

## 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. These items are crucial factors in many care-planning decisions.

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

<b>C0100. Should Brief Interview for Mental Status (C0200-C0500) be Conducted?</b>	
Attempt to conduct interview with all residents	
Enter Code <input type="checkbox"/>	0. No (resident is rarely/never understood) → Skip to and complete C0700-C1000, Staff Assessment for Mental Status 1. Yes → Continue to C0200, Repetition of Three Words

### Item Rationale

#### Health-related Quality of Life

- This information identifies if the interview will be attempted.
- Most residents are able to attempt the Brief Interview for Mental Status (BIMS).
- 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 his or her 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. Determine if the resident is rarely/never understood verbally or in writing. If rarely/never understood, skip to C0700 – C1000, Staff Assessment of Mental Status.
2. Review **Language** item (A1100), to determine if the resident needs or wants an interpreter.
  - If the resident needs or wants an interpreter, complete the interview with an interpreter.

### Coding Instructions

*Record whether the cognitive interview should be attempted with the resident.*

- Code 0, no: if the interview should not be attempted because the resident is rarely/never understood, cannot respond verbally or in writing, or an interpreter is needed but not available. Skip to C0700, Staff Assessment of Mental Status.
- Code 1, yes: if the interview should be attempted because the resident is at least sometimes understood verbally or in writing, and if an interpreter is needed, one is available. Proceed to C0200, Repetition of Three Words.

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

### Coding Tips

- If the resident needs an interpreter, 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 C0700-C1000, **Staff Assessment of Mental Status**, instead of C0200-C0500, **Brief Interview for Mental Status**.
- Includes residents who use American Sign Language (ASL).

## C0200-C0500: Brief Interview for Mental Status (BIMS)



Brief Interview for Mental Status (BIMS)	
<b>C0200. Repetition of Three Words</b>	
Enter Code <input type="checkbox"/>	<p>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: <b>sock, blue, and bed</b>. Now tell me the three words."</p> <p><b>Number of words repeated after first attempt</b></p> <p>0. <b>None</b> 1. <b>One</b> 2. <b>Two</b> 3. <b>Three</b></p> <p>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.</p>
<b>C0300. Temporal Orientation</b> (orientation to year, month, and day)	
Enter Code <input type="checkbox"/>	<p>Ask resident: "Please tell me what year it is right now."</p> <p><b>A. Able to report correct year</b></p> <p>0. <b>Missed by &gt; 5 years</b> or no answer 1. <b>Missed by 2-5 years</b> 2. <b>Missed by 1 year</b> 3. <b>Correct</b></p>
Enter Code <input type="checkbox"/>	<p>Ask resident: "What month are we in right now?"</p> <p><b>B. Able to report correct month</b></p> <p>0. <b>Missed by &gt; 1 month</b> or no answer 1. <b>Missed by 6 days to 1 month</b> 2. <b>Accurate within 5 days</b></p>
Enter Code <input type="checkbox"/>	<p>Ask resident: "What day of the week is today?"</p> <p><b>C. Able to report correct day of the week</b></p> <p>0. <b>Incorrect</b> or no answer 1. <b>Correct</b></p>
<b>C0400. Recall</b>	
Enter Code <input type="checkbox"/>	<p>Ask resident: "Let's go back to an earlier question. What were those three words that I asked you to repeat?"</p> <p>If unable to remember a word, give cue (something to wear; a color; a piece of furniture) for that word.</p> <p><b>A. Able to recall "sock"</b></p> <p>0. <b>No</b> - could not recall 1. <b>Yes, after cueing</b> ("something to wear") 2. <b>Yes, no cue required</b></p>
Enter Code <input type="checkbox"/>	<p><b>B. Able to recall "blue"</b></p> <p>0. <b>No</b> - could not recall 1. <b>Yes, after cueing</b> ("a color") 2. <b>Yes, no cue required</b></p>
Enter Code <input type="checkbox"/>	<p><b>C. Able to recall "bed"</b></p> <p>0. <b>No</b> - could not recall 1. <b>Yes, after cueing</b> ("a piece of furniture") 2. <b>Yes, no cue required</b></p>
<b>C0500. BIMS Summary Score</b>	
Enter Score <input type="text"/>	<p><b>Add scores</b> for questions C0200-C0400 and fill in total score (00-15)</p> <p><b>Enter 99 if the resident was unable to complete the interview</b></p>

## C0200-C0500: Brief Interview for Mental Status (BIMS) (cont.)



### 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.
- When cognitive impairment is incorrectly diagnosed or missed, appropriate communication, worthwhile activities and therapies may not be offered.
- A resident's performance on cognitive tests can be compared over time.
  - If performance worsens, then an assessment for delirium and or depression should be considered.
- The BIMS is an opportunity to observe residents for signs and symptoms of delirium (C1310).

#### 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.
  - 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.
4. Be sure the resident can hear you.
  - Residents with hearing impairment should be tested using their usual communication devices/techniques, as applicable.

## C0200-C0500: Brief Interview for Mental Status (BIMS) (cont.)



- 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 his or her memory, he or she 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 his or her refusal and move on to the next questions. For C0200 through C0400, code refusals as incorrect.

### Coding Instructions

*See coding instructions for individual items.*

### Coding Tips

- On occasion, the interviewer may not be able to state the items clearly because of an accent or slurred speech. If the interviewer is unable to pronounce any cognitive items clearly, have a different staff member complete the BIMS.
- Nonsensical responses should be coded as zero.
- Rules for stopping the interview before it is complete:
  - Stop the interview after completing (C0300C) “Day of the Week” if:
    1. all responses have been nonsensical (i.e., any response that is unrelated, incomprehensible, or incoherent; not informative with respect to the item being rated), OR
    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 summary score in C0500.
  3. Code 1, yes in **C0600 Should the Staff Assessment for Mental Status (C0700-C1000) be Conducted?**
  4. Complete the **Staff Assessment for Mental Status**.

## C0200-C0500: Brief Interview for Mental Status (BIMS) (cont.)



- 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 this circumstance.**
- See Appendix E for details regarding how to administer the BIMS in writing.

**DEFINITION****ONSENSICAL  
RESPONSE**

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

**Examples of Incorrect and Nonsensical Responses**

- 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.

- 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.

- Interviewer asks the resident to name the day of the week. Resident answers, "Sylvia, she's my daughter."

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**

Brief Interview for Mental Status (BIMS)	
<b>C0200. Repetition of Three Words</b>	
Enter Code	Ask resident: <i>"I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: <b>sock, blue, and bed.</b> Now tell me the three words."</i>
<input type="checkbox"/>	<b>Number of words repeated after first attempt</b>
	0. None
	1. One
	2. Two
	3. Three
	After the resident's first attempt, repeat the words using cues ( <i>"sock, something to wear; blue, a color; bed, a piece of furniture"</i> ). You may repeat the words up to two more times.

## C0200: Repetition of Three Words (cont.)



### Item Rationale

#### Health-related Quality of Life

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

#### 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.

### Steps for Assessment

*Basic BIMS interview instructions are shown on pages C-3 and C-4. 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."
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.

#### 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."

## C0200: Repetition of Three Words (cont.)



- 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 he or she is 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.

### Coding Tips

- On occasion, the interviewer may not be able to state the words clearly because of an accent or slurred speech. If the interviewer is unable to pronounce any of the 3 words clearly, have a different staff member conduct the interview.

### 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.



## C0200: Repetition of Three Words (cont.)



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 repeats the three words plus the category cues.

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

Rationale: The resident repeated two of the three items—blue and sock. 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 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 <input type="checkbox"/>	Ask resident: "Please tell me what year it is right now." <b>A. Able to report correct year</b> 0. Missed by > 5 years or no answer 1. Missed by 2-5 years 2. Missed by 1 year 3. Correct
Enter Code <input type="checkbox"/>	Ask resident: "What month are we in right now?" <b>B. Able to report correct month</b> 0. Missed by > 1 month or no answer 1. Missed by 6 days to 1 month 2. Accurate within 5 days
Enter Code <input type="checkbox"/>	Ask resident: "What day of the week is today?" <b>C. Able to report correct day of the week</b> 0. Incorrect or no answer 1. Correct

### Item Rationale

#### Health-related Quality of Life

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

#### Planning for Care

- If staff know that a resident has a problem with orientation, they can provide reorientation aids and verbal reminders that may reduce anxiety.

### 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.





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

- Reorienting those who are disoriented or at risk of disorientation may be useful in treating symptoms of delirium.
- 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-3 and C-4.*

1. Ask the resident each of the 3 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.”

### 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 answer the item.
- 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, 2011. The resident, responding to the statement, “Please tell me what year it is right now,” states that it is 2011.

Coding: C0300A would be coded 3, correct.

Rationale: 2011 is the current year.

2. The date of interview is June 16, 2011. The resident, responding to the statement, “Please tell me what year it is right now,” states that it is 2007.

Coding: C0300A would be coded 1, missed by 2-5 years.

Rationale: 2007 is within 2 to 5 years of 2011.

3. The date of interview is January 10, 2011. The resident, responding to the statement, “Please tell me what year it is right now,” states that it is 1911.

Coding: C0300A would be coded 0, missed by more than 5 years.

Rationale: Even though the ’11 part of the year would be correct, 1911 is more than 5 years from 2011.

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



4. The date of interview is April 1, 2011. The resident, responding to the statement, “Please tell me what year it is right now,” states that it is “11”. The interviewer asks, “Can you tell me the full year?” The resident still responds “11,” and the interviewer asks again, “Can you tell me the full year, for example, nineteen-eighty-two.” The resident states, “2011.”

Coding: C0300A would be coded 3, correct.

Rationale: Even though '11 is partially correct, the only correct answer is the exact year. The resident must state “2011,” not “11” or “1811” or “1911.”

### 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.
- 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, 2011. 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, 2011. 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.

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



3. The date of interview is June 25, 2011. 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.

4. The date of interview is June 30, 2011. 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.

5. The date of interview is June 2, 2011. The resident, responding to the question, “What month are we in right now?” states that it is May.

Coding: C0300B would be coded 2, accurate within 5 days.

Rationale: June 2 minus 5 days = May 29<sup>th</sup>. The resident correctly stated the month within 5 days even though the current month is June.

### 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.
- Code 1, correct: if the answer is correct.

### Examples

1. The day of interview is Monday, June 25, 2011. 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 25, 2011. 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 25, 2011. 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 <input type="checkbox"/>	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. <b>A. Able to recall "sock"</b> 0. No - could not recall 1. Yes, after cueing ("something to wear") 2. Yes, no cue required
Enter Code <input type="checkbox"/>	<b>B. Able to recall "blue"</b> 0. No - could not recall 1. Yes, after cueing ("a color") 2. Yes, no cue required
Enter Code <input type="checkbox"/>	<b>C. Able to recall "bed"</b> 0. 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-3 and C-4.*

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," pages C-6–C-7 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.” He is given credit for this response, even though he also listed another item in that category (shoes), because he was 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	
Enter 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
<input type="text"/>	

### Item Rationale

#### 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 a staff assessment 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 on page C-4 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 of the BIMS items is coded with a dash.
  - Note: a zero score does not mean the BIMS was incomplete. To be incomplete, a resident had to choose not to answer or give completely unrelated, nonsensical responses to four or more items.

### 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 of mental status.



## C0500: BIMS Summary Score (cont.)

### Example

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.

## 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 <input type="checkbox"/>	<p>0. <b>No</b> (resident was able to complete Brief Interview for Mental Status) → Skip to C1310, Signs and Symptoms of Delirium</p> <p>1. <b>Yes</b> (resident was unable to complete Brief Interview for Mental Status) → Continue to C0700, Short-term Memory OK</p>

### 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.

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

### Steps for Assessment

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

### 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-C1000 and perform the Staff Assessment for Mental Status. Note: C0500 should be coded 99.

### Coding Tips

- If a resident is scored 00 on C0500, C0700-C1000, Staff Assessment, 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 Assessment for Mental Status	
Do not conduct if Brief Interview for Mental Status (C0200-C0500) was completed	
<b>C0700. Short-term Memory OK</b>	
Enter Code <input type="checkbox"/>	Seems or appears to recall after 5 minutes 0. Memory OK 1. Memory problem
<b>C0800. Long-term Memory OK</b>	
Enter Code <input type="checkbox"/>	Seems or appears to recall long past 0. Memory OK 1. Memory problem
<b>C0900. Memory/Recall Ability</b>	
↓ Check all that the resident was normally able to recall	
<input type="checkbox"/>	A. Current season
<input type="checkbox"/>	B. Location of own room
<input type="checkbox"/>	C. Staff names and faces
<input type="checkbox"/>	D. That he or she is in a nursing home/hospital swing bed
<input type="checkbox"/>	Z. None of the above were recalled
<b>C1000. Cognitive Skills for Daily Decision Making</b>	
Enter Code <input type="checkbox"/>	Made decisions regarding tasks of daily life 0. <b>Independent</b> - decisions consistent/reasonable 1. <b>Modified independence</b> - some difficulty in new situations only 2. <b>Moderately impaired</b> - decisions poor; cues/supervision required 3. <b>Severely impaired</b> - 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

C0700. Short-term Memory OK	
Enter Code	Seems or appears to recall after 5 minutes
<input type="checkbox"/>	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.

#### Planning for Care

- Identified memory problems typically indicate the need for:

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

- 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 him or her:
  - 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 look-back 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 she and other residents were playing bingo. You ask her if she enjoyed herself playing bingo, but she returns a blank stare. When you ask her if she was just playing bingo, she says, “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	
Enter Code	Seems or appears to recall long past
<input type="checkbox"/>	0. Memory OK
	1. Memory problem

### 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	
↓ Check all that the resident was normally able to recall	
<input type="checkbox"/>	A. Current season
<input type="checkbox"/>	B. Location of own room
<input type="checkbox"/>	C. Staff names and faces
<input type="checkbox"/>	D. That he or she is in a nursing home/hospital swing bed
<input type="checkbox"/>	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 his or her 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 he or she 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 he or she should recognize that the person is a staff member and not the resident’s son or daughter, etc.
- Check C0900D, that he or she is in a nursing home/hospital swing bed: if resident is able to determine that he or she is 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 he or she 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 <input type="checkbox"/>	<p><b>Made decisions regarding tasks of daily life</b></p> <p>0. <b>Independent</b> - decisions consistent/reasonable</p> <p>1. <b>Modified independence</b> - some difficulty in new situations only</p> <p>2. <b>Moderately impaired</b> - decisions poor; cues/supervision required</p> <p>3. <b>Severely impaired</b> - never/rarely made decisions</p>

### 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 his or her 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 his or her 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. Mr. B. seems to have severe cognitive impairment and is non-verbal. He usually clamps his mouth shut when offered a bite of food.
2. Mrs. C. does not generally make conversation or make her needs known, but replies "yes" when asked if she 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 her own decisions throughout the day and is consistent and reasonable in her decision-making except that she constantly walks away from the walker she has been using for nearly 2 years. Asked why she doesn't use her walker, she replies, "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 her own decisions, and her decision is to decline the recommended course of action – using the walker.

Other decisions she 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. She eventually left and was found sitting in the original coffee hour room. Asked why she came back to this location, she 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, she had difficulty adjusting.

5. Mr. G. enjoys congregate meals in the dining and is friendly with the other residents at his table. Recently, he has started to lose weight. He appears to have little appetite, rarely eats without reminders and willingly gives his food to other residents at the table. Mr. G. requires frequent cueing from staff to eat and supervision to prevent him from sharing his food.

Coding: C1000 would be coded 2, moderately impaired.

Rationale: The resident is making poor decisions by giving his food away. He requires cueing to eat and supervision to be sure that he is eating the food on his plate.

## C1310: Signs and Symptoms of Delirium

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	
<input type="checkbox"/>	Is there evidence of an acute change in mental status from the resident's baseline? 0. No 1. Yes
<b>Coding:</b> 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
	<input type="checkbox"/> B. Inattention- Did the resident have difficulty focusing attention, for example being easily distractible, or having difficulty keeping track of what was being said?
	<input type="checkbox"/> 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)?
	<input type="checkbox"/> D. Altered level of consciousness- Did the resident have altered level of consciousness as indicated by any of the following criteria? •vigilant- startled easily to any sound or touch •lethargic- repeatedly dozed off when being asked questions, but responded to voice or touch •stuporous- very difficult to arouse and keep aroused for the interview •comatose- could not be aroused
Confusion Assessment Method. © 1988, 2003, Hospital Elder Life Program. All rights reserved. Adapted from: Inouye SK et al. Ann Intern Med. 1990; 113:941-8. Used with 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.

## C1310: Signs and Symptoms of Delirium (cont.)

### 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) was completed instead of the BIMS, ask staff members who conducted the interview about their observations of signs and symptoms of delirium.
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. Interview staff, family members and others in a position to observe the resident's behavior during the 7-day look-back period.

### DEFINITION

#### DELIRIUM

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

For 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 past 7 days or in the BIMS that represents a change from baseline.

### Coding Tips

- Interview resident's family or significant others.
- Review medical record prior to 7-day look-back to determine the resident's usual mental status.

### Examples

1. Resident was admitted to the nursing home 4 days ago. Her family reports that she was alert and oriented prior to admission. During the BIMS interview, she is 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. Nurse reports that a resident with poor short-term memory and disorientation to time suddenly becomes agitated, calling out to her dead husband, tearing off her 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.

## C1310: Signs and Symptoms of Delirium (cont.)

### Other Examples of Acute Mental Status Changes

- 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 his or her way around the unit begins to get lost.

### 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.

## C1310: Signs and Symptoms of Delirium (cont.)

### Examples

1. The resident tries to answer all questions during the BIMS. Although she answers several items incorrectly and responds “I don’t know” to others, she pays attention to the interviewer. Medical record and staff indicate that this is her 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 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 look-back 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 his gaze wandered. However, several notes in the resident’s medical record indicate that the resident was attentive when staff communicated with him.

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. Resident is dazedly staring at the television for the first several questions. When you ask a question, she looks at you momentarily but does not answer. Midway through questioning, she seems to pay more attention and tries 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.



## C1310: Signs and Symptoms of Delirium (cont.)

### 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 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.

#### DEFINITION

#### DISORGANIZED THINKING

Evidenced by rambling, irrelevant, or incoherent speech.

### 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 he often discusses his 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 her name, the year and where she was. She was able to talk about the activity she 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 daughter'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.

## C1310: Signs and Symptoms of Delirium (cont.)

### 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. He arouses to soft touch but is only able to converse for a short time before his eyes close, and he appears to be sleeping. Again, he arouses to voice or touch but only for short periods during the interview. Information from other sources indicates that this was his condition throughout the look-back period.

Coding: 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.

## C1310: Signs and Symptoms of Delirium (cont.)

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 **OR** Item B, C or D = 2

**AND**

Item B = 1 OR 2

**AND EITHER**

Item C = 1 OR 2 **OR** Item D = 1 OR 2