3Ds: Delirium-Dementia-Depression Assessment Guide

This pocket card provides tools to help identify three common geriatric syndromes that can affect thinking abilities: delirium, dementia, and depression. It is intended to be used as part of a comprehensive assessment and the data entered into the electronic health record. Asymptomatic screening is NOT recommended.

Suggested Approach to Assessment

1. Conduct a general health assessment, including physical exam and labs. E.g., CBC, chem 7, liver panel, calcium, TSH, B12, HIV w/verbal consent documented.

2. Rule out delirium for all patients with cognitive symptoms.

3. Conduct assessment for suicidal thoughts per VA guidelines.

4. Are unusual/atypical symptoms present? E.g., focal neurological symptoms, acute mental status changes. Consider neuroimaging and/or refer for specialty care, such as neuropsychology, psychiatry and/or neurology.

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3Ds Comparison Table

<table>
<thead>
<tr>
<th>Feature</th>
<th>Delirium</th>
<th>Dementia</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Acute</td>
<td>Gradual (years)</td>
<td>Gradual (weeks-months)</td>
</tr>
<tr>
<td>Course</td>
<td>Transient/reversible</td>
<td>Progressive/irreversible</td>
<td>Slowly fluctuating/reversible</td>
</tr>
<tr>
<td>Common Cognitive Deficit</td>
<td>Attention</td>
<td>Memory</td>
<td>Concentration</td>
</tr>
<tr>
<td>Consciousness</td>
<td>Fluctuations</td>
<td>Usually Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>Hallucinations</td>
<td>Common</td>
<td>Less common early</td>
<td>Only if severely depressed</td>
</tr>
<tr>
<td>Agitation</td>
<td>Common</td>
<td>Less common early</td>
<td>Restlessness or sluggishness</td>
</tr>
<tr>
<td>Disorganized Thought</td>
<td>Common</td>
<td>Less common early</td>
<td>Rare</td>
</tr>
<tr>
<td>Speech</td>
<td>Sometimes disorganized</td>
<td>Usually normal, with word-finding problems</td>
<td>Normal, slowed</td>
</tr>
<tr>
<td>Clinical Approach</td>
<td>Address as medical emergency</td>
<td>Conduct a workup</td>
<td>Follow evaluation and treatment guidelines</td>
</tr>
<tr>
<td>Assessment Tools</td>
<td>CAM (see panel)</td>
<td>MiniCog; SLUMS; AD8 (see panels)</td>
<td>PHQ-9 (see panel)</td>
</tr>
</tbody>
</table>
**DELIRIUM**

- Delirium is a medical condition that causes a temporary problem with mental function.
- Delirium occurs commonly in sick older adults, in hospital settings, and in those with pre-existing cognitive problems.
- Delirium is a medical emergency; often the presenting symptom of an underlying illness. Early diagnosis/treatment of the underlying condition offers the best chance of recovery.
- Marked by problems with attention and concentration, and shows a waxing and waning course (patients can seem normal at times).
- Consider delirium and work up potential causes of delirium in ALL patients with mental status changes.

Common medical causes: metabolic disorders, infections, medications, hypoxemia, dehydration
Common medication causes: opioids, anticholinergics, sedative-hypnotics

*Delirium is also known as Acute Brain Failure; Toxic-Metabolic Encephalopathy; or Acute Confusional State.*

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**Delirium Assessment Tool: Confusion Assessment Method (CAM), a Diagnostic Algorithm**

Delirium is diagnosed with the presence of Features 1 and 2, and either Feature 3 or 4.

**Feature 1: Acute Onset and Fluctuating Course**

Usually obtained from family member or caregiver: rapid change from baseline, and fluctuating severity during the day.

**Feature 2: Inattention**

Trouble with attention, being distractible or having difficulty keeping track of what was said. **Example:** Recite the months of the year backwards.

**Feature 3: Disorganized Thinking**

Rambling or irrelevant conversation, unclear or illogical flow of ideas or unpredictable switching from subject to subject.

**Feature 4: Altered Level of Consciousness**

Anything other than alert on scale of Normal [alert], Vigilant [hyperalert], Lethargic [drowsy, easily aroused], Stupor [difficult to arouse] or Coma [unarousable].

DEMENTIA

• Dementia represents a **decline in thinking abilities and/or behavior**.

• The **decline has a functional impact** resulting in loss of independence in daily living activities.

• Common causes of dementia are Alzheimer’s and/or vascular disease.

• Dementia is a diagnosis of exclusion; **other causes of decline must be ruled out first**.

  **Dementia Warning Signs:** These “red flags” should be used to prompt further evaluation of cognition/daily function.

  Clinicians may notice that patient is:

  • Inattentive to appearance or unkempt, inappropriately dressed for weather or disheveled
  • A “poor historian” or forgetful
  • Appearing on the wrong day/time for an appointment
  • Having unexplained weight loss, “failure to thrive” or vague symptoms (e.g., dizziness, weakness)
  • Repeatedly and apparently unintentionally failing to follow directions (e.g., medication non-adherence)
  • Deferring to others to answer questions

  **Dementia Warning Signs continued:**

  Patients or caregivers may report:

  • Asking the same questions over and over again
  • Not being able to follow directions or becoming lost in familiar places
  • Getting very confused about time, people and places
  • Problems with self-care, nutrition, bathing or safety

**ADDITIONAL FACTORS THAT CAN IMPACT THINKING AND DAILY FUNCTION:**

Some common aging-related conditions can cause problems with thinking or memory. Many are treatable. Consider these as you evaluate cognitive concerns.

MENTAL HEALTH: Depression, stress and anxiety can interfere with thinking clearly.

SLEEP: Sleep apnea and chronic insomnia have significant impacts on daytime cognition.

VISION AND HEARING: Uncorrected sensory loss can interfere with optimal cognition.

PTSD: Symptoms can change during aging, with increased concerns for poor attention/memory.

SIDE EFFECTS: Some medications, alone or in combination, can cause confusion.

MEDICAL CONDITIONS: If poorly controlled can cause confusion.

LONELINESS/INACTIVITY: Lack of activity/loss of social connections can negatively affect the brain and its efficient function.
Assess function in daily living activities

The AD8® can assess a patient’s functional status based on the report of a significant other or caregiver. It focuses on CHANGE in the last several years caused by cognitive problems. Answers are “YES, a change,” “NO, no change,” and “Don’t know.”

**SCORING:** Items endorsed as “Yes, a change” are summed to yield the total AD8 score (maximum 8). 0-1 = normal, 2 or greater = impairment is likely

| 1. Problems with judgment (e.g., falls for scams, bad financial decisions, buys gifts inappropriate for recipients). |
| 2. Reduced interest in hobbies/activities. |
| 3. Repeats questions, stories or statements. |
| 4. Trouble learning how to use a tool, appliance or gadget (e.g., cell phone, computer, microwave, remote control). |
| 5. Forgets correct month or year. |
| 6. Difficulty handling complicated financial affairs (e.g., balancing checkbook, income taxes, paying bills). |
| 7. Difficulty remembering appointments. |
| 8. Consistent problems with thinking and/or memory. |

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Assess thinking with brief cognitive tests

If warning signs are present, brief tests can determine if further evaluation is warranted. Examples include: Mini-Cog© (see below) or the St. Louis University Mental Status examination (SLUMS; [http://aging.slu.edu/pdfsurveys/mentalstatus.pdf](http://aging.slu.edu/pdfsurveys/mentalstatus.pdf))

**MINI-COG©**

1. Get the patient’s attention then say, *I am going to say 3 words that I want you to remember now and later. The words are: Banana, Sunrise, Chair. Please say them for me now.* — Give the patient 3 tries to repeat the words. If unable after 3 tries, go to next item.

2. Say all the following phrases in order, *Please draw a clock in the space below. Start by drawing a large circle.* When done, say, *Put all the numbers in the circle.* When done, say, *Now set the hands to show 11:10 (10 past 11).* — If patient has not finished clock drawing in 3 minutes, discontinue and ask for recall items.

3. **What were the 3 words I asked you to remember?**

**SCORING:** 1 pt for each recalled word after the clock drawing test (no points for initial recall). Normal clock is 2 pts; abnormal clock is 0 pts. A normal clock has the following elements: all numbers 1-12, each only once, present in the correct order and direction (clockwise); 2 hands are present, one pointing to 11 and one pointing to 2. Any clock missing any of these elements is scored abnormal. Refusal to draw a clock is scored abnormal.

**Total Score = 0-5 possible** (3-item recall plus clock score) 0-2 = possible impairment; 3-5 suggests no impairment. Abnormal clock = cognitively impaired

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DEPRESSION

*Depression is not a normal part of aging.*

Younger and older adults respond well to treatment: psychotherapy and/or pharmacotherapy. Monitor for cognitive decline, because depression in later life can be a red flag for preclinical dementia. Depression is a major risk factor for suicide.

<table>
<thead>
<tr>
<th>PHQ-9*</th>
<th>Not at all</th>
<th>Several days</th>
<th>&gt;Half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the past two weeks, how often have you been bothered by:</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1. Little or no interest or pleasure in doing things?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed or hopeless?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble sleeping or sleeping too much?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself, or that you are a failure or have let your family down?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking slowly, or being fidgety and restless?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Kroenke, et al. J Gen Int. 2001. PHQ-9 © 1999 Pfizer. All rights reserved.

*CONDUCT SUICIDE RISK EVALUATION if PHQ-9 score > 10, or response to #9 is 1, 2 or 3.*

Contact Julie Moorer, RN, to order copies: Julie.Moorer@va.gov

For more information and patient handouts: www.va.gov/geriatrics/brain

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