

## SECTION C: COGNITIVE PATTERNS

Intent: The items in this section are intended to determine the patient's attention, orientation, and ability to register and recall new information.

### C0100. Should Brief Interview for Mental Status (C0200-C0500) Be Conducted?

**C0100. Should Brief Interview for Mental Status (C0200-C0500) be Conducted?** (3-day assessment period)

Attempt to conduct interview with all patients.

Enter Code

0. No (patient is rarely/never understood) → *Skip to C0900, Memory/Recall Ability*  
 1. Yes → *Continue to C0200, Repetition of Three Words*

#### Item Rationale

- This information identifies if the interview will be attempted.
- Most patients are able to attempt the Brief Interview for Mental Status (BIMS). The BIMS is 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 patient might be mislabeled based on his or her appearance or assumed diagnosis.
  - Structured interviews efficiently provide insight into the patient's current condition that will enhance quality of care.
- Structured cognitive interviews assist in identifying needed supports.

#### Steps for Assessment

1. Determine if the patient is rarely/never understood verbally or in writing. If rarely/never understood, skip to C0900, Memory/Recall Ability.
2. Determine if the patient needs or wants an interpreter. If the patient needs or wants an interpreter, complete the interview with an interpreter.

**Assessment Period:** The 3-day assessment period for the IRF-PAI admission assessment includes the first day of admission and the following two days, ending at 11:59 PM. The Brief Interview for Mental Status (BIMS) should be attempted with all patients. It only needs to be conducted once during the 3-day assessment period. If the BIMS is not conducted or the patient is unable to complete the BIMS, C0900, Memory/Recall Ability (which is a staff assessment of mental status) is completed.

#### Coding Instructions

Record whether the cognitive interview should be attempted with the patient. Complete during the 3-day admission assessment period.

- Code 0, no, if the interview should not be attempted because the patient is rarely/never understood, cannot respond verbally or in writing, or an interpreter is needed but not available. Skip to C0900, Memory/Recall Ability.
- Code 1, yes, if the interview should be attempted because the patient 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.

### Coding Tips

- If the patient 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 item C0900, Memory/Recall Ability (which is a staff assessment of mental status), instead of items C0200-C0500, Brief Interview for Mental Status.
- Includes patients 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"/>	Ask patient: <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: sock, blue and bed. Now tell me the three words."</i> <b>Number of words repeated after first attempt</b> 3. <b>Three</b> 2. <b>Two</b> 1. <b>One</b> 0. <b>None</b>  After the patient'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.
<b>C0300. Temporal Orientation</b> (orientation to year, month, and day)	
Enter Code <input type="checkbox"/>	Ask patient: <i>"Please tell me what year it is right now."</i> <b>A. Able to report correct year</b> 3. <b>Correct</b> 2. <b>Missed by 1 year</b> 1. <b>Missed by 2 - 5 years</b> 0. <b>Missed by &gt; 5 years</b> or no answer
Enter Code <input type="checkbox"/>	Ask patient: <i>"What month are we in right now?"</i> <b>B. Able to report correct month</b> 2. <b>Accurate within 5 days</b> 1. <b>Missed by 6 days to 1 month</b> 0. <b>Missed by &gt; 1 month</b> or no answer
Enter Code <input type="checkbox"/>	Ask patient: <i>"What day of the week is today?"</i> <b>C. Able to report correct day of the week</b> 1. <b>Correct</b> 0. <b>Incorrect</b> or no answer
<b>C0400. Recall</b>	
Enter Code <input type="checkbox"/>	Ask patient: <i>"Let's go back to an earlier question. What were those three words that I asked you to repeat?"</i> 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> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> ("something to wear") 0. <b>No</b> - could not recall
Enter Code <input type="checkbox"/>	<b>B. Able to recall "blue"</b> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> ("a color") 0. <b>No</b> - could not recall
Enter Code <input type="checkbox"/>	<b>C. Able to recall "bed"</b> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> ("a piece of furniture") 0. <b>No</b> - could not recall
<b>C0500. BIMS Summary Score</b>	
Enter Score <input type="text"/>	Add scores for questions C0200-C0400 and fill in total score (00-15) Enter 99 if the patient was unable to complete the interview
<b>C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted?</b>	
Enter Code <input type="checkbox"/>	0. <b>No</b> (patient was able to complete Brief Interview for Mental Status) → Skip to GG0100, Prior Functioning: Everyday Activities 1. <b>Yes</b> (patient was unable to complete Brief Interview for Mental Status) → Continue to C0900, Memory/Recall Ability

### Item Rationale

- Direct or performance-based testing of cognitive function decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.

- Cognitively intact patients may appear to be cognitively impaired because of a language barrier, hearing impairment, or lack of social interaction.
- Some patients 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.
- Assessment of a patient's mental status provides a direct understanding of patient function that may:
  - enhance future communication and assistance; and
  - direct clinician interventions to facilitate greater independence such as posting or providing reminders for self-care activities.
- 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, comprehensive discharge planning.

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

1. Interview any patient not screened out by item C0100, Should Brief Interview for Mental Status Be Conducted?
2. Conduct the interview in a private setting.
3. Be sure the patient can hear you.
  - Patients with a 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.
4. Sit so that the patient can see your face. Minimize glare by directing light sources away from the patient's face.
5. 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."
6. If the patient 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."
7. Directly ask the patient each item in C0200 through C0400 at one sitting and in the order provided.
8. If the patient chooses not to answer a particular item or the patient provides nonsensical responses, accept his or her refusal and move on to the next questions. For C0200 through C0400, code refusals as incorrect or could not recall.

## Coding Instructions

*Collect BIMS items during the 3-day admission assessment period.*

### Coding Tips

- If a staff member is unable to articulate or pronounce any of the cognitive interview items clearly, for any reason (e.g. accent or speech impairment), have a different staff member conduct the BIMS.
  - Nonsensical responses should be coded as zero. The clinician should determine if the patient provides irrelevant or nonsensical responses throughout the interview and should document this behavior. The clinician would further seek clinical staff documentation of disorganized thinking in the medical record that would indicate this behavior is constant.
  - Rules for stopping the BIMS interview before it is complete:
    - Stop the interview after completing (C0300C) “Day of the Week” if:
      - responses to C0300A, C0300B and C0300C have been nonsensical (i.e., any response that is unrelated, incomprehensible, or incoherent; not informative with respect to the item being rated), OR
      - there has been no verbal or written response to **any** of the questions up to this point, OR
      - there has been no verbal or written response to some questions up to this point and for all others, the patient 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 (C0900) be Conducted?
      4. Complete the Staff Assessment for Mental Status. (C0900) if the patient’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.

#### DEFINITION

#### NONSENSICAL 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

1. Interviewer asks patient to state the year. The patient 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 patient to state the year. The patient says, “Oh what difference does the year make when you’re as old as I am?” The interviewer asks the patient to try to name the year, and the patient 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 patient’s comment is logical and clearly relates to the question.

3. Interviewer asks the patient to name the day of the week. Patient 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 patient’s comment clearly does not relate to the question; it is nonsensical

## C0200. Repetition of Three Words

Brief Interview for Mental Status (BIMS)	
C0200. Repetition of Three Words	
Enter Code <input type="text"/>	Ask patient: <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>  <b>Number of words repeated after first attempt</b> 3. <b>Three</b> 2. <b>Two</b> 1. <b>One</b> 0. <b>None</b>  After the patient’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.

### Item Rationale

- The 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.

### Steps for Assessment

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

1. Say to the patient: “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 patient: “Now please tell me the three words.”

3. After the patient’s first attempt to repeat the items:

- If the patient 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 patients’ recall ability. Putting words in context stimulates learning and fosters memory of the words that patients will be asked to recall in item C0400, even among patients able to repeat the words immediately.
- If the patient recalled two or fewer words, code C0200, Repetition of three words according to the patient’s recall on this first attempt. Next say to the patient: “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 patient still does not recall all three words correctly, you may repeat the words and category cues one more time. Do not code the number of repeated words on the second or third attempt.
- If the patient does not repeat all three words after three attempts, re-assess ability to hear. If the patient 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.

#### DEFINITION

##### CATEGORY CUE

Phrase that puts a word in context to help with learning and to serve as a hint that helps prompt the patient. 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.”

## Coding Instructions

*Record the maximum number of words that the patient 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 patient needed to complete.
- Code 3, three: if the patient repeated all 3 words on the first attempt.
- Code 2, two: if the patient repeated only 2 of the 3 words on the first attempt.
- Code 1, one: if the patient repeated only 1 of the 3 words on the first attempt.
- Code 0, none: if the patient did not repeat any of the 3 words on the first attempt.
- Coding Tips If the patient is unable to complete the BIMS verbally, it may be administered using alternative methods. Directions and guidance on alternative methods that may be used to conduct the BIMS interview are provided at the end of Section C instructions.

- If the patient’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.

## Examples

1. The interviewer says, “The words are sock, blue, and bed. Now please tell me the three words.” The patient 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 Repetition of Three Words would be coded 3, three words correct.

Rationale: The patient 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 patient 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 patient says, “Oh yes, that’s right, sock, blue, bed.”

Coding: C0200 Repetition of Three Words would be coded 2, two of three words correct.

Rationale: The patient repeated two of the three items on the first attempt. Patients 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 patient says, “Blue socks belong in the dresser.” The interviewer codes according to the patient’s response and then the interviewer repeats the three words plus the category cues.

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

Rationale: The patient repeated two of the three items—blue and sock. The patient put the words into a sentence, resulting in the patient 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 patient replies, “What were those three words?” The patient’s response is coded and then the interviewer repeats the three words plus the category cues.

Coding: C0200 Repetition of Three Words would be coded 0, none of the words correct.

Rationale: The patient did not repeat any of the three words after the first time the interviewer said them.



## C0300. Temporal Orientation: Year, Month, Day

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

### Item Rationale

- A lack of temporal orientation may lead to decreased communication or participation in activities.
- Not being oriented may be frustrating or frightening.
- If staff know that a patient has a problem with orientation, they can provide reorientation aids and verbal reminders that may reduce anxiety and encourage patient 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.
- Patients who are not oriented may need further assessment for delirium, especially if this fluctuates or is recent in onset.

#### 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.

### Steps for Assessment

*Basic BIMS interview instructions are shown on page C-4 and C-5.*

1. Ask the patient each of the 3 questions in Item C0300 separately.
2. Allow the patient up to 30 seconds for each answer and do not provide clues.
3. If the patient 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 3, correct: if the patient states the correct year.
- Code 2, missed by 1 year: if the patient's answer is incorrect and is within one year from the current year.

- Code 1, missed by 2-5 years: if the patient's answer is incorrect and is within 2 to 5 years from the current year.
- Code 0, missed by >5 years or no answer: if the patient's answer is incorrect and is **greater than** 5 years from the current year or the patient chooses not to answer the item.

## Examples

1. The date of interview is May 5, 2018. The patient, responding to the statement, "Please tell me what year it is right now," states that it is 2018.

Coding: C0300A would be coded 3, correct.

Rationale: 2018 is the current year at the time of this assessment.

2. The date of interview is June 16, 2018. The patient, responding to the statement, "Please tell me what year it is right now," states that it is 2015.

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

Rationale: 2015 is within 2 to 5 years of 2018.

3. The date of interview is January 10, 2018. The patient, responding to the statement, "Please tell me what year it is right now," states that it is 1918.

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

Rationale: Even though the '18 part of the year would be correct, 1918 is more than 5 years from 2018.

4. The date of interview is April 1, 2018. The patient, responding to the statement, "Please tell me what year it is right now," states that it is "18." The interviewer asks, "Can you tell me the full year?" The patient still responds "18," and the interviewer asks again, "Can you tell me the full year, for example, nineteen-eighty-two." The patient states, "2018."

Coding: C0300A would be coded 3, correct.

Rationale: Even though '18 is partially correct, the only correct answer is the exact year. The patient must state "2018," not "18" or "1818" or "1918."

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

## Coding Tips

- In most instances, it will be immediately obvious which code to select. In some cases, you may need to write the patient'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, 2016. The patient, 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 patient correctly stated the month.

2. The date of interview is June 28, 2016. The patient, 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 patient 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, 2016. The patient, 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 patient missed the correct month by six days. June 25th (day 1) + 5 more days = June 30th. Therefore, the patient's answer is incorrect within 6 days to 1 month.

4. The date of interview is June 30, 2016. The patient, 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 patient missed the month by more than 1 month.

5. The date of interview is June 2, 2016. The patient, 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 29th. The patient 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 1, correct: if the answer is correct.
- Code 0, incorrect, or no answer: if the answer is incorrect or the patient chooses not to answer the item.

## Examples

1. The day of interview is Monday, June 27, 2016. The interviewer asks: “What day of the week is it today?” The patient responds, “It’s Monday.”

Coding: C0300C would be coded 1, correct.

Rationale: The patient correctly stated the day of the week.

2. The day of interview is Monday, June 27, 2016. The patient, responding to the question, “What day of the week is it today?” states, “Tuesday.”

Coding: C0300C would be coded 0, incorrect.

Rationale: The patient incorrectly stated the day of the week.

3. The day of interview is Monday, June 27, 2016. The patient, 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 patient did not answer the question correctly.

## C0400. Recall

C0400. Recall	
Enter Code <input type="checkbox"/>	Ask patient: <i>Let’s go back to an earlier question. What were those three words that I asked you to repeat?</i> 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> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> (“something to wear”) 0. <b>No</b> - could not recall
Enter Code <input type="checkbox"/>	<b>B. Able to recall “blue”</b> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> (“a color”) 0. <b>No</b> - could not recall
Enter Code <input type="checkbox"/>	<b>C. Able to recall “bed”</b> 2. <b>Yes, no cue required</b> 1. <b>Yes, after cueing</b> (“a piece of furniture”) 0. <b>No</b> - could not recall

## Item Rationale

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

## Steps for Assessment

*Basic BIMS interview instructions are shown on page C-4 and C-5.*

1. Ask the patient 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-7 for the definition of category cue). Category cues should be used only after the patient 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 patient is asked to remember:*

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

## Coding Tips

- If on the first try (without cueing), the patient 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 patient the cue and the patient 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 patient is asked to recall the three words that were initially presented. The patient 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, patients might choose not to answer for other reasons.

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

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

Rationale: The patient’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 patient 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 patient independently recalled the item on the first attempt.

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

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

Rationale: The patient did not recall the item, even with a cue.

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

Rationale: The patient did recall after being given the cue.

Coding: C0400C, bed, would be coded 0, no—could not recall.

Rationale: The patient did not recall the item, even with a cue.

## C0500. BIMS Summary Score

C0500. BIMS Summary Score	
<small>Enter Score</small>	<b>Add scores for questions C0200-C0400 and fill in total score (00-15)</b> <b>Enter 99 if the patient was unable to complete the interview</b>
<input style="width: 20px; height: 20px;" type="text"/>	

### Item Rationale

- The total score:
  - Decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.
  - Provides staff with a more reliable estimate of patient function and allows staff interactions with patients that are based on more accurate impressions about patient ability.
- The BIMS is a brief screener that aids in detecting cognitive impairment. It does not assess all possible aspects of cognitive impairment. The final determination of the level of impairment should be made by the patient’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 patients can hear all questions and the patient is not delirious suggest the following distributions:

- 13–15: cognitively intact
- 8–12: moderately impaired
- 0–7: severe impairment

- 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.

## 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 patient. 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 patient 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 patient chooses not to answer four or more items, then the interview is coded as incomplete and a staff assessment (item C0900 Memory/Recall Ability) is completed.
  - To be considered a completed interview, the patient had to attempt and provide relevant answers to at least four of the questions included in C0200-C0400C. 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-5 for patients who choose not to participate at all.
  - Code 99, unable to complete interview: If (a) the patient chooses not to participate in the BIMS, (b) if four or more items were coded 0 because the patient chose not to answer or gave a nonsensical response, or (c) if any of the BIMS items is coded with a “-“ (dash).

## Coding Tips

- Occasionally, a patient 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 code 99 for C0500, **BIMS Summary Score**, and complete the staff assessment of mental status.

## Example

1. The patient’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 - **BIMS summary score** would be coded 12 (Sum of C0200–C0400C).

2. The patient’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 – BIMS summary score** would be coded as 07 (Sum of C0200-C0400C). **C0600 – Should the Staff Assessment for Mental Status (C0900) be Conducted?** is coded as 0, No and follow the skip pattern

3. **STOP the interview if each of items C0200-C300C are coded as 0**, because a patient chose not to participate in the BIMS and/or has provided nonsensical answers **and/or** does not provide verbal or written responses, then **stop the interview after C300C**.

**Example:** The patient’s score on items C0200-C0400C were as follows:

C0200 (repetition)	0
C0300A (year)	0
C0300B (month)	0
C0300C (day)	0 (Interview is stopped after C0300C)
C0400A (recall “sock”)	(-)
C0400B (recall “blue”)	(-)
C0400C (recall “bed”)	(-)

Coding: C0200-C0300C, are coded 0 and dashes entered for C0400A-C. **C0500 – BIMS Summary Score**, enter code 99, unable to complete interview, C0600 Should the Staff Assessment for Mental Status is coded 1, Yes and complete the Staff Assessment for Mental Status, C0900.

Note: a zero score does not mean the BIMS was incomplete. To be incomplete, a patient had to choose not to answer or give completely unrelated, nonsensical responses to four or more items.

## C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted?

C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted?	
Enter Code <input type="checkbox"/>	0. No (patient was able to complete Brief Interview for Mental Status) → Skip to GG0100. Prior Functioning: Everyday Activities 1. Yes (patient was unable to complete Brief Interview for Mental Status) → Continue to C0900. Memory/Recall Ability



## Item Rationale

- 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 patients 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 techniques, activities, and therapies may not be offered.
- 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.

## Steps for Assessment

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

## Coding Instructions

- Complete during the 3-day admission assessment period. Code 0, no: if the BIMS was completed and scored between 00 and 15. Skip to GG0100. Prior Functioning: Everyday Activities.
- Code 1, yes: if the patient chooses not to participate in the BIMS or if four or more items were coded 0 because the patient chose not to answer or gave a nonsensical response. Continue to C0900. Memory/Recall Ability. Note: C0500 should be coded 99.

## Coding Tips

- If a patient is scored 00 on C0500, BIMS Summary Score, C0900, Memory/Recall Ability, should not be completed. 00 is a legitimate value for C0500 and indicates that the interview was complete. To have an incomplete interview, a patient had to choose not to answer or had to give completely unrelated, nonsensical responses to four or more BIMS items resulting in the interview being stopped.

## C0900. Memory/Recall Ability

Staff Assessment for Mental Status	
Do not conduct if Brief Interview for Mental Status (C0200-C0500) was completed.	
C0900. Memory/Recall Ability (3-day assessment period)	
↓ Check all that the patient 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"/>	E. That he or she is in a hospital/hospital unit
<input type="checkbox"/>	Z. None of the above were recalled

### Item Rationale

- 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 patient’s baseline.

### Steps for Assessment

1. Ask the patient 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 patient is not in his or her room, ask, “Will you show me to your room?” Observe the patient’s ability to find the way.
2. For patients 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 patient gave indications of recalling these subjects or recognizing them during the assessment period.
3. Observations should be made by staff across all shifts and departments and others with close contact with the patient.
4. Review the medical record for indications of the patient’s recall of these subjects during the assessment period.

### Coding Instructions

*For each item that the patient recalls, check the corresponding answer box. If the patient recalls none, check none of above. Complete during the 3-day admission assessment period.*

- Check C0900A, Current season: if patient is able to identify the current season (e.g., correctly refers to weather for the time of year, legal holidays, religious celebrations).
- Check C0900B, Location of own room: if patient is able to locate and recognize own room. It is not necessary for the patient 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 patient is able to distinguish staff members from family members, strangers, visitors, and other patients. It is not necessary

for the patient to know the staff member's name, but he or she should recognize that the person is a staff member and not the patient's son or daughter, etc.

- Check C0900E, That he or she is in a hospital/hospital unit: if patient is able to determine that he or she is currently in a hospital/hospital unit. To check this item, it is not necessary that the patient be able to state the name of the hospital, but he or she should be able to refer to the hospital by a term such as a "hospital" or "rehabilitation center" or "where I am getting therapy."
- Check C0900Z, None of above was recalled.

## Coding Tips

- When coding C0900, the clinician can use information gathered from various resources such as consulting with the direct care staff and clinical documentation. Observing the patient's interactions with others in different locations and circumstances is important for a comprehensive understanding of the patient's mental status.

## Guidance for Completing the BIMS Using Alternative Methods

If the patient'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.

### Instructions for BIMS When Administered in Writing

1. Interview any patient not screened out by Should Brief Interview for Mental Status Be Conducted? item (C0100).
2. Conduct the interview in a private setting.
3. Patients with visual impairment should be tested using their usual visual aids.
4. Minimize glare by directing light sources away from the patient's face and from written materials.
5. Provide a written introduction before starting the interview.
6. Suggested language: "I would like to ask you some questions, which I will show you in a moment. 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. We ask these questions of everyone so we can make sure that our care will meet your needs."
7. Directly provide the written questions for each item in C0200 through C0400 at one sitting and in the order provided.
  - For each BIMS question, show the patient a sheet of paper or card with the instruction for that question from the form clearly written in a large enough font to be easily seen.

- The patient may respond to any of the BIMS questions in writing.
  - Show separate sheets or cards for each question or statement.
  - For C0200 items, instructions should be written as:
    - I have written 3 words for you to remember. Please read them. Then I will remove the card and ask you repeat or write down the words as you remember them.
    - Category cues should be provided to the patient in writing after the patient’s first attempt to answer. Written category cues should state: “sock, something to wear; blue, a color; bed, a piece of furniture.”
  - For C0300 items, instructions should be written as:
    - C0300A: “Please tell me what year it is right now.”
    - C0300B: “What month are we in right now?”
    - C0300C: “What day of the week is today?”
  - For C0400 items, instructions should be written as:
    - Let’s go back to an earlier question. What were those three words that I asked you to repeat?”
    - If the patient is unable to remember a word, provide Category cues again, but without using the actual word. Therefore, Category cues for:
      - i. C0400A should be written as “something to wear,”
      - ii. C0400B should be written as “a color,” and
      - iii. C0500C should be written as “a piece of furniture.”
8. If the patient chooses not to answer a particular item, accept his or her refusal and move on to the next question. For C0200 through C0400C, code refusals as incorrect.
9. Rules for stopping the interview are the same as if for administering the BIMS verbally see pages C-5.

The facility may develop their own signs for this process. If the facility develops their own, they must use the exact language as that used in the item set.

## Supplement A: Interviewing to Increase Patient Voice in IRF-PAI

A simple performance-based assessment of cognitive function can quickly clarify a patient's cognitive status. The majority of patients, even those with moderate to severe cognitive impairment, are able to answer some simple questions about these topics.

Even simple scripted interviews like those in the IRF-PAI involve a dynamic, collaborative process. There are some basic approaches that can make interviews simpler and more effective.

- Introduce yourself to the patient.
- Be sure the patient can hear what you are saying.
  - Do not mumble or rush. Articulate words clearly.
  - Ask the patient if he or she uses or owns a hearing aid or other communication device.
  - Help him or her get the aid or device in place before starting the interview.
  - The assessor may need to offer an assistive device (headphones).
  - If the patient is using a hearing aid or other communication device make sure that it is operational.
- Ask whether the patient would like an interpreter (language or signing) if the patient does not appear to be fluent in English or continues to have difficulty understanding. Interpreters are people who translate oral or written language from one language to another. If an interpreter is used during patient interviews, he or she should not attempt to determine the intent behind what is being translated, the outcome of the interview, or the meaning or significance of the interviewee's responses. The patient should determine meaning based solely on his or her interpretation of what is being translated.
- Find a quiet, private area where you are not likely to be interrupted or overheard. This is important for several reasons:
  - Background noise should be minimized.
  - Some items are personal, and the patient will be more comfortable answering in private. The interviewer is in a better position to respond to issues that arise.
  - Decrease available distractions.
- Sit where the patient can see you clearly and you can see his or her expressions.
  - Have your face well lighted.
  - Minimize glare by directing light sources away from the patient's face.
  - Ask the patient where you should sit so that he or she can see you best. Some patients have decreased central vision or limited ability to turn their heads.
- Establish rapport and respect.
  - The steps you have already taken to ensure comfort go a long way toward establishing rapport and demonstrating respect.

- You can also engage the patient in general conversation to help establish rapport.
- If the patient asks a particular question or makes a request, try to address the request or question before proceeding with the interview.
- Explain the purpose of the questions to the patient.
  - Start by introducing the topic and explain that you are going to ask a series of questions.
  - You can tell the patient that these questions are designed to be asked of everyone to make sure that nothing is missed.
  - Highlight what you will ask.
  - End by explaining that his or her answers will help the care team develop a care plan that is appropriate for the patient.
  - Suggested explanations and introductions are included in specific item instructions.
- Say and show the item responses.
  - It is helpful to many older adults to both hear and read the response options.
  - As you verbally review the response options, show the patient the items written in large, clear print on a piece of paper or card.
  - Patients may respond to questions verbally, by pointing to their answers on the visual aid, or by writing out their answers.
- Ask the questions as they appear in the questionnaire.
  - Use a nonjudgmental approach to questioning.
  - Don't be afraid of what the patient might say; you are there to hear it.
  - Actively listen; these questions can provide insights beyond the direct answer.
- Move on to another question if the patient is unable to answer.
  - Even if the interview item cannot be completed the time spent is not wasted. The observation of patient behaviors and attention during the interview attempt provide important insights into delirium, cognition, mood, etc.

## Supplement B. Cue Cards for BIMS

### Written Introduction Card – BIMS – Items C0200 – C0400

I would like to ask you some questions, which I will show you in a moment.

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.

We ask these questions so that we can make sure that our care will meet your needs.

### Written Instruction Cards – Item C0200 – Repetition of Three Words

I have written 3 words for you to remember.

Please read them.

Then, I will remove the card and ask you to repeat or write down the words as you remember them.

Word Card – Item C0200

SOCK

BLUE

BED

Category Cue Card – Item C0200

SOCK, something to wear

BLUE, a color

BED, a piece of furniture



Written Instruction Cards – Item C0300 – Temporal  
Orientation Statement Card – C0300A – Year

Please tell me what  
year it is right now.

Question Card – C0300B – Month

What month are we  
in right now?

Question Card – Item C0300C – Day

What day of the  
week is today?

Written Instruction Card – Item C0400 – Recall

Let's go back to an  
earlier question

What were those three words  
that I asked you to repeat?

Category Cue Card – Item C0400A – Sock

Something to wear

Category Cue Card – Item C0400B – Blue

A color

Category Cue Card – Item C0400C

A piece of furniture