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

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

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.

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].

Inouye SK, et al *Ann Intern Med.* 1990; 113: 941-948. Confusion Assessment Method: Training Manual and Coding Guide. © 2003 Hospital Elder Life Program, LLC. Reprinted with permission.

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)

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.

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

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.**

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

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