

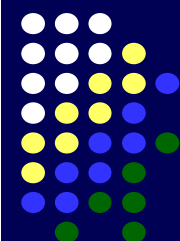
Frontline Tools:

Delirium, Dementia, & Depression in Older Adults

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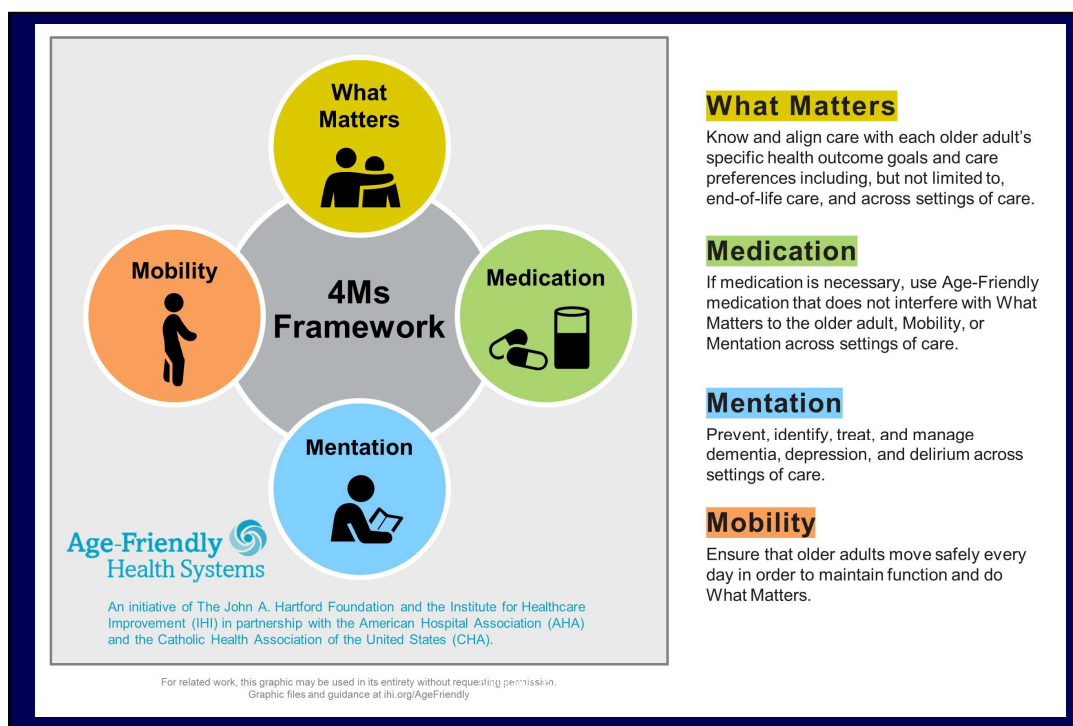
VA HEALTH CARE Defining
EXCELLENCE
in the 21st Century

Disclosure

- Nothing to disclose
- The views and opinions in this presentation are those of the presenter and they do not necessarily reflect, and should not be taken as, official policy of the U.S. Department of Veterans Affairs or the University of Washington.

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Learning Objectives

- Characterize dementia, delirium, and depression
- Identify key similarities and differences between these clinical syndromes
- Recognize warning signs and initiate diagnostic work-up
- Utilize data to guide treatment and care planning

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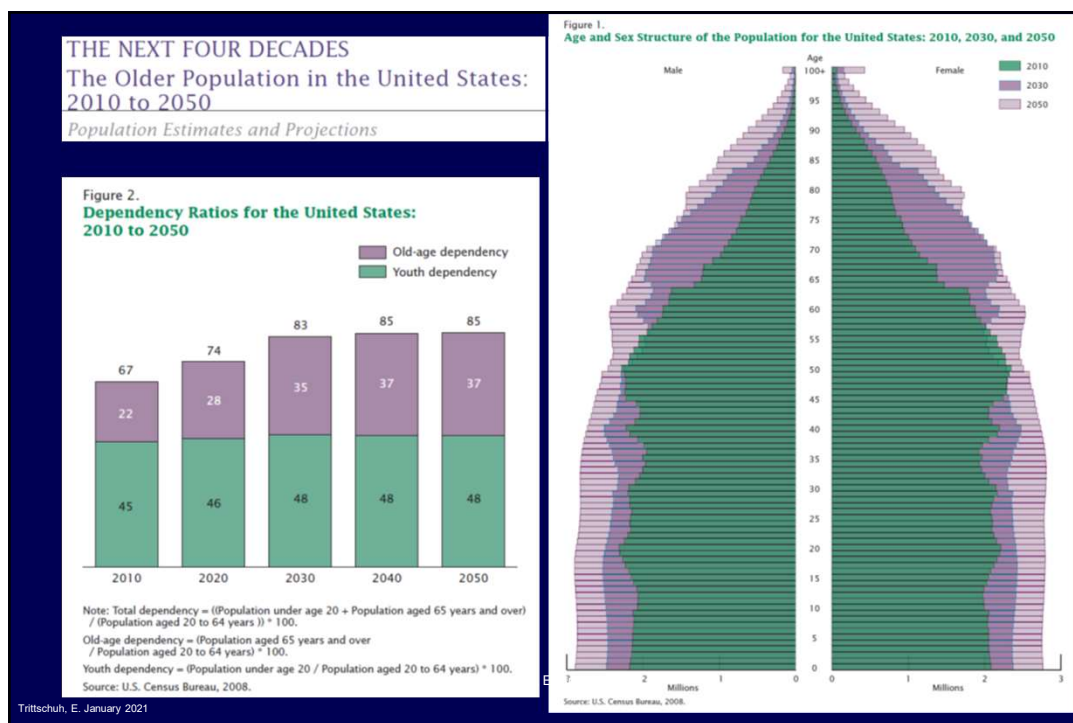
Clinical Relevance: The Aging Population



- In 2022, the oldest baby boomers are turning age 76
 - By 2030, all baby boomers will be 65+ years old
- The number of Americans age 65+ is expected to grow from 53 million in 2018 to 88 million by 2050
- Older adults constitute:
 - 26% percent of physician office visits
 - A third of all hospital stays and of all prescriptions
 - Almost 40% of all emergency medical responses
 - 90% of nursing home residents

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Facts & Figures: Alzheimer's Association



Northwest Geriatrics Region

Aging Population by State

Number of Persons 65 and over

State	Census 2010	Projection 2015	Projection 2019
AK	54,938	73,938	91,588
ID	194,668	241,154	290,670
MT	146,742	176,034	206,437
OR	533,533	653,968	766,080
WA	827,677	1,028,520	1,209,723
WY	70,090	84,699	99,179

Data Source: US Census Bureau

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How to provide care for this increasing and changing demographic?

- Geriatric specialists
- Primary Care Providers (PCPs)
- PACT – Patient Aligned Care Team
- Given the significant consequences of untreated delirium, depression, and dementia there needs to be a paradigm shift such that these disorders are a regular part of the workup and diagnostic differential for our aging patients
- **Healthcare team approach is best**

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Changes in thinking in older age

LET'S TALK MENTATION

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What you might hear in clinic

- I can't focus
- She's not interested in her usual activities
- I can't come up with the word I want
- My energy is low
- My husband's "selective attention" is worse – he doesn't listen to me
- My short-term memory is shot
- I couldn't find my car in the parking lot
- You didn't tell me to increase my atenolol and stop taking HCTZ

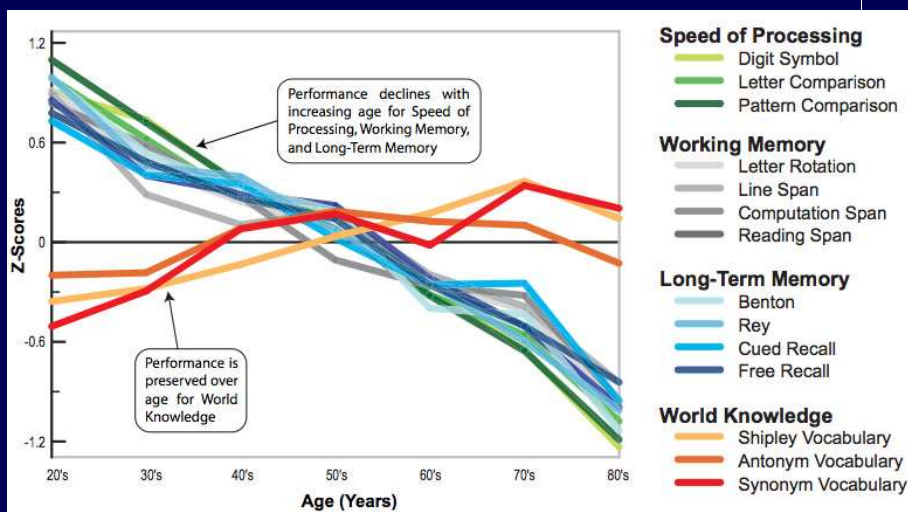
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“Typical” Cognitive Aging

- Autobiographical memory
- Recall of well-learned information
- Procedural memory
- Emotional processing
 - ↓ Encoding of new memories
 - Slower to learn new tasks, need more repetition
 - ↓ Working memory/multi-tasking
 - Can't juggle as many things at once
 - ↓ Processing speed
 - Slower to respond to novel situations

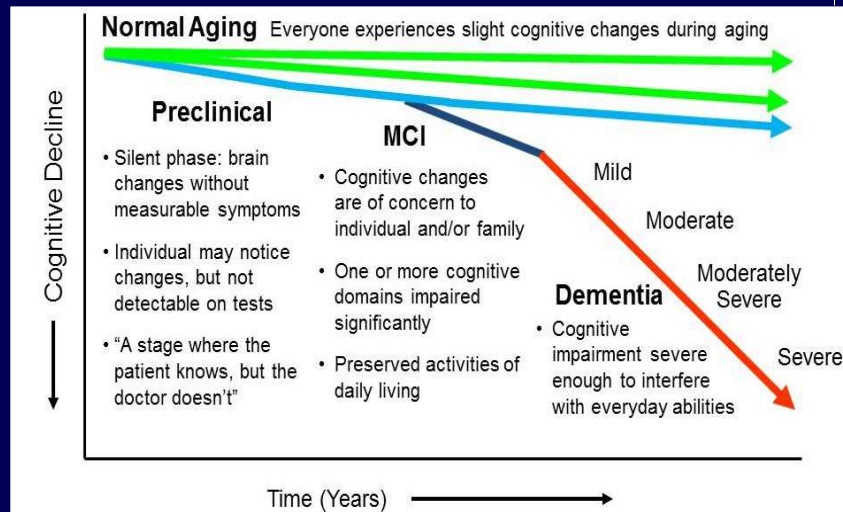
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More “typical” cognitive aging



Park, et al, *Psychology & Aging*, 2002

Not all changes are “typical”



From S. McCurry who credits: <http://health.mashangel.com>

Dementia Is . . .

A decline in some aspect of cognitive function and/or behavior



Daily Living Skills

- ✓ **Significant**
 - functional consequences
- ✓ **Chronic**
 - insidious onset and progressive course
- ✓ **Loss**
 - new impairments (not lifelong)
- ✓ **Structural Damage**
 - neurons die

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... What Dementia Is Not



- Delirium — acute onset, attention and concentration problems
- Depression — apathy, distraction; apparent cognitive deficits, but none during testing
- Sensory deficits or communication problems
- Normal aging

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Types of Dementia

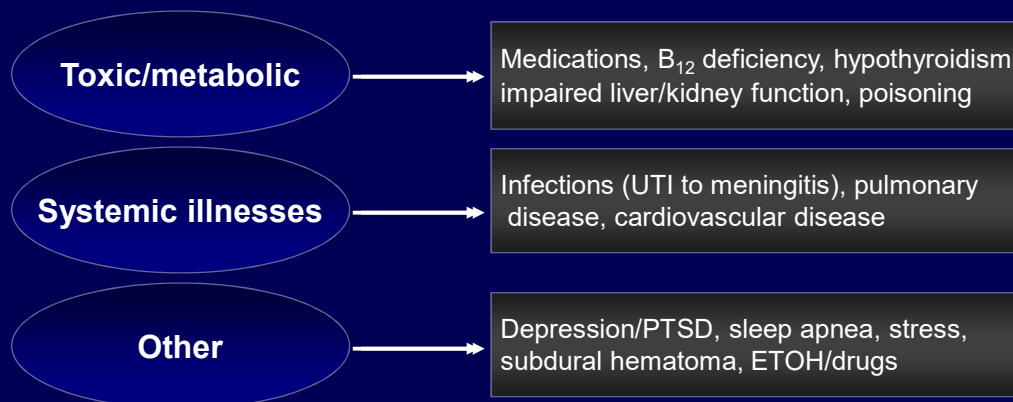


Alzheimer's Disease

- ☐ Vascular Dementia (cerebrovascular disease)
- ☐ Lewy Body Disease
- ☐ Parkinson's disease with dementia
- ☐ Frontotemporal Dementia (FTD)

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Causes that Mimic Dementia



**Treatment may improve, but not fully reverse, symptoms*

What Delirium Is . . .



aka “Toxic Metabolic Encephalopathy” or “Acute Confusional State”

A medical condition:

- Rapid onset
- Deficits in attention and concentration
- Waxing and waning mental status
- Infections, medications, metabolic abnormalities are the most common causes

✓ **Mental status changes often precede objective signs of illness**

✓ **Under-recognized** (Inouye, Westendorp, and Saczynski, *Lancet*, 2014)

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... What Delirium Is Not



- Insignificant – increased mortality when followed over 6-24 months McCusker, et al, JAMA, 2002; McCusker, et al, JAGS, 2014; Witlox, et al, JAMA, 2010; Tsai, et al, Intl J Psych Med, 2013, and many more.
- Dementia – slower onset, slower decline, more subtle fluctuation
- Rapidly resolving, even when the cause is corrected
- Normal aging

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Risk Factors for Delirium



- Hospitalization – delirium affects up to 40%
- Review & Meta-analysis (Ahmed, Leurent, & Sampson, 2014)
 - Pooled analysis risk factors: dementia, illness severity, visual impairment, urinary catheterization, low albumin, and length of hospital stay
- Risk factors in a hip fracture hospital sample (Mosk, et al, 2017)
 - n=566, 35% with delirium
 - Age, dementia, hx of delirium, overall health rating, preoperative hx of institutionalization, functional dependency, amount of blood transfusion, low Hb

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Recognizing Delirium



- Confusion that develops over days or weeks
- Trouble with attention, focus, & concentration
- Waxing and waning
- Fluctuating sleep disturbances
- Hyperactive (agitated) or hypoactive (sedated)
- Erratic, uncharacteristic, inappropriate behavior
- Hallucinations (especially visual), paranoia
- Somnolence

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What Depression is . . .



A syndrome of psychological and bodily symptoms

- Low mood or anhedonia (lack of pleasure)
- Problems with sleep (too little or too much)
- Problems with appetite (too high or too low)
- Trouble concentrating
- Decreased interests
- Feelings of guilt or having done something wrong
- Low energy
- Slowed movements
- Suicidal thoughts
- Unreal experiences: “my mind playing tricks on me” (hearing voices or feeling paranoid)

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... What Depression Is Not



- A bad day, week, or month
- Grief
- A natural reaction to medical illness or loss
- A cause of dementia – “pseudo-dementia”
- **Untreatable in older adults**

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Recognizing Depression



- Often presents as nonspecific physical symptoms
 - Fatigue
 - Pain
 - GI problems
- Older patients might be less likely than younger to admit to being “depressed”
- Depression is stigmatized
- Patients often more willing to endorse mental health symptoms in writing than in person

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Depression in Older Adults

- As many as 10% of adults age 65+ seen in primary care settings have clinically significant depression^{1,2}
 - However, only ~10% of older adults with depression receive treatment³
- Behavioral Activation: meta-analysis of 7 RCTs showed moderate-intensity exercise reduced depressive symptoms⁴
- Younger and older adults respond equally well to treatment: psychotherapy and/or pharmacotherapy⁵
 - Consider Medical Comorbidity for best treatment options, pharmacotherapy is not always advised
 - Psychotherapy caveat for certain populations

1. Unützer, *N Engl J Med* 2007. 2. Lyness, et al. *J Gen Intern Med* 1999; 3. Klap, et al. *Am J Geriatr Psychiatry* 2003. 4. Bridle, et al. *Br J Psychiatry* 2012. 5. Taylor, WD, *N Engl J Med* 2014. Clinical practice. Depression in the elderly.

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The NEW ENGLAND
JOURNAL of MEDICINE

Antidepressants Commonly Used to Treat Late-Life Depression

Table 3. Antidepressants Commonly Used to Treat Late-Life Depression.[¶]

Class and Agent	Initial Daily Dose	Therapeutic Daily Dose	Side Effects			
			Common	Serious but Rare		
First-line therapy						
SSRIs						
Sertraline	25–50 mg	50–100 mg, to a maximum of 200 mg	Nausea, diarrhea, headaches, sexual dysfunction, increased risk of falls	Abnormal bleeding (due to altered platelet function), hyponatremia		
Escitalopram	10 mg	10–20 mg				
Second-line therapy						
SNRIs						
Duloxetine	20–30 mg	60 mg, to a maximum of 120 mg†	Nausea, diarrhea, headaches, sexual dysfunction, diaphoresis, dry mouth	Hypertension		
Venlafaxine XR	37.5–75 mg	150 mg, to a maximum of 225 mg	Possible increased risk of falls			
Antidepressants with novel mechanisms						
Bupropion XL	150 mg	300 mg, to a maximum of 450 mg	Jitteriness or agitation, headaches, tremors	Seizures (avoid in patients with risk factors for seizures)		
Mirtazapine	15 mg	30 mg, to a maximum of 45 mg	Dry mouth, constipation, weight gain	Increased serum cholesterol		

Table 3. Antidepressants Commonly Used to Treat Late-Life Depression.[☆]

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† Dosing should target plasma steady-state levels of 80 to 120 ng per milliliter.

‡ Second-generation antipsychotic agents should be used for antidepressant augmentation, not as the sole therapy for depression.

¶ An increased risk of stroke is specifically reported for older patients with dementia-related psychosis. Whether the same risk extends to other older patients is not known.

Taylor WD, N Engl J Med 2014;371:1228-1236.

Taylor WD. *N Engl J Med* 2014;371:1228-1236.

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Depression in Older Adults



- Monitor patients with increased medical morbidity as rates of depression are as high as 37% post critical care hospitalization¹
- Cognitive impairment can be predictive of a less robust/poor response to antidepressants^{2,3}
- Monitor for cognitive decline because depression in later life could be a red flag for preclinical dementia⁴
- Suicide rates: higher in the elderly
 - Also higher in Veterans, males, and Whites/Native Americans*

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1. Girard, et al. *Lancet*, 2014. 2. Alexopoulos, et al. *Biol Psychiatry*, 2005. 3. Sheline, et al. *Arch Gen Psych*, 2010. 4. Singh-Manoux, et al. *JAMA Psychiatry* 2017.

Dementia, Delirium, and Depression



	Common Features	Hallmarks
Dementia	Subjective confusion Difficulty performing tasks	Problems with memory plus problems with speech, actions, recognition, or executive functioning Chronic and progressive, slow onset Functional decline
Delirium	“Not right” on interview	Trouble with attention and concentration Rapid onset; waxing and waning Due to a medical cause
Depression	Loved ones are worried	Decreased concentration and interest Sensorium is clear

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Overlap in Syndromes



- Rates of depression in dementia range from 0-86% of cases (Wright & Persad, 2007)
- Delirium superimposed on dementia (DSD) = 57.7% (Mosk, et al, 2017)
- Older hospitalized patients, n=459, age 70+
 - Delirium and Depression – 5%
 - Delirium alone – 8.5%
 - Depression alone – 26.3%
 - **Overlap syndrome = higher odds of 1 month functional decline, and NH placement or death at 1 year**
 - Givens, Jones, & Inouye (2009)

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Case - Joseph



- 66 year old male Veteran
- Divorced x 2 years from 2nd wife (<5 year marriage)
- New to primary care clinic; moved here to be closer to daughter
- Living independently in an apartment
- Her concern is: “He just sits around all day and forgets what I tell him”
- PMHx: diabetes, HTN – historically good control

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Case - Joseph



- 66 year old male Veteran, living in an apt
- Divorced x 2 years from 2nd wife (<5 year marriage)
- New to clinic; moved here to be closer to daughter
- Daughter's concern is: "He just sits around all day and forgets what I tell him"
- **PMHx: diabetes, HTN – they reported good control, but current BP and glucose are out of range**
 - Is he taking his medications/insulin as prescribed?
- **He says he misses his wife and doesn't have friends**
- **Doesn't seem cognitively sharp; disengaged at visit**

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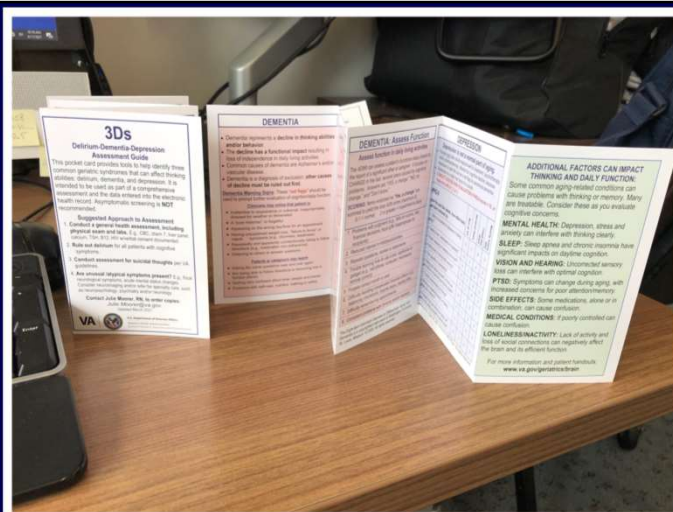
Initiate Work Up



What are some available

**IDENTIFICATION / SCREENING
TOOLS?**

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3Ds: Assessment Guide

GERIATRIC DELIRIUM DEMENTIA AND DEPRESSION

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.

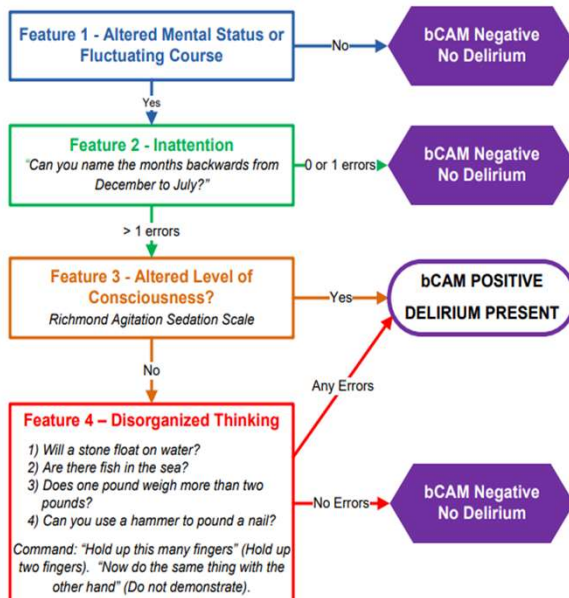
Contact Julie Moorer, RN, to order copies: Julie.Moorer@va.gov



Delirium

DELIRIUM	
<ul style="list-style-type: none"> Delirium is a <i>medical</i> condition that causes a temporary problem with mental function. Delirium occurs commonly in <i>sick older adults</i>, in <i>hospital settings</i>, and in those with <i>pre-existing</i> cognitive problems. Delirium is a <i>medical emergency</i>; 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 <i>attention and concentration</i>, and shows a <i>waxing and waning course</i> (patients can seem normal at times). Consider delirium and work up potential causes of delirium in <i>ALL</i> patients with mental status changes. <p>Most common medical causes: metabolic disorders, infections, medications, hypoxemia, dehydration</p> <p>Most common medication causes: opioids, anticholinergics, sedative-hypnotics</p> <p>Delirium is also known as <i>Acute Brain Failure</i>; <i>Toxic-Metabolic Encephalopathy</i>; or <i>Acute Confusional State</i>.</p>	<p>Delirium Assessment Tool Confusion Assessment Method (CAM) Diagnostic Algorithm</p> <p>Delirium is diagnosed with the presence of Features 1 and 2, and either Feature 3 or 4.</p> <p>Feature 1: Acute Onset and Fluctuating Course Usually obtained from family member or caregiver: rapid change from baseline, and fluctuating severity during the day.</p> <p>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.</p> <p>Feature 3: Disorganized Thinking Rambling or irrelevant conversation, unclear or illogical flow of ideas or unpredictable switching from subject to subject.</p> <p>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].</p> <p><small>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.</small></p>

Brief Confusion Assessment Method (bCAM) Flow Sheet



Copyright © 2012. Vanderbilt University.
The Brief Confusion Assessment Method (bCAM) is adapted from:
Ely EW, et al. JAMA. 2001; 286: 2703-2710. Confusion Assessment Method for the Intensive Care Unit. Copyright © 2002, Vanderbilt University.
Inouye SK, et al. Ann Intern Med. 1990; 113: 941-948. Confusion Assessment Method. Copyright © 2003, Hospital Elder Life Program, LLC.
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Modified Richmond Agitation & Sedation Scale (mRASS)

RASS is a tool developed originally to assess the level of sedation or agitation in the intensive care unit (ICU). The mRASS is a modified version to be used in non-ICU settings

Score	Description
+4 Combative	Violent, danger to staff
+3 Very agitated	Very distractible, pulls/removes tubes, aggressive, fighting environment
+2 Agitated	Resists care or uncooperative, frequent non-purposeful movement
+1 Restless	Pays attention most of the time; anxious but cooperative, movements not aggressive/vigorous
0 Alert and calm	Makes eye contact; responds appropriately to calling their name
-1 Drowsy	Not fully alert, sustained awakening to voice, (maintains eye contact for >10 secs.)
-2 Light sedation	Briefly awakens to voice (eye opening and contact <10 secs.)
-3 Moderate sedation	Movements or eye opening to voice (but NO eye opening/contact)
-4 Deep sedation	Can't stay awake; no response to voice, but has movement/eye opening to physical stimulation
-5 Unarousable	No response to voice or physical stimulation

The mRASS is a VA-developed instrument. See Chester J.G., Beth Harrington M., Rudolph J.L.:Br J Hosp Med 2012; 7: pp. 450-453.

Working Up Delirium

- Use collateral sources of information
- Consider the whole clinical picture – broad differential

Infections

Withdrawal

Acute metabolic

Trauma

CNS pathology

Hypoxia

Deficiencies

Endocrinopathies

Acute vascular

Toxins or drugs

Heat

Joseph's work
up was
negative

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Depression



- You need not be a mental health professional to ask about symptoms of depression
 - Use recommended tools to guide you and have a plan for how to triage when you get a positive
 - Screening is covered by Medicare Part B
- PHQ-2 >> PHQ-9: well-validated, free and common
- Geriatric Depression Scale (GDS): 30-item or 15-item
- VHA adds the Columbia-Suicide Severity Rating Scale (C-SSRS)
 - <https://www.hrsa.gov/behavioral-health/columbia-suicide-severity-rating-scale-c-ssrs>

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Patient Health Questionnaire: PHQ-2



- A quick, self-report screen which may be appropriate for your setting

“Over the past two weeks, how often have you been bothered by these problems?”

	Not at all	Several days	> Half of 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

A score of **3 or greater** merits completing the PHQ-9, next slide.

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PHQ-9

1. Little or no interest or pleasure in doing things?
2. Feeling down, depressed, or hopeless?
3. Trouble falling asleep, staying asleep, or sleeping too much?
4. Feeling tired or having little energy?
5. Poor appetite or overeating?
6. Feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down?
7. Trouble concentrating on things such as reading the newspaper or watching television?
8. Moving or speaking so slowly that others could have noticed, or being so fidgety and restless that you have been moving around a lot more than usual?
9. Thinking that you would be better off dead or that you want to hurt yourself in some way?

All questions use same PHQ-2 0 – 3 scale

Depression is likely if the total score is > 10

Suicide risk evaluation recommended if:

Total Score is > 10 and/or response to question #9 is >0

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Joseph's work
up was positive

C-SSRS

Joseph:
no SI now
or ever

SUICIDAL IDEATION		Lifetime: Time He/She Felt Most Suicidal	Past 1 month
1. Wish to be Dead Subject endorses thoughts about a wish to be dead or not alive anymore, or wish to fall asleep and not wake up. <i>Have you wished you were dead or wished you could go to sleep and not wake up?</i> If yes, describe:		Yes No <input type="checkbox"/> <input type="checkbox"/>	Yes No <input type="checkbox"/> <input type="checkbox"/>
2. Non-Specific Active Suicidal Thoughts General non-specific thoughts of wanting to end one's life/commit suicide (e.g., "I've thought about killing myself") without thoughts of ways to kill oneself/associated methods, intent, or plan during the assessment period. <i>Have you actually had any thoughts of killing yourself?</i> If yes, describe:		Yes No <input type="checkbox"/> <input type="checkbox"/>	Yes No <input type="checkbox"/> <input type="checkbox"/>
3. Active Suicidal Ideation with Any Methods (Not Plan) without Intent to Act Subject endorses thoughts of suicide and has thought of at least one method during the assessment period. This is different than a specific plan with time, place or method details worked out (e.g., thought of method to kill self but not a specific plan). Includes person who would say, "I thought about taking an overdose but I never made a specific plan as to when, where or how I would actually do it...and I would never go through with it." <i>Have you been thinking about how you might do this?</i> If yes, describe:		Yes No <input type="checkbox"/> <input type="checkbox"/>	Yes No <input type="checkbox"/> <input type="checkbox"/>
4. Active Suicidal Ideation with Some Intent to Act, without Specific Plan Active suicidal thoughts of killing oneself and subject reports having <u>some intent to act on such thoughts</u> , as opposed to "I have the thoughts but I definitely will not do anything about them." <i>Have you had these thoughts and had some intention of acting on them?</i> If yes, describe:		Yes No <input type="checkbox"/> <input type="checkbox"/>	Yes No <input type="checkbox"/> <input type="checkbox"/>
5. Active Suicidal Ideation with Specific Plan and Intent Thoughts of killing oneself with details of plan fully or partially worked out and subject has some intent to carry it out. <i>Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?</i> If yes, describe:		Yes No <input type="checkbox"/> <input type="checkbox"/>	Yes No <input type="checkbox"/> <input type="checkbox"/>
INTENSITY OF IDEATION The following features should be rated with respect to the most severe type of ideation (i.e., 1-5 from above, with 1 being the least severe and 5 being the most severe). Ask about time he/she was feeling the most suicidal.			
Lifetime - Most Severe Ideation: Type # (1-5) _____ Description of Ideation _____		Most Severe	Most Severe
Recent - Most Severe Ideation: Type # (1-5) _____ Description of Ideation _____			

Dementia



Signs/symptoms a clinician, caregiver, or patient may notice; should prompt provider to evaluate cognition

Clinicians may notice:

Is Your Patient.....

- Inattentive to appearance or unkempt, inappropriately dressed for weather or disheveled?
- A "poor historian" or forgetful?

Does your patient.....

- Fail to keep appointments, or appear on the wrong day or wrong time for an appointment?
- Have unexplained weight loss, "failure to thrive" or vague symptoms e.g., dizziness, weakness?
- Repeatedly and apparently unintentionally fail to follow directions e.g., not following through with medication changes?
- Defer to a caregiver or family member to answer questions?

Patients or caregivers may report:

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

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Cognitive screen: Mini-Cog

A Screening Tool; does not diagnose dementia



1. Get the patient's attention then say, ***I am going to say three 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.

→ Unscored

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 subject has not finished clock drawing in 3 minutes, discontinue and ask for recall items.

→ 2 pts for a clock without errors, 0 for any error

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

→ 1 pt per word (max 3)

Scoring: 0-5 possible

0-2 = possible impairment

3-5 = suggests no impairment

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Montreal Cognitive Assessment (MoCA):

<http://www.mocatest.org/>

- More sensitive than MMSE
- WELL-RESEARCHED
 - <http://www.mocatest.org/references.asp>
- Comes in multiple English versions and >25 other languages
- Blind/Telephone version
- Telemedicine version
- Training/certification required

MOCA SCORES

	Normal Controls (NC)	Mild Cognitive Impairment (MCI)	Alzheimer's Disease (AD)
Number of subjects	90	94	93
MoCA average score	27.4	22.1	16.2
MoCA standard deviation	2.2	3.1	4.8
MoCA score range	25.2 – 29.6	19.0 – 25.2	21.0 – 11.4
Suggested cut-off score	≥26	<26	<26 ψ

ψ Although the average MoCA score for the AD group is much lower than the MCI group, there is overlap between them. The suggested MoCA cut-off score is thus the same for both. The distinction between AD and MCI is mostly dependent on the presence of associated functional impairment and not on a specific score on the MoCA test.

Sensitivity and Specificity (%) MoCA and MMSE

Cut-off	≥ 26	< 26	< 26
Group (n)	Normal controls (90)	Mild Cognitive Impairment (94)	Alzheimer Disease (93)
MoCA	87	90	100
MMSE	100	18	78

Nasreddine, et al. (2005) J Am Geriatr Soc 53: 695-699.

SLUMS: St. Louis University Mental Status examination

- Far from perfect, but perfectly acceptable for many populations
- Use the standard instructions
- Good news/Bad news situation:
 - It's free (yay) and no training required (sort of yay)
 - Spanish version (PR Spanish) and Canadian version (province and Toronto)
 - Small limited research sample and very little f/u research
 - Bias: cultural and SES, etc
 - No official adaptation for telephone or telemedicine
- Telephone: total score = 26
- Telemedicine: easily adaptable

The image shows a sample of the SLUMS (St. Louis University Mental Status) examination form. It includes instructions for the examiner and a list of 10 questions. The questions are designed to assess various cognitive functions such as orientation, attention, memory, and executive function. The form also includes a section for the examiner to record the patient's score on each question and the total score.

Why use brief cognitive tests?



- To obtain a quick sense of global function
 - To identify if there are deficits
 - To follow someone with identified deficits over time
- Is there any reason to question whether the patient has decision-making capacity?
- To identify cognitive decline early
 - Benefits may include: early introduction of cholinesterase inhibitors, addressing any reversible influences, assist with care planning, to motivate patients toward **positive behavioral change**

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Cognitive Screening – Meaning



- Interpretation and appropriate populations?
 - Limited detection for individuals who are outside the average range (either higher or lower)
 - Learning disability or low education?
 - Hearing or vision problems?
 - Limited hand function?
- Poor as stand-alone measures
 - Recommend informant/collateral input
 - Consider other risk factors and context

Joseph's MOCA
was 25

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Functional Activities Questionnaire

Scoring for each item:

Dependent = 3 Requires assistance = 2
 Has difficulty, but does by self = 1 Normal = 0
 Never did (the activity), but could do now = 0
 Never did, but would have difficulty now = 1



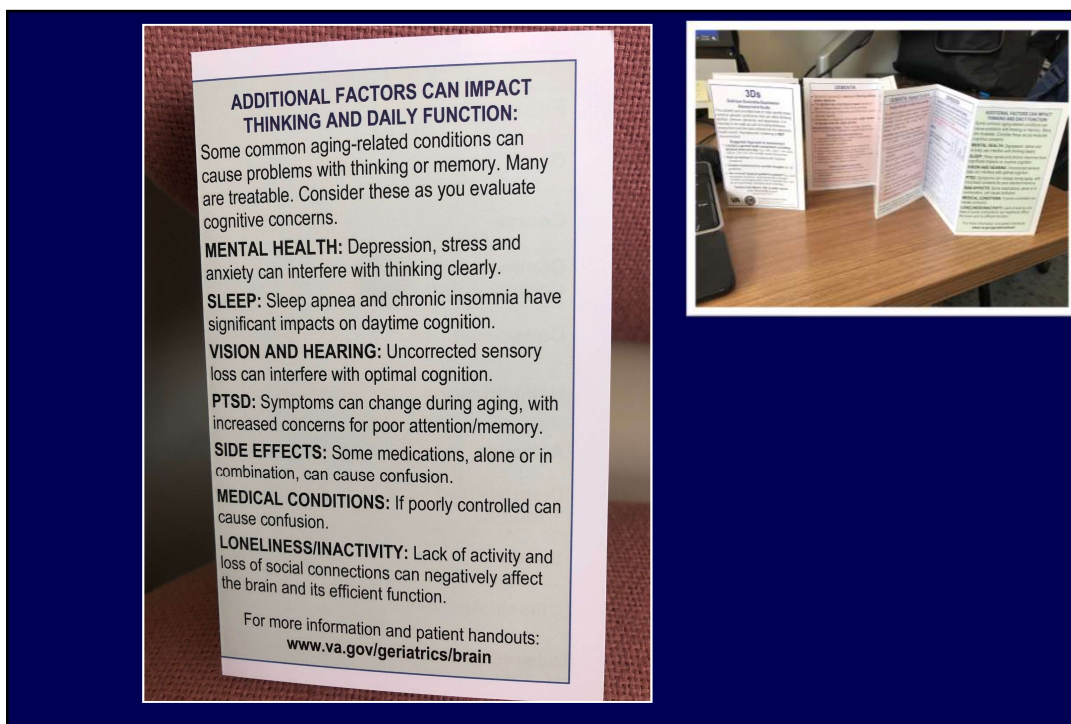
1. Writing checks, paying bills, balancing checkbook
2. Assembling tax records, business affairs or papers
3. Shopping alone for clothes, household goods, groceries
4. Playing a game of skill, working on a hobby
5. Heating water, making cup of coffee, turning off stove
6. Preparing a balanced meal
7. Keeping track of current events
8. Paying attention to, understanding, discussing a TV show, book or magazine
9. Remembering appointments, family occasions, holidays, medications
10. Traveling out of neighborhood, driving, taking buses

Sum scores to obtain total, which ranges from 0-30. Cut-off point of 9 (dependent in 3+ activities) suggests impaired function/possible cognition dysfunction

Pfeffer, R.I., et al, 1982. *Measurement of functional activities in older adults in the community*. J Gerontology, 37(3), 323-329.

Dementia is a
 diagnosis of
EXCLUSION





Healthy Brain Aging

Risk Factors: Manage and/or Avoid



Medical Conditions

- High Blood Pressure
- High Cholesterol
- Type II Diabetes
- Sleep Apnea

Behavioral Factors

- Nutrition / Diet
- Alcohol / Tobacco
- Exercise
- Stress
- Socialization

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The 3 Ds: Action Plan

Step 1 – Rule-Out

Identify potentially treatable causes of cognitive decline.
[use frontline tools, history, physical exam, blood tests]

Step 2 – Monitor

Once these are ruled out and/or treated, monitor patients over time.
[use frontline tools to catch signs early]

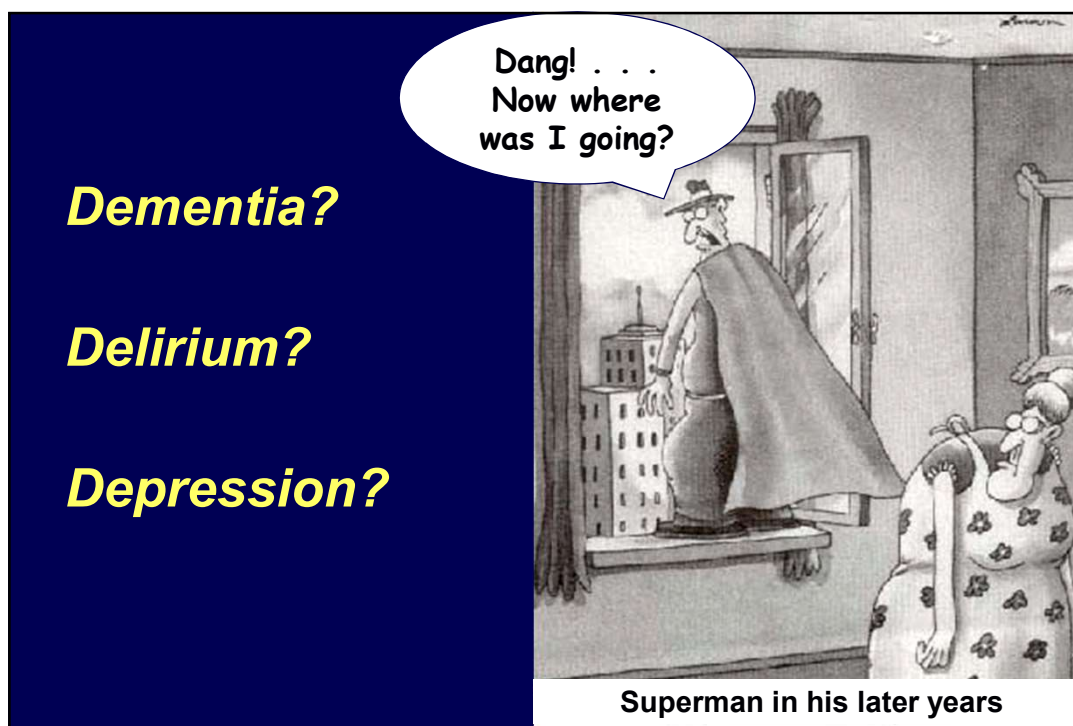
Step 3 – Indepth Evaluation

If problems persist and/or worsen, consider further evaluation.
[brain scan, additional labs, specialists.]

Case - Joseph

- 66 year old male Veteran, living in an apt
- Divorced x 2 years from 2nd wife (<5 year marriage)
- New to clinic; moved here to be closer to daughter
- Daughter is concerned
- PMHx: diabetes, HTN – historically good control, but now vitals and labs don't look so great
- Is he taking his medications/insulin as prescribed?
- Doesn't seem cognitively sharp; disengaged at visit
- **Delirium ruled out**
- **Depression tx initiated**
- **Dementia is tbd**

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Thank you!

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