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Recognizing the 3D's of Mental Illness in Older Adults

DEMENTIA, DEPRESSION, & DELIRIUM

Presented on Sept. 24, 2021 by Stacy Barnes, PhD, Marquette University

Outline

Dementia

Depression

Communicating with patients who have cognitive impairment

Delirium

DEMENTIA

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Significance of Dementia

- 1 in 3 seniors dies with Alzheimer's disease or another form of dementia. It kills more than breast cancer and prostate cancer combined.
- Alzheimer's disease is the 5th leading cause of death in the U.S. for 65+
- In 2023, more than 6.2 Million Americans are living with Alzheimer's Disease. By 2050, this number is projected to rise to nearly 13 Million.
- 72% are age 75 or older
- 2/3 of Americans with Alzheimer's disease are women
- Older Black Americans are 2x as likely to have dementia as older Whites
- Older Hispanics are 1.5x times as likely to have dementia as older Whites

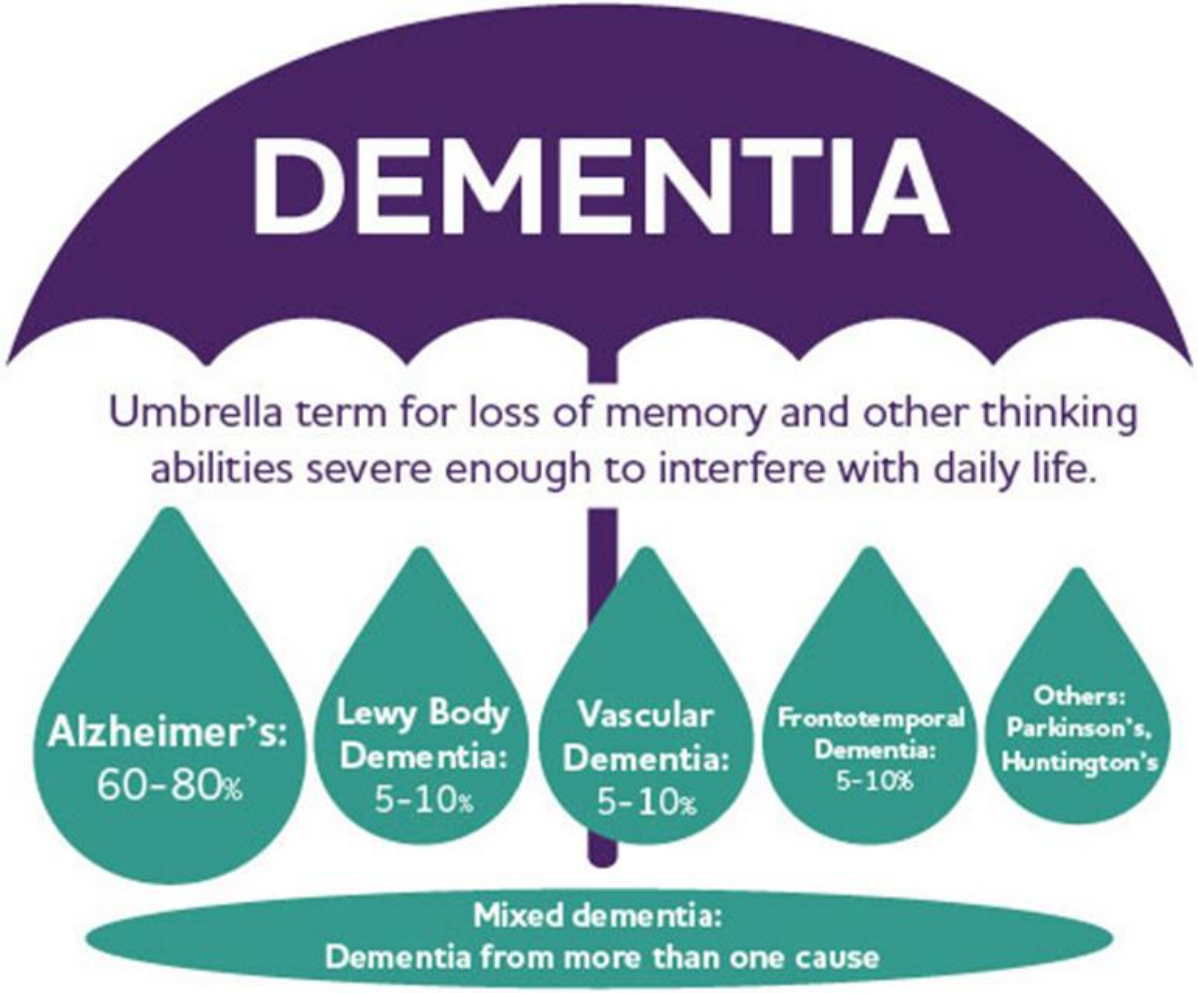
SOURCE: HTTPS://WWW.ALZ.ORG/ALZHEIMERS-DEMENTIA/FACTS-FIGURES

Dementia

Dementia is a general term encompassing a variety of neurodegenerative diseases and conditions

Chronic and persistent, with no cure

Dementia is not part of the normal aging process



Dementia Subtypes

Healthy brain

Alzheimer's disease brain

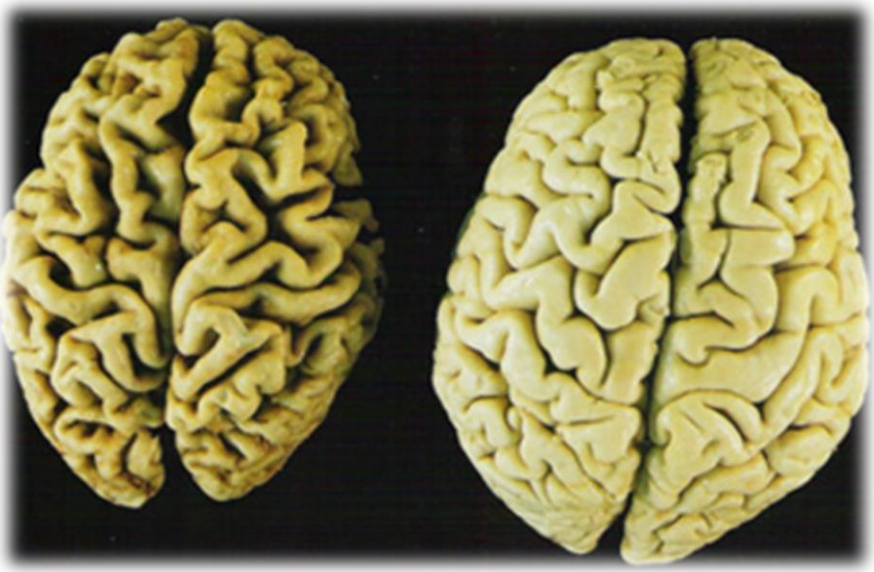
Cerebral cortex:
Responsible for language and information processing

The cortex shrivels up, damaging areas involved in thinking, planning and remembering

Ventricles filled with cerebrospinal fluid grow larger

Hippocampus:
Critical to the formation of new memories

Hippocampus
shrinks severely



Dementia

Dementia is defined as a "significant deterioration in 2 or more areas of cognitive function that is severe enough to interfere with a person's ability to perform everyday activities" (NINDS, 2017)

Diagnosis of dementia requires impairment in 2 or more core mental functions (NINDS, 2017)

- Memory
- Language skills
- Visual perception
- Ability to focus and pay attention
- Ability to reason and solve problems

Plus functional impairment

- Loss of brain function is severe enough that a person has difficulty performing normal everyday tasks (ADLs and IADLs)

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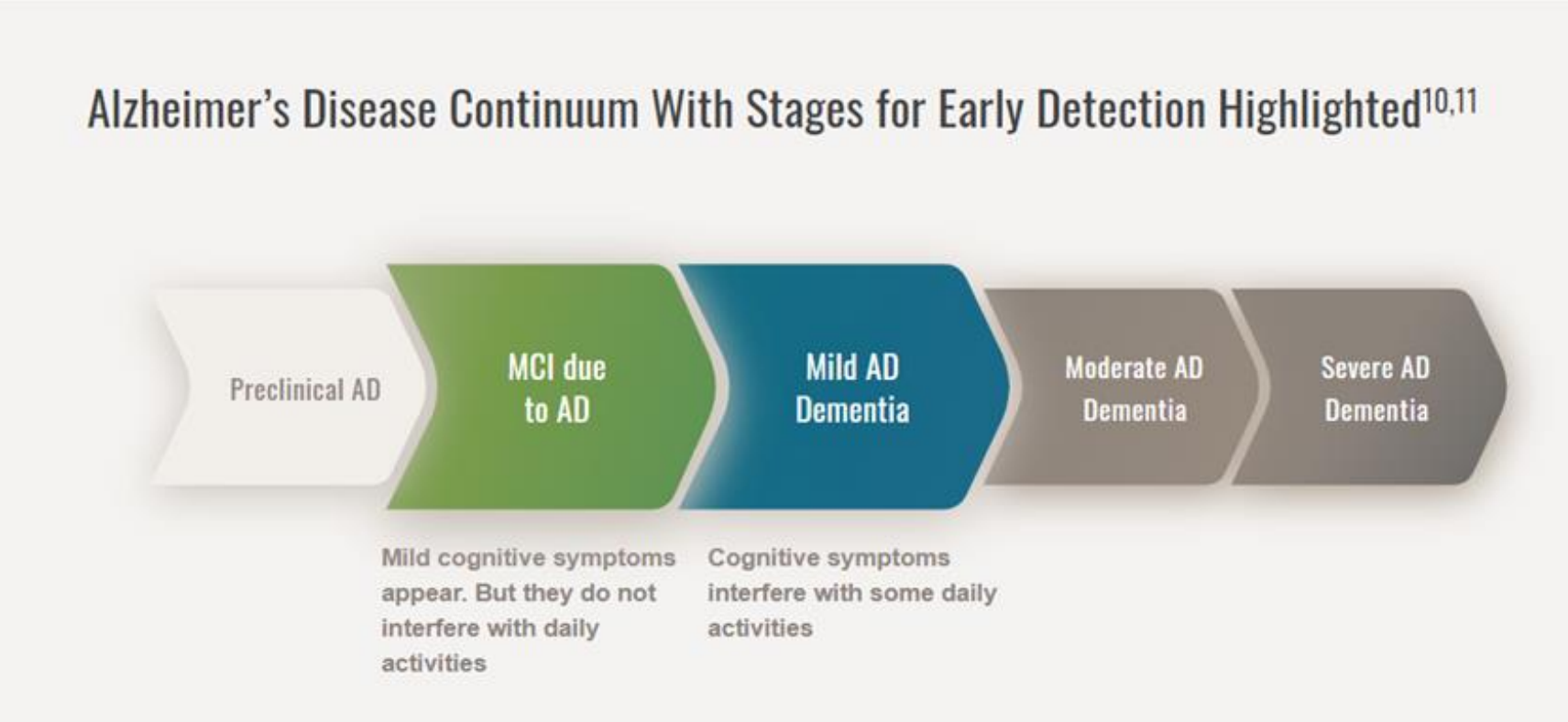
Causes of Dementia

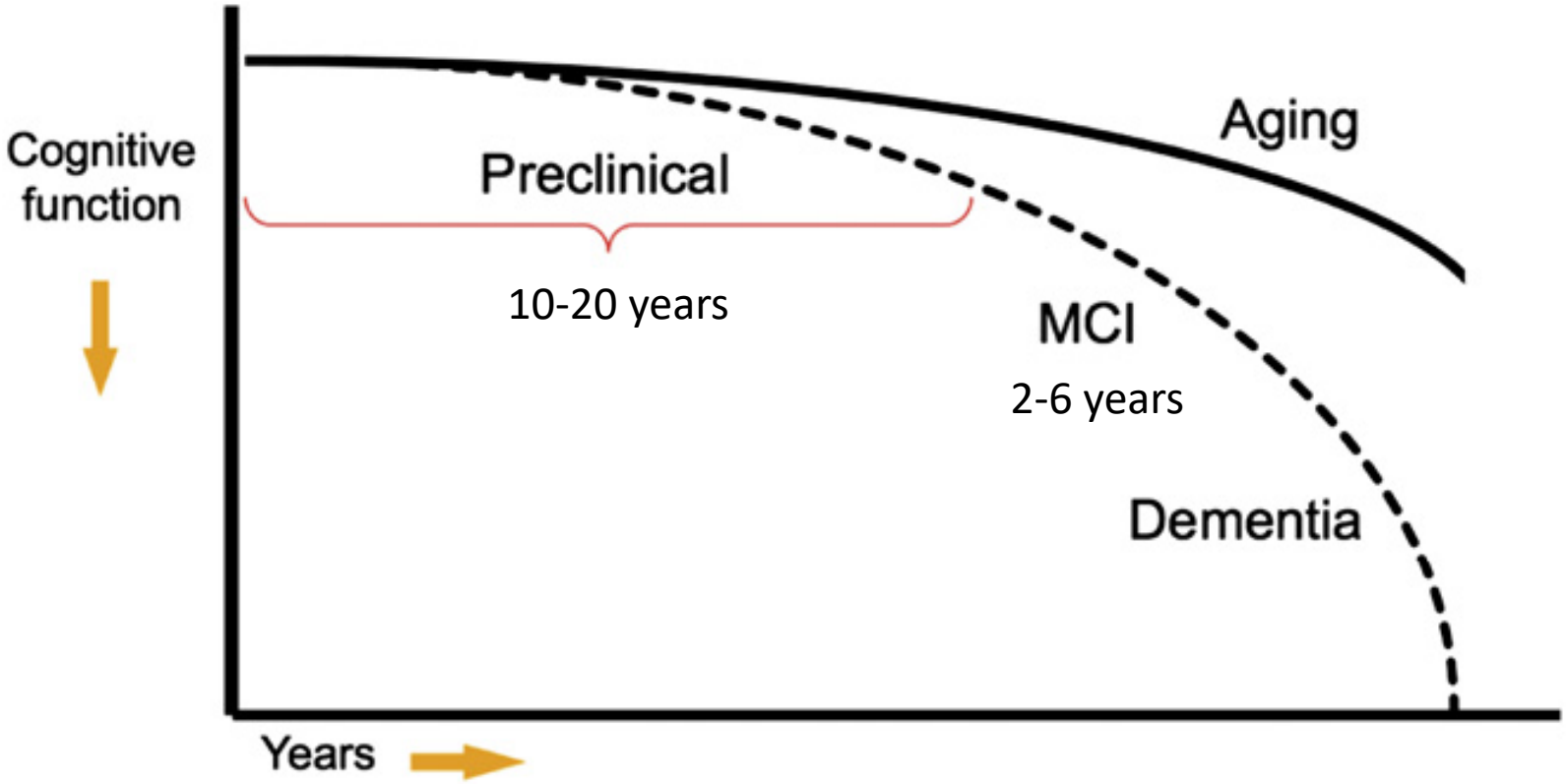
Dementia is caused by damage to brain cells.

Some symptoms of dementia are potentially caused by treatable conditions:

- Depression
- Medication side effects
- Excess use of alcohol
- Thyroid problems
- Vitamin deficiencies

Disease Progression

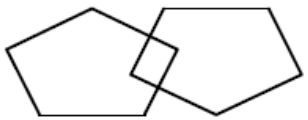



Cognitive function
Aging
Preclinical
10-20 years
MCI
2-6 years
Dementia
Years

Dementia Screening: MMSE

Mini Mental Status Exam (MMSE): measures global cognitive function by examining memory/recall, language, orientation, and executive function.

Interpretation of scores depend on level of education

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, …) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.) 
30		TOTAL

SCORES

25-30 = normal or mild cognitive impairment

20-24 = dementia, mild

10-20 = dementia, moderate

< 10 = dementia, severe

Dementia Screening: Mini-Cog

Ask patient to repeat three words (e.g., banana, sunrise, chair)

Ask patient to draw face of a clock, then draw hands to read “ten past eleven”

Ask the patient to recall the three words

Scoring	
3 recalled words	Negative for cognitive impairment
1-2 recalled words + normal CDT	Negative for cognitive impairment
1-2 recalled words + abnormal CDT	Positive for cognitive impairment
0 recalled words	Positive for cognitive impairment

DEPRESSION

Symptoms of late-life depression

- Changes in sleep pattern and appetite
- Diminished sex drive
- Lack of energy and/or motivation
- Feelings of worthlessness or guilt
- Difficulty concentrating and making decisions
- Irritability, restlessness
- Social withdrawal
- Recurrent thoughts of death, suicidal ideation
- Memory problems and confusion
- Vague, multiple somatic complaints

Depression vs Dementia

	Depression	Dementia
Interests	Anhedonia, loss of pleasure	Apathy, loss of interest
Self-attitude	Diminished	Diminished or intact
Cognitive testing	Give up, won't try to answer some questions	Wrong answers
Cognition	Executive dysfunction prominent: impaired planning, organizing, prioritizing	Memory impairment prominent
Onset of symptoms	Can be abrupt or gradual	Gradual, progressive
Variability of symptoms	Better in the evening	Worse cognition in the evening (referred to as "sundowning")

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Depression Screening: PHQ-9

- The PHQ-9 is a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression.
- Patient completes the form. Provider scores and interprets the results.

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, 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 yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

Depression Screening: PHQ-9

PHQ-9 Score	Depression Severity	Proposed Treatment Actions
0 – 4	None or minimal	None
5 – 9	Mild	Watchful waiting; repeat PHQ-9 at follow-up
10 – 14	Moderate	Treatment plan, considering counseling, follow-up and/or pharmacotherapy
15 – 19	Moderately Severe	Active treatment with pharmacotherapy and/or psychotherapy
20 – 27	Severe	Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management

Communication Techniques

Communication Deficits Experienced by People with Memory Loss

- Problems finding the right words
- Lack of coherence or logic in speech
- Repetition of ideas
- Decreased attention span
- Regularly forgetting recent events, names, and faces
- May have hearing or vision loss

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Ten Communication Strategies

1. Eliminate distractions, ie TV or radio
2. Approach the person slowly and from the front; establish & maintain eye contact
3. Use short, simple sentences
4. Speak slowly
5. Ask one question or give one instruction at a time
6. Use “yes” or “no” rather than open-ended questions
7. Repeat messages using the same wording
8. Paraphrase repeated messages
9. Avoid interrupting the person; allow plenty of time to respond
10. Encourage the person to “talk around” or describe the word he/she is searching for

DELIRIUM

Delirium

Delirium is an acute onset of confusion disturbances in attention, disorganized thinking, and/or decline in level of consciousness.

May fluctuate - may wax and wane throughout the day

Reversible with treatment

Common Causes:

- Medications
- Infections
- Withdrawal
- Acute metabolic toxins
- Central nervous system pathology
- Hypoxia
- Trauma
- Constipation
- Urinary retention

Delirium Subtypes

Hyperactive Delirium: agitation, aggression, restlessness and hallucinations

Hypoactive Delirium: usually sedated, can be un-arousable

Mixed Delirium: both hypoactive and hyperactive behavior

Delirium Predisposing Factors

Advance age

Cognitive impairment/Dementia

Hearing and/or visual impairment

Polypharmacy: benzodiazepines, narcotics, anticholinergics

Chronic kidney disease (CKD)

Substance use such as alcohol

Anesthesia

Delirium Screening: CAM

The Confusion Assessment Method (CAM) Diagnostic Algorithm

Feature 1: ***Acute Onset or Fluctuating Course***
This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal) behavior fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

Feature 2: ***Inattention***
This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

Feature 3: ***Disorganized thinking***
This feature is shown by a positive response to the following question: Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

Feature 4: ***Altered Level of consciousness***
This feature is shown by any answer other than "alert" to the following question: Overall, how would you rate this patient's level of consciousness? (alert [normal]), vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable])

The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.

Delirium Treatment

Treat underlying cause:

- Rule out infection
- Check medications
- Rule out constipation, urinary retention, dehydration
- Provide adequate sensory input, ie give glasses or hearing aids from home

Non-Pharmacological Treatments:

- Setting a defined sleep wake cycle for patients.
- Minimizing extraneous environmental noise such alarms or a disruptive roommate.
- Having a family member, caregiver or sitter present to re-orient patient.

For more info:

Alzheimer's Association: www.alz.org

MOCA (Montreal Cognitive Assessment): www.mocatest.org

Mini-Cog: http://geriatrics.uthscsa.edu/tools/MINICog.pdf

CAM (Confusion Assessment Method): http://www.hospitalelderlifeprogram.org/delirium-instruments/short-cam/

Depression in older adults: http://www.helpguide.org/articles/depression/depression-in-older-adults-and-the-elderly.htm