Section C
Cognitive Patterns

Intent
To determine the resident’s ability to remember, think coherently, and organize daily self-care activities. The focus is on resident performance, including a demonstrated ability to remember recent and long-past events and to perform key decision-making skills.

Mental status exams and assessment tools should be used carefully. A resident may not know the current year or who is president because he simply does not care. Impaired vision can make it difficult for a resident to recognize staff, friends, or family members.

Interview the resident in a private, quiet area without distractions. The information gathering process does not need to be completed in one sitting, but may be ongoing during the entire assessment period.

Significant Changes
C0500, C1000- Decision-making or organized thinking deteriorates or improves

Care Area Triggers
C0200, C0400, C0500, C0700, C0800, C1000, C1100– Cognitive Impairment/Dementia
C0500 - Delirium
C1000 – ADL/Functional Rehabilitation Potential
C1300 – Cognitive Loss / Dementia

RUG IV Categories
C0500– Behavioral Symptoms and Cognitive Performance

Quality Indicators
C0200-C1300– Cognitive Impairment

Enhanced Quality Measures
C1300 – Percent of Short Stay Residents with Delirium

Skilled Charting
Cognitive Impairment

Care Plans
Cognitive Deficit, Decision-Making Impaired
Cognitive Deficit, Disordered Thinking
Cognitive Deficit, Memory Problem

Changes from 2.0

From 2.0 section B
Old sections of B retained in Staff Assessment items in C0700-C1000 and in Delirium item C1300. 2.0 section C was Communication / Hearing Patterns, now found in section B: Hearing/Speech/ Vision C0700 and C0800 - Short term and long term memory separated into two different items
C11 - Signs and Symptoms of Delirium:
Title changed from: Indicators of Delirium-Periodic Disordered Thinking/Awareness
Coding value descriptions changed: recent onset dropped, and fluctuation added

**New Items**
C0100 through C0500 - Brief Interview for Mental Status:
- C0100 – Should Brief Interview for Mental Status be Conducted?
- C0200 - Repetition of Three Words
- C0300 - Temporal Orientation (orientation to year, month, and day)
- C0400 - Recall
- C0500 - Summary Score

- C0600 - Should Staff Assessment for Mental Status be Conducted?

**Dropped Items**
B6 – Change in Cognitive Status

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**C0100. Should Brief Interview for Mental Status be Conducted?**  
Skip Item  
**New item**

Attempt to conduct interview with all residents

0. **No** (resident is rarely/never understood)  ➔  Skip to C0700-C1000, Should the Staff Assessment for Mental Status be Conducted?

1. **Yes**  ➔  Continue to C0200, Repetition of Three Words

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**C0200. Repetition of Three Words**

**New item**

**Brief interview for Mental Status (BIMS):**

<table>
<thead>
<tr>
<th><strong>C0200. Repetition of Three Words</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ask resident: “I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: sock, blue, and bed. Now tell me the three words.”</strong></td>
</tr>
</tbody>
</table>

**Number of words repeated after first attempt**

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

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

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**C0200. Repetition of Three Words**

**New item**

**CAT – Cognitive Impairment/Dementia**  
**QI – Cognitive Impairment**

The BIMS is a Structured test to replace the MDS 2.0 staff assessment for residents who can be understood, and directly tests domains common to most cognitive tests that are used in other settings, including registration, temporal orientation, and recall. The BIMS uses a resident interview and gives partial credit for answers to make it more relevant and specific to the SNF population.
Ask resident: “I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: **sock, blue, and bed.** Now tell me the three words.”

**Number of words repeated after first attempt**
0. None 1. One 2. Two 3. Three

After the resident’s first attempt, repeat the words using cues (Sock, something to wear; blue, a color; bed, a piece of furniture”) You may repeat the words up to two or more times. These three words will be the subject of the recall test in C4, later in the interview.

**Rules for stopping the interview before it is complete:**
Stop the interview after completing (C0300C) “Day of the Week” if:
- 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
- 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 resident has given a nonsensical response.

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

**C0300. Temporal Orientation (orientation to year, month, and day)**

**QI – Cognitive Impairment**

Ask the resident each of the 3 questions in Item C0300 separately. Allow the resident up to 30 seconds for each answer and do not provide clues. 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.”

Ask resident: “Please tell me what year it is right now.”

**A. Able to report correct year**
0. Missed by >5 years or no answer 1. Missed by 2-5 years 2. Missed by 1 year 3. Correct

Ask resident “What month are we in right now?”

**B. Able to report correct month**
0. Missed by >1 month or no answer
1. Missed by 6 days to 1 month
2. Accurate within 5 days

Ask resident: “What day of the week is today?”

**C. Able to report correct day of the week**
0. Incorrect or no answer 1. Correct
C0400. Recall

Ask resident: “Let’s go back to the first question. What were those three words that I asked you to repeat?”
If unable to remember a word, give cue (something to wear; a color; a piece of furniture) for that word.

A. **Able to recall “sock”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

B. **Able to recall “blue”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

C. **Able to recall “bed”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

**C0400. Recall**

**CAT – Cognitive Impairment/Dementia**  **QI – Cognitive Impairment**

Asks the resident to recall the three words from C2, from earlier in the interview.

Ask resident: “Let’s go back to the first question. What were the three words 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.

If the interview is stopped, do the following: Code -, **dash** in C0400A, C0400B, and C0400C.

A. **Able to recall “sock”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

B. **Able to recall “blue”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

C. **Able to recall “bed”**
   0. No—could not recall
   1. Yes, after cueing
   2. Yes, no cue required

**C0500. Summary Score**

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

**C0500. Summary Score**

**Significant Change – Decision-making changes from 0 or 1 to 2 or 3/from 2 or 3 to 0 or 1**

**RUG – Behavioral Symptoms and Cognitive Performance**
**CAT – Cognitive Impairment / Dementia, Delirium**  **QI – Cognitive Impairment**

This score represents the end of the memory part of the resident interview.

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

**C0600. Should Staff Assessment of Mental Status (C0700-C1000) be Conducted?**

1. No (resident was able to complete interview) → Skip to C1300, Signs and Symptoms of Delirium
0. Yes (resident was unable to complete interview) → Continue to C0700, short-term Memory OK

**C0600. Should Staff Assessment of Mental Status (C7-C10) be Conducted?**

1. No (resident was able to complete interview) → Skip to C1300, Signs and Symptoms of Delirium
0. Yes (resident was unable to complete interview) → Continue to C0700, short-term Memory OK
The last part of this section, C0700-C1100, is only to be completed if the first part of section C, the resident interview, was not completed

<table>
<thead>
<tr>
<th>C0700</th>
<th>Short Term Memory OK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seems or appears to recall after 5 minutes.</td>
</tr>
<tr>
<td></td>
<td>0. Memory OK</td>
</tr>
<tr>
<td></td>
<td>1. Memory problem</td>
</tr>
</tbody>
</table>

**C0700. Short Term Memory OK**

**CAT – Cognitive Impairment/Dementia**  **QI – Cognitive Impairment**  **RUG – Behavioral Symptoms and Cognitive Performance**

Ask the resident to describe a recent, verifiable event or use a more structured short term memory test.

Seems or appears to recall after 5 minutes.  

0. Memory OK  

1. Memory problem

*From 2.0 item B2*  Short term and long term memory separated into two different items

<table>
<thead>
<tr>
<th>C0800</th>
<th>Long Term Memory OK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seems or appears to recall long past.</td>
</tr>
<tr>
<td></td>
<td>0. Memory OK</td>
</tr>
<tr>
<td></td>
<td>1. Memory problem</td>
</tr>
</tbody>
</table>

**C0800. Long Term Memory OK**

**CAT – Cognitive Impairment/Dementia**  **QI – Cognitive Impairment**

Sample questions include: Where did you live just before you came here?  
What year were you born? Do you have children?  
Seems or appears to recall long past.  

0. Memory OK  

1. Memory problem

*From 2.0 item B2*  Short term and long term memory separated into two different items

<table>
<thead>
<tr>
<th>C0900</th>
<th>Memory/ Recall Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Check all that resident was normally able to recall)</td>
</tr>
<tr>
<td></td>
<td>A. Current season</td>
</tr>
<tr>
<td></td>
<td>B. Location of own room</td>
</tr>
<tr>
<td></td>
<td>C. Staff names and faces</td>
</tr>
<tr>
<td></td>
<td>D. That he or she is in a nursing home</td>
</tr>
<tr>
<td></td>
<td>E. None of the Above were recalled</td>
</tr>
</tbody>
</table>

**C0900. Memory / Recall Ability**  **QI – Cognitive Impairment**  

From 2.0 item B3

Memory / recall performance within the environmental setting

**A. Current Season**  Correctly refers to time of year, weather, major holidays.

**B. Location of Own Room**  Able to locate and recognize own room.  
Not necessary to know the room number, but should be able to find the way to the room.
C. Staff Names and Faces  Able to distinguish staff members from family members, strangers, other visitors, and other residents. Does not need to know the staff member’s name, but recognize that the person is a staff member and not the resident’s family member.

D. That He or She is in a Nursing Home
Does not need to be able to state name of facility, but be able to know he/she is in a facility.

E. NONE OF ABOVE were recalled

<table>
<thead>
<tr>
<th>C1000. Cognitive Skills For Daily Decision-Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Made decisions regarding tasks of daily life)</td>
</tr>
<tr>
<td>0. Independent- decisions consistent/reasonable</td>
</tr>
<tr>
<td>1. Modified Independent - some difficulty in new situations only</td>
</tr>
<tr>
<td>2. Moderately Impaired - decisions poor; cues/supervision required</td>
</tr>
<tr>
<td>3. Severely Impaired - never/rarely made decisions</td>
</tr>
</tbody>
</table>

C1000. Cognitive Skills for Daily Decision-Making

Significant Change – Decision-making changes from 0 or 1 to 2 or 3/from 2 or 3 to 0 or 1

CAT – Cognitive Impairment/Dementia        QI – Cognitive Impairment
CAT – ADL Functional/Rehabilitation Potential

Resident’s actual performance in making everyday decisions about tasks or activities of daily living (Ex) Choosing items of clothing or knowing when to go to scheduled meals. Focuses on whether or not the resident is actively making decisions, and not whether the staff believes the resident might be capable of doing so or not. Can alert staff to discrepancy between resident’s abilities and current level of performance, or that staff may be encouraging the resident’s dependence.

0. Independent
Resident’s decisions and ability to organize daily routine were consistent and reasonable.

1. Modified Independence
Resident organized daily routine and made safe decisions in familiar situations, but exhibited some difficulty in decision-making when faced with new tasks or situations.

2. Moderately Impaired
Resident’s decisions were poor – required reminders, cues, and supervision in planning, organizing, and correcting daily routines. Resident attempts to make decisions although poorly.

3. Severely Impaired
Resident never (or rarely) made decisions.

<table>
<thead>
<tr>
<th>C1100. Procedural Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Memory OK – can perform all or almost all steps in a multitask sequence without cues. Code for recall of what was learned or known.</td>
</tr>
<tr>
<td>0. Yes, Memory OK</td>
</tr>
<tr>
<td>1. Memory Problem</td>
</tr>
</tbody>
</table>

C1100. Procedural Memory

Procedural Memory OK – can perform all or almost all steps in a multitask sequence without cues. Code for recall of what was learned or known. 0. Yes, Memory OK  1. Memory Problem

New item
C1300. Signs And Symptoms Of Delirium (from CAM)

Code after completing Brief Interview for Mental Status or Staff Assessment and reviewing medical record.

<table>
<thead>
<tr>
<th>Coding:</th>
<th>A. Inattention</th>
<th>B. Disorganized Thinking</th>
<th>C. Altered Level Of Consciousness</th>
<th>D. Psychomotor Retardation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Behavior not present</td>
<td>Did the resident have difficulty focusing attention (easily distracted, out of touch or difficulty following what was said)?</td>
<td>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)?</td>
<td>Did the resident have altered level of consciousness? (e.g. vigilant—startled easily to any sound or touch; lethargic—repeatedly dozed off when being asked questions, but responds to voice or touch; stuporous—very difficult to arouse and keep aroused for the interview; comatose—could not be aroused)</td>
<td>Did the resident have an unusually decreased level of activity such as sluggishness, staring into space, staying in one position, moving very slowly?</td>
</tr>
<tr>
<td>1. Behavior continuously present, does not fluctuate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Behavior present, fluctuates (comes and goes, changes in severity)</td>
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<td></td>
</tr>
</tbody>
</table>

C1300. Signs and Symptoms of Delirium

CAT – Cognitive Loss / Dementia      EQM – Percent of short stay residents with delirium

Code for resident’s behavior regardless of what you believe to be the cause, focusing on when the behavior first occurred.

Coding:
0. Behavior not present  1. Behavior continuously present, does not fluctuate  2. Behavior present, fluctuates (comes and goes, changes in severity)

A. Inattention        Did the resident have difficulty focusing attention (easily distracted, out of touch or difficulty following what was said)?

B. 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)?

C. Altered Level Of Consciousness Did the resident have altered level of consciousness? Vigilant—startled easily to any sound or touch  Lethargic—repeatedly dozed off when being asked questions, but responds to voice or touch  Stuporous—very difficult to arouse and keep aroused for the interview

D. Psychomotor Retardation Did the resident have an unusually decreased level of activity such as sluggishness, staring into space, staying in one position, moving very slowly?

From 2.0 item B5 Coding value descriptions changed.
Title changed from: Indicators of Delirium-Periodic Disordered Thinking/Awareness

C1600. Acute Onset Mental Status Change

| Is there evidence of an acute change in mental status from the resident’s baseline? |
|-------------------------------------|----------------------------------|
| 0. No                               | 1. Yes                           |

C1600. Acute Onset Mental Status Change

Is there evidence of an acute change in mental status from the resident’s baseline?

0. No  1. Yes