. Disorganized Thinking - Was the resident's thinking disorganized or incoherent (rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject)?	
<ul> <li>D. Altered Level of Consciousness - Did the resident have altered level of consciousness, as indicated by any of the following criteria?</li> <li>vigilant - startled easily to any sound or touch</li> <li>lethargic - repeatedly dozed off when being asked questions, but responded to voice or touch</li> <li>stuporous - very difficult to arouse and keep aroused for the interview</li> <li>comatose - could not be aroused</li> </ul>	

Adapted from: Inouye SK, et al. Ann Intern Med. 1990; 113: 941-948. Confusion Assessment Method. Copyright 2003, Hospital Elder Life Program, LLC. Not to be reproduced without permission.

# **Item Rationale**

# Health-related Quality of Life

- Delirium is associated with:
  - increased mortality,
  - functional decline,
  - development or worsening of incontinence,
  - behavior problems,
  - withdrawal from activities
  - rehospitalizations and increased length of nursing home stay.
- Delirium can be misdiagnosed as dementia.
- A recent deterioration in cognitive function may indicate delirium, which may be reversible if detected and treated in a timely fashion.

### **Planning for Care**

- Delirium may be a symptom of an acute, treatable illness such as infection or reaction to medications.
- Prompt detection is essential in order to identify and treat or eliminate the cause.

### **Steps for Assessment**

- 1. Observe resident behavior during the **BIMS** items (C0200-C0400) for the signs and symptoms of delirium. Some experts suggest that increasing the frequency of assessment (as often as daily for new admissions) will improve the level of detection.
- 2. If the **Staff Assessment for Mental Status** items (C0700-C1000) were completed instead of the BIMS, ask staff members who conducted the interview about their observations of signs and symptoms of delirium.

### DEFINITION

### DELIRIUM

A mental disturbance characterized by new or acutely worsening confusion, disordered expression of thoughts, change in level of consciousness or hallucinations.

- 3. Review medical record documentation during the 7-day look-back period to determine the resident's baseline status, fluctuations in behavior, and behaviors that might have occurred during the 7-day look-back period that were not observed during the BIMS.
- 4. Observe the resident's behavior during interactions and consult with other staff, family members/caregivers, and others in a position to observe the resident's behavior during the 7-day look-back period.

Additional guidance on the signs and symptoms of delirium can be found in Appendix C.

## **Coding Instructions for C1310A, Acute Mental Status Change**

- **Code 0, no:** if there is no evidence of acute mental status change from the resident's baseline.
- **Code 1, yes:** if resident has an alteration in mental status observed in the observation period that represents an acute change from baseline.

## **Coding Tips**

- Examples of acute mental status change:
  - A resident who is usually noisy or belligerent becomes quiet, lethargic, or inattentive.
  - A resident who is normally quiet and content suddenly becomes restless or noisy.
  - A resident who is usually able to find their way around their living environment begins to get lost.

### **Examples**

1. The resident was admitted to the nursing home 4 days ago. Their family reports that they were alert and oriented prior to admission. During the BIMS interview, they are lethargic and incoherent.

Coding: Item C1310A would be coded 1, yes.

**Rationale:** There is an acute change of the resident's behavior from alert and oriented (family report) to lethargic and incoherent during interview.

2. The nurse reports that a resident with poor short-term memory and disorientation to time suddenly becomes agitated, calling out to their dead spouse, tearing off their clothes, and being completely disoriented to time, person, and place.

### Coding: Item C1310A would be coded 1, yes.

**Rationale:** The new behaviors represent an acute change in mental status.

# Steps for Assessment for C1310B, Inattention

- 1. Assess attention separately from level of consciousness. Evidence of inattention may be found during the resident interview, in the medical record, or from family or staff reports of inattention during the 7-day look-back period.
- 2. An additional step to identify difficulty with attention is to ask the resident to count backwards from 20.

# **Coding Instructions for C1310B, Inattention**

- **Code 0, behavior not present:** if the resident remains focused during the interview and all other sources agree that the resident was attentive during other activities.
- Code 1, behavior continuously present, did not fluctuate: if the resident had difficulty focusing attention, was easily distracted, or had difficulty keeping track of what was said AND the inattention did not vary during the look-back period. All sources must agree that inattention was consistently present to select this code.
- **Code 2, behavior present, fluctuates:** if inattention is noted during the interview or any source reports that the resident had difficulty focusing attention, was easily distracted, or had difficulty keeping track of what was said AND the inattention varied during interview or during the look-back period or if information sources disagree in assessing level of attention.

### DEFINITIONS

### INATTENTION

Reduced ability to maintain attention to external stimuli and to appropriately shift attention to new external stimuli. Resident seems unaware or out of touch with environment (e.g., dazed, fixated or darting attention).

### FLUCTUATION

The behavior tends to come and go and/or increase or decrease in severity. The behavior may fluctuate over the course of the interview or during the 7-day look- back period. Fluctuating behavior may be noted by the interviewer, reported by staff or family or documented in the medical record.

# **Examples**

1. The resident tries to answer all questions during the BIMS. Although they answer several items incorrectly and respond "I don't know" to others, they pay attention to the interviewer. Medical record and staff indicate that this is their consistent behavior.

**Coding:** Item C1310B would be **coded 0, behavior not present**. **Rationale:** The resident remained focused throughout the interview and this was constant during the look-back period.

2. Questions during the BIMS must be frequently repeated because the resident's attention wanders. This behavior occurs throughout the interview and medical records and staff agree that this behavior is consistently present. The resident has a diagnosis of dementia.

Coding: Item C1310B would be coded 1, behavior continuously present, does not fluctuate.

**Rationale:** The resident's attention consistently wandered throughout the 7-day lookback period. The resident's dementia diagnosis does not affect the coding.

3. During the BIMS interview, the resident was not able to focus on all questions asked and their gaze wandered. However, several notes in the resident's medical record indicate that the resident was attentive when staff communicated with them, and family confirmed this.

**Coding:** Item C1310B would be **coded 2, behavior present, fluctuates. Rationale:** Evidence of inattention was found during the BIMS but was noted to be absent in the medical record. This disagreement shows possible fluctuation in the behavior. If any information source reports the symptom as present, C1310B **cannot be coded as 0, Behavior not present.** 

4. The resident is dazedly staring at the television for the first several questions. When you ask a question, they look at you momentarily but do not answer. Midway through questioning, they seem to pay more attention and try to answer.

**Coding:** Item C1310B would be **coded 2, behavior present, fluctuates. Rationale:** Resident's attention fluctuated during the interview. If as few as one source notes fluctuation, then the behavior should be **coded 2**.

# Coding Instructions for C1310C, Disorganized Thinking

- **Code 0, behavior not present:** if all sources agree that the resident's thinking was organized and coherent, even if answers were inaccurate or wrong.
- Code 1, behavior continuously present, did not fluctuate: if, during the interview and according to other sources, the resident's responses were consistently disorganized or incoherent, conversation

### DEFINITION

### DISORGANIZED THINKING

Evidenced by rambling, irrelevant, or incoherent speech.

was rambling or irrelevant, ideas were unclear or flowed illogically, or the resident unpredictably switched from subject to subject.

• **Code 2, behavior present, fluctuates:** if, during the interview or according to other data sources, the resident's responses fluctuated between disorganized/incoherent and organized/clear. Also code as fluctuating if information sources disagree.

# **Examples**

1. The interviewer asks the resident, who is often confused, to give the date, and the response is: "Let's go get the sailor suits!" The resident continues to provide irrelevant or nonsensical responses throughout the interview, and medical record and staff indicate this is constant.

# Coding: C1310C would be coded 1, behavior continuously present, does not fluctuate.

Rationale: All sources agree that the disorganized thinking is constant.

2. The resident responds that the year is 1837 when asked to give the date. The medical record and staff indicate that the resident is never oriented to time but has coherent conversations. For example, staff reports they often discuss their passion for baseball.

**Coding:** C1310C would be **coded 0, behavior not present**. **Rationale:** The resident's answer was related to the question, even though it was incorrect. No other sources report disorganized thinking.

3. The resident was able to tell the interviewer their name, the year and where they were. They were able to talk about the activity they just attended and the residents and staff that also attended. Then the resident suddenly asked the interviewer, "Who are you? What are you doing in my child's home?"

### **Coding:** C1310C would be **coded 2**, **behavior present**, **fluctuates**.

**Rationale:** The resident's thinking fluctuated between coherent and incoherent at least once. If as few as one source notes fluctuation, then the behavior should be **coded 2**.

### **Coding Instructions for C1310D, Altered Level of Consciousness**

- **Code 0, behavior not present:** if all sources agree that the resident was alert and maintained wakefulness during conversation, interview(s), and activities.
- Code 1, behavior continuously present, did not fluctuate: if, during the interview and according to other sources, the resident was consistently lethargic (difficult to keep awake), stuporous (very difficult to arouse and keep aroused), vigilant (startles easily to any sound or touch), or comatose.
- **Code 2, behavior present, fluctuates:** if, during the interview or according to other sources, the resident varied in levels of consciousness. For example, was at times alert and responsive, while at other times resident was lethargic, stuporous, or vigilant. Also code as fluctuating if information sources disagree.

### **DEFINITIONS**

### ALTERED LEVEL OF CONSCIOUSNESS

VIGILANT – startles easily to any sound or touch; LETHARGIC – repeatedly dozes off when you are asking questions, but responds to voice or touch; STUPOR – very difficult to arouse and keep aroused for the interview; COMATOSE – cannot be aroused despite shaking and shouting.

# **Coding Tips**

• A diagnosis of coma or stupor does not have to be present for staff to note the behavior in this section.

# Examples

1. Resident is alert and conversational and answers all questions during the BIMS interview, although not all answers are correct. Medical record documentation and staff report during the 7-day look-back period consistently noted that the resident was alert.

**Coding:** C1310D would be **coded 0, behavior not present**. **Rationale:** All evidence indicates that the resident is alert during conversation, interview(s) and activities.

2. The resident is lying in bed. They arouse to soft touch but are only able to converse for a short time before their eyes close, and they appear to be sleeping. Again, they arouse to voice or touch but only for short periods during the interview. Information from other sources indicates that this was their condition throughout the look-back period.

# Coding: $\rm C1310D\ would\ be\ coded\ 1,\ behavior\ continuously\ present,\ does not\ fluctuate.$

**Rationale:** The resident's lethargy was consistent throughout the interview, and there is consistent documentation of lethargy in the medical record during the look-back period.

3. Resident is usually alert, oriented to time, place, and person. Today, at the time of the BIMS interview, resident is conversant at the beginning of the interview but becomes lethargic and difficult to arouse.

Coding: C1310D would be coded 2, behavior present, fluctuates.

**Rationale:** The level of consciousness fluctuated during the interview. If as few as one source notes fluctuation, then the behavior should be **coded 2, fluctuating**.

CAM Assessment Scoring Methodology
The indication of delirium by the CAM requires the presence of:
Item A = 1 <b>OR</b> Item B, C or D = 2
AND
Item $B = 1 \text{ OR } 2$
AND EITHER
Item C = 1 OR 2 <b>OR</b> Item D = 1 OR 2