

4Ms Deep Dive: Mentation

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MEDICINE *of* THE HIGHEST ORDER



Mentation?

“ Mental activity.”

“ The process of using your mind to consider something carefully.”

Mentation in the Age-Friendly Health System



The 3 D's:

Delirium

Dementia

Depression



Baseline and the Other Ms

You can't tell if there's a change without knowing the **BASELINE**.

Normal mobility?

Usual medications?

What do they want?

Normal thinking?

DELIRIUM

- Disturbance in consciousness, ↓ sustained attention
- Change in cognition (memory, orientation, etc.) or development of perceptual disturbance not due to dementia
- Develops over short time period and fluctuates
- Evidence supports a relation to a general medical condition (trauma, infection, etc.) or substance
- Big risk factors: Age, Dementia, Comorbidities

Delirium (Acute Confusion)



- 10-15% of OAs admitted to hospital
- 10-40% of OAs diagnosed in hospital
- Up to 60% of SNF residents age 75 and older
- Medical emergency - high morbidity/mortality and risk for dementia
 - 20-75% mortality rate associated with delirium in hosp.
 - Up to 15% mortality after 1 mo, up to 25% mortality within 6 mo

Baseline & Ms

CAM – Confusion Assessment Method

Confusion Assessment Method (CAM) Diagnostic Algorithm

Feature 1: Acute Onset and 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, did it 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])

© 2003 Sharon K. Inouye, MD, MPH

Inouye, S., van Dyck, C., Alessi, C., Balkin, S., Siegel, A. & Horwitz, R. (1990). Clarifying confusion: The confusion assessment method. *Annals of Internal Medicine*, 113(12), 941-948.

Catatonia

A neuropsychiatric syndrome characterized by abnormal movements, behaviors, and withdrawal, is a condition that is most often seen in mood disorders but can also be seen in psychotic, medical, neurologic, and other disorders.

Psychiatric:

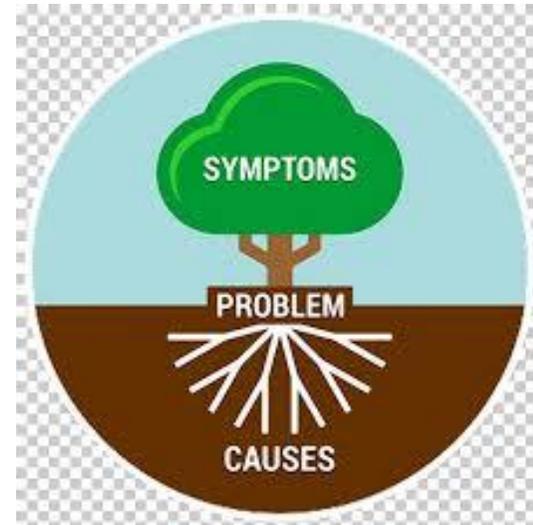
- Mood Disorders – Major Depression & Bipolar Disorders
- Schizophrenia

Medical:

- Strokes
- Neoplasms (cancer)
- Autoimmune Disorders

Withdrawal:

- Clozapine
- Benzodiazepines



Catatonia Symptoms



Cardinal Features:
Immobility (70%)
Mutism (62%)
Staring (82%)
Withdrawal (53%)

Bush Francis Catatonia Rating Scale

- | | |
|----------------------------|---------------------------|
| 1. Excitement | 13. Waxy Flexibility |
| 2. Immobility/Stupor | 14. Withdrawal |
| 3. Mutism | 15. Impulsivity |
| 4. Staring | 16. Automatic Obedience |
| 5. Posturing/
Catalepsy | 17. Mitgehen |
| 6. Echophenomena | 18. Gegenhalten |
| 7. Stereotypy | 19. Ambitendency |
| 8. Grimacing | 20. Grasp Reflex |
| 9. Mannerisms | 21. Perseveration |
| 10. Verbigeration | 22. Combativeness |
| 11. Rigidity | 23. Autonomic abnormality |
| 12. Negativism | |

Catatonia Assessment

<https://www.urmc.rochester.edu/psychiatry/divisions/collaborative-care-and-wellness/bush-francis-catatonia-rating-scale>



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Catatonia Rating Scale

Make a Gift

Bush-Francis Catatonia Rating Scale Assessment Resources

[Joshua Wortzel](#) and [Mark Oldham](#) have developed the following educational resources on how to assess for catatonia using the Bush-Francis Catatonia Rating Scale (BFCRS) in collaboration with [Andrew Francis](#).

- [BFCRS Training Manual & Coding Guide](#) 
Describes how to use the BFCRS and explains each item in detail.
- [Educational modules on using the BFCRS](#)
Standardized patient videos and test questions with explanations.
- [Videos on scoring individual BFCRS items](#)
These can also be accessed from the [PDF version of the BFCRS](#) .

10

Substance-Related Disorders

- Intoxication and Withdrawal
- Abuse (maladaptive use despite failed obligations, physical hazard, legal problems, social/interpersonal problems)
- Dependence (maladaptive use w/ tolerance, withdrawal, use more/longer, want to cut down/quit, xs time to obtain/use/recover, give up important activities, continued use despite awareness causing psychological/physical probs)

11

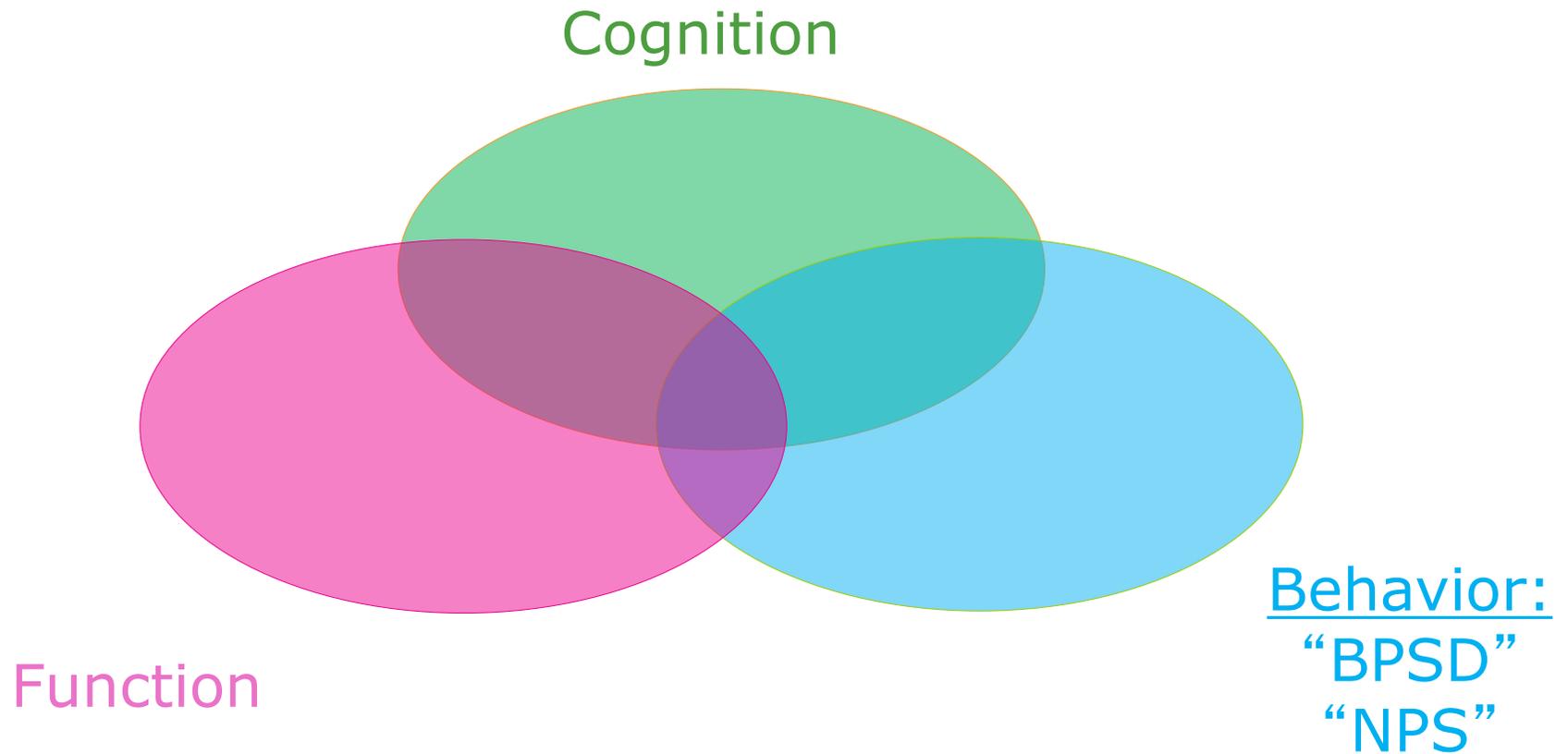
Recommendations for Alcohol Use

- >65 yo:
 - Routine no more than 1 drink/day, with a max 2 drinks/single occasion
 - 1 drink: 6 oz wine, 1.5 oz hard liquor, 12 oz beer
 - Brief Screener CAGE: Cut down? Annoyed? Guilty? Eye opener? (Need 1+ yes's)

Substances: Warning Signs

- Excessive worry whether meds working, c/o decreased effectiveness (tolerance)
- Detailed knowledge about particular drug, attach great significance to the one particular drug
- Anxiety about having enough pills, when take next dose, alter activities to scheduling of pills
- Ongoing use despite resolution of physical/psychological indications, resistance to taper/cessation
- Complaints about those who refuse to provide scripts for drug of choice, who taper or don't take sxs seriously
- Self-medicators (self-increase, add others)

Dementia



Dementia/Neurocognitive DSO

- A clinical syndrome (no antemortem confirmatory test – yet)
- **Progressive** loss of intellectual abilities
- Interferes with social and occupational functioning
- Not due to delirium or other medical disorder
- 6 Neurocognitive Domains:

Complex attention
Executive Function
Learning and Memory

Language
Perceptual-motor
Social cognition

Disturbance in Executive Functioning

Planning

Working Memory

Overriding Habits/inhibition

Mental Flexibility

Organizing

Sequencing

Abstracting

Problem Solving

Problems with Executive Function \neq Dementia

Examples of other causes:

- Developmental Delay
- Head Trauma
- Psychiatric Illness (Depression, OCD, Psychosis)
- Drug-induced

Cognitive Screening Tools

Mini-Cog (< 3/5 points)

MoCA – Montreal Cognitive Assessment (<26/30)

SLUMS – St. Louis University Mental Status Exam (<27/30)

MMSE – Mini-Mental Status Exam (<25/30)

sMMSE – severe Mini-Mental Status Exam

BIMS – Brief Interview for Mental Status (<13/15)

Harmon EY, Gillen RW. Comparison of the Brief Interview for Mental Status (BIMS) and Montreal Cognitive Assessment (MoCA) for identifying cognitive impairments and predicting rehabilitation outcomes in an inpatient rehabilitation facility. PM R. 2022 Oct 4.

New Work-ups for Dementia

*** Find out what is available in your system ***

- FDG-PET with MRI (Frontotemporal vs Alzheimer's Dementia)
- Verification of β -Amyloid
 1. CSF: Mayo/Roche Elecsys panel which includes p-tau 181/AB42 ratio, AB42, p-tau 181, and t-tau
 2. Amyloid PET scan
 3. Plasma P-tau 217

Dementia Meds

Medications for Symptom Improvement:

AChEIs – Donepezil, Rivastigmine, Galantamine:

- GI Upset
- Vivid Dreams (Donepezil)
- Bradycardia

NMDA-receptor antagonist - Memantine:

- Activating
- Confusion

Medications for Disease Modification:

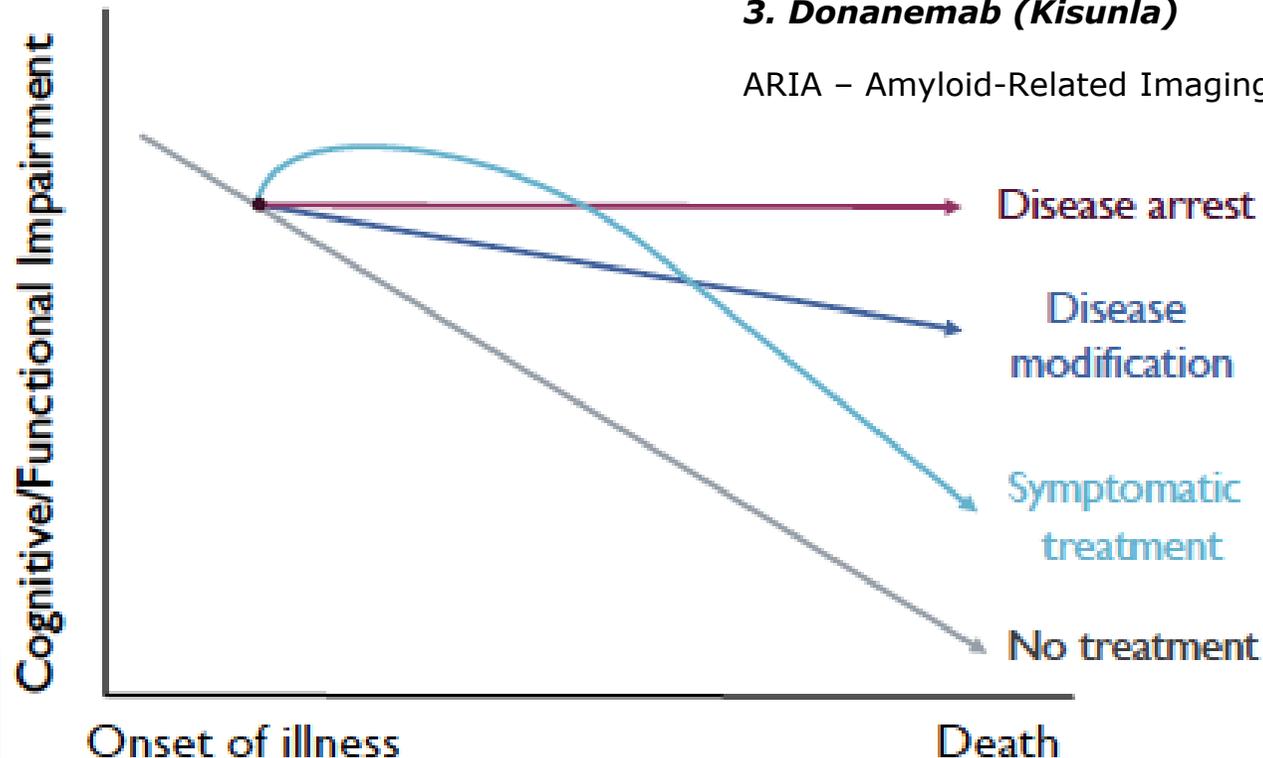
Amyloid- β Monoclonal Antibodies –

1. Aducanumab (Aduhelm)

2. Lecanemab (Lequemi)

3. Donanemab (Kisunla)

ARIA – Amyloid-Related Imaging Abnormalities



Poll Question 1

What is the most common Neuropsychiatric Symptom (NPS) of Dementia?

- 1) Anxiety
- 2) Apathy
- 3) Delusions
- 4) Depression

Epidemiology of NPS

Most common sx's in DEMENTIA

- Apathy (27-36%)
- Depression (24-32%)
- Agitation/aggression (24-30%)

Most common sx's in MCI

- Depression (20%)
- Apathy (15%)
- Irritability (15%)

NPS Characteristics

- Up to 95% pts at some point during course of dementia
- 43-59% with MCI
- Often see multiple sx's simultaneously (>40%)
- Often intermittent/fluctuating NPS that are persistent
 - Approx 65% with sx's over 2 y
 - Associated with dementia stage (mild, mod, severe)
 - Longer: apathy, aberrant motor
 - Shorter: hallucinations, euphoria, disinhibition

General Approaches for Dementia Care

- Patient & caregiver education
- Anticipatory guidance & future-care planning
- Safety/Risk management
- Optimize environment (keep routines, calm)
- Routine mental and physical activity, socialization
- Optimize physical and mental health
- Support and linkage

Evaluation of NPS

Routine surveillance

ABCs (Antecedents – Behavior – Consequences)

Behavioral/Environmental Modifications

- Define behaviors and symptoms
- Remove offending triggers
- Calm reassurance or distraction
- Address unmet needs, what could make one feel better?
- Positive reinforcement

Evaluation of NPS (2)

Establish/Revisit Medical Diagnoses

Establish/Revisit Psychiatric Diagnoses

Evaluate for offending or change in medications

- Anticholinergic
- Sedative/hypnotics
- Drug withdrawal?
- Drug interactions?

Baseline &
Ms

Consider pain, sensory impairments

Work-up Delirium

Dementia or Depression?

Distant:

- Highest level of functionality
- Psychiatric
- Family (dementia and psychiatric)

Recent:

- Social supports
- HCP and POA
- Expectations



26

Depression

- ❖ Sleep Disturbance
- ❖ Interest/Anhedonia
- ❖ Guilt/Negative ruminations
- ❖ Energy
- ❖ Concentration
- ❖ Appetite
- ❖ Psychomotor
- ❖ Suicide/Death wish



PHQ-9 History

Primary **C**are **E**valuation of **M**ental **D**isorders = PRIME-MD

Developed in 1990s by Pfizer

Became Patient Health Questionnaire (PHQ) – 11 multi-part questions

- ◆ Depression = PHQ-2, PHQ-8, PHQ-9
- ◆ Anxiety = GAD-2, GAD-7 (PHQ-4 = PHQ-2 + GAD-2)
- ◆ Alcohol
- ◆ Eating
- ◆ Somatoform = PHQ-15

Use of PHQ-9 in LTC Settings

- ◆ 2010 CMS adds PHQ-9 to MDS 3.0
- ◆ 86% surveyed in NH reported that “PQH-9 provided new insights into residents’ mood”
- ◆ Average time of completion was 4 minutes.

PHQ-9

Not at all	Several days	More than half the days	Nearly every day
0	1	2	3

- 1) Interest/pleasure
- 2) Feeling down, depressed, hopeless
- 3) Sleep disturbance
- 4) Tired/low energy
- 5) Changes in appetite
- 6) Guilt – failure, letting family down
- 7) Concentration
- 8) Moving or speaking slowly, or restlessness
- 9) Suicidal thoughts

PHQ-9

Total Score	Depression Severity
1-4	Minimal depression
5-9	Mild depression
10-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

PHQ-9-0V

Not at all	Several days	More than half the days	Nearly every day
0	1	2	3

- 1) Interest/pleasure
- 2) Appearing down, depressed, hopeless
- 3) Sleep disturbance
- 4) Tired/low energy
- 5) Changes in appetite
- 6) Guilt – failure, letting family down
- 7) Concentration
- 8) Moving or speaking slowly, or restlessness
- 9) Attempt to self-harm, death wish
- 10) Short-tempered, easily annoyed

Total Severity Score from OV

In addition, PHQ-9[®] Total Severity Score can be used to track changes in severity over time. Total Severity Score can be interpreted as follows:

- 0-4: minimal depression
- 5-9: mild depression
- 10-14: moderate depression
- 15-19: moderately severe depression
- 20-30: severe depression

Must ask questions

- Do you think you have any problems?
- If so, what do you think is causing your problems?
- If not, are there any ways that we can help?
- What is your mood like? (Mood as a season, not just in the moment.)
- Have you ever felt like this before?
- If so, what helped to turn it around?

Baseline & Ms

Do Cognitive Screening. MoCA, SLUMS, MMSE....

Do Depression Screening. PHQ-9, GDS, CES-D, Beck's Dep...

Cornell Scale for Depression in Dementia (Caregiver)

34

Clues to Look For

DEPRESSION	DEMENTIA
Rapid decline	Slow, insidious decline
Poor testing effort	Effort is usually good
Physically slow	Often normal physically
Normal speech/language, though may be slow	Language impairment, word finding difficulty/aphasia
Mood reportedly depressed and/or anxious	Mood may not be a concern. May be apathy/motivation.
Worried about memory	Usually unaware of memory problems

35

What if it's both?

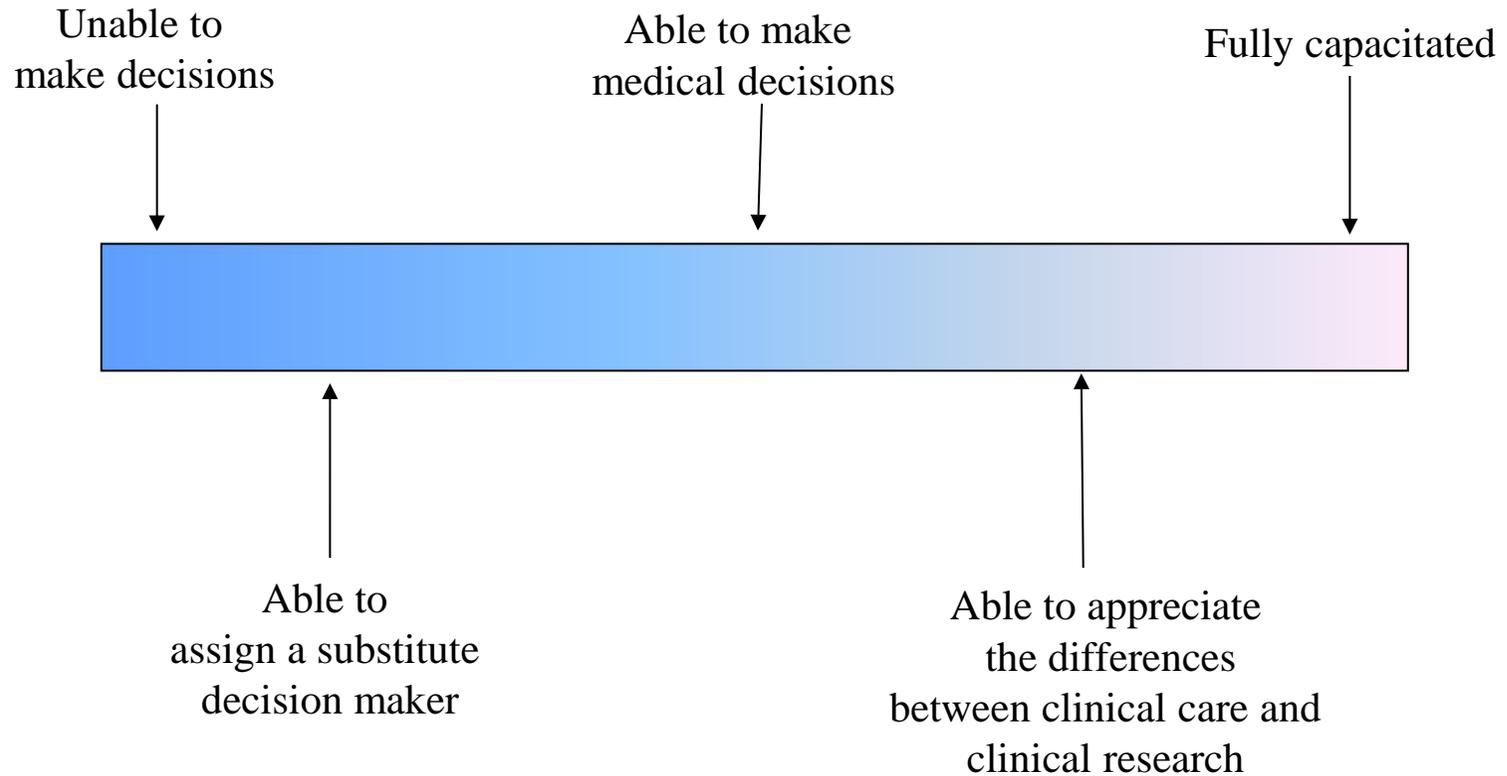
- Treat the depression. May help with improved function.
- Depression may be pre-morbid to dementia, so continue to monitor with screening tools.
- Educate patient as possible and family. Set realistic expectations for improvement. Future planning is important.

Poll Question 2

Which of these is not an element of a capacity evaluation?

- 1) Ability to follow directions
- 2) Appreciating the consequences
- 3) Communicating a choice
- 4) Understanding relevant information

Continuum of Decision-Making Capacity



D.L.Rosenstein, FG Miller Textbook of Psychosomatic Medicine Ed by JLevenson
2005 American Psychiatric Press, pp55-65

MEDICINE *of* THE HIGHEST ORDER



Dementia ≠ Incompetent

Decisional Capacity vs Competency

Competency

- ◆ A misused term in clinical settings, is really a legal term
- ◆ Court may determine ‘*incompetence*’ based upon clinician testimony regarding impaired decision-making capacity.
- ◆ A clinician cannot determine ‘incompetence’

Decision-making capacity

- ◆ A clinical determination.
- ◆ Adults (including those with serious mental illness) are considered competent unless declared incompetent by court of law.
- ◆ Lacking capacity vs Incapacitated

Criteria For Determining Capacity

Criteria	Issues involved
1) Communicating choice	Can be affected by: impairment of consciousness, thought disorder, disruption of short term memory, and severe ambivalence
2) Understanding relevant information	Can be affected by deficits in attention, intelligence, memory - . memories for words, phrases, ideas, and sequences of information, reception, storage and retrieval. Must comprehend fundamental meaning
3) Appreciating the situation & its consequences	One can understand what one is told, without understanding specific implications that it carries for one's future. One must appreciate the illness♦, consequences of treatment or it's refusal, and likelihood of consequences
4) Manipulating the information rationally	One must use logical processes to compare the benefits and risks of various treatment options.

Impact of Depression on Capacity

Depressive Cognition	Clinical example
Overgeneralization	Medication is rejected on the basis of one side-effect
Mental Filter	View of treatment or prognosis is darkened by one negative detail
Jumping to conclusions	A merely possible side effect is viewed as a certainty
Emotional reasoning	Negative emotions such as hopelessness are assumed to reflect the state of reality
“Should” statements	“I should suffer.” Treatment is seen as interfering with deserved punishment

42

Family Health Care Decisions Act

Does not apply to decisions for incapable patients:

- who have a health care agent
- who have a court-appointed guardian under SCPA 1750b
- for whom decisions about life-sustaining treatment may be made by a family member or close friend under SCPA 1750-b
- for whom treatment decisions may be made pursuant to OMH or OMRDD surrogate decision-making regulations.

Decisions for Adult Patients by Surrogates

- Sets forth, in order of priority, the persons who may act as a surrogate decision-maker for the incapable patient, i.e.:
 - an MHL Article 81 court-appointed guardian (if there is one);
 - the spouse or domestic partner (as defined in the FHCDA);
 - an adult child
 - a parent
 - a brother or sister
 - a close friend.

Robert N. Swidler
NYSBA *Health Law Journal* | Spring 2010
| Vol. 15 | No. 1:32-35

What if the HCP Lacks Capacity?

From McKinney's Public Health Law § 2992:
Special Proceeding Authorized

1. Determine the validity of the HCP
2. Have the agent removed:
 - Not reasonably available, willing and competent
 - Acting in bad faith
 - Subject of an order of protection, or caused the principals lack of capacity
3. Override the agents decisions about health care treatment:
 - Decision made in bad faith
 - Not in accordance with standards in section 2982

Unable to
make decisions

Able to make
medical decisions

Fully capacitated

Dementia ≠ Incompetent

Able to
assign a substitute
decision maker

Able to appreciate
the differences
between clinical care and
clinical research



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