

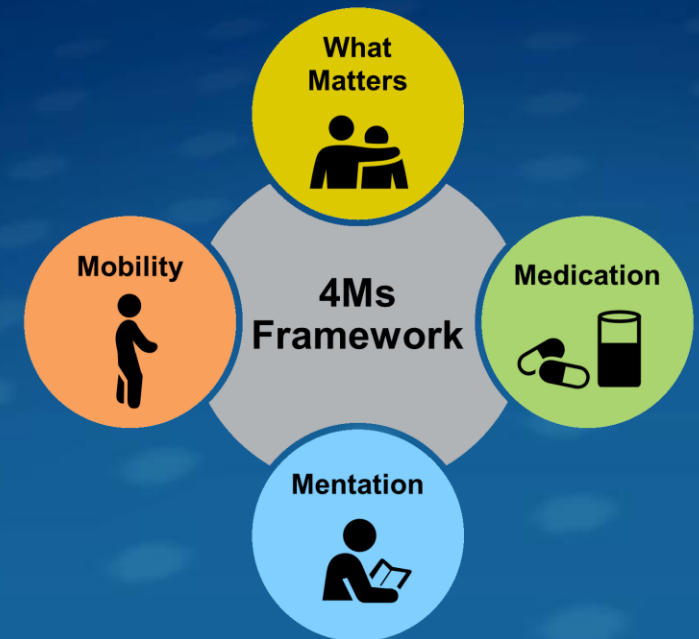
Age-Friendly HIV Care: Addressing the 4Ms

Part 3 of 4: Mentation

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No conflicts of interest or relationships to disclose.

Meet Louise

Louise is a 74-year-old community-dwelling woman with HIV (VL undetectable) and diabetes brought to your office for evaluation of mental status changes by her son. He reports that in the past year, she has neglected personal hygiene, naps during the day, and has difficulty sleeping at night, and has lost interest in leaving the house.

Vitals are normal. No focal neuro deficits.

Medications:

Biktarvy

Rosuvastatin

Metformin

OTC multivitamin

Next steps:

1. Medication/substance review
2. Labs: CBC, BMP, TSH, B12, syphilis screen, etc.
3. Depression screening: PHQ-9 or GDS
4. Dementia testing: Mini-Cog, MOCA, AD8 or RUDAS
5. Consider MRI brain w/wo contrast

Lab Results:

WBC 5.3 Hb 12.2
 Hct 36 Plt 180

136	100	14	122
3.9	24	0.99	

CD4 >1000

HIV RNA <20

Syphilis screen: neg

TSH 3.705

B12 190

LDL 70

B12 goal in older adults: >300 pg/mL

Treatment:

1000mcg PO daily indefinitely

- or -

1000mcg IM weekly x3-4, then
maintenance with 1000mcg IM every
other month or daily PO.

Depression Screening in Older Adults

- Depression can present as cognitive impairment or worsening of pre-existing cognitive impairment.
- Symptoms can include low mood, somatic symptoms, fatigue, decreased concentration, and psychomotor agitation/slowness.
- The prevalence of clinically significant symptoms among older adults is 8-16% though rates are much higher in certain groups, such as those with chronic medical illnesses and those residing in nursing facilities.¹

Both the PHQ-9 and the Geriatric Depression Scale have acceptable sensitivity/specificity for detecting depression in older patients.

¹Casey, D. A. (2017). Depression in older adults. *Primary Care: Clinics in Office Practice*, 44(3), 499–510. <https://doi.org/10.1016/j.pop.2017.04.007>

The Geriatric Depression Scale (GDS)

Are you basically satisfied with your life?	<u>yes</u> /no
Have you dropped many of your activities and interests?	<u>yes</u> /no
Do you feel that your life is empty?	<u>yes</u> /no
Do you often get bored?	<u>yes</u> /no
Are you in good spirits most of the time?	yes/ <u>no</u>
Are you afraid something bad is going to happen to you?	<u>yes</u> /no
Do you feel happy most of the time?	yes/ <u>no</u>
Do you often feel helpless?	<u>yes</u> /no
Do you prefer to stay at home, rather than going out and doing new things?	<u>yes</u> /no
Do you feel you have more problems with memory than most?	<u>yes</u> /no
Do you think it is wonderful to be alive now?	yes/ <u>no</u>
Do you feel pretty worthless the way you are now?	<u>yes</u> /no
Do you feel full of energy?	yes/ <u>no</u>
Do you feel that your situation is hopeless?	<u>yes</u> /no
Do you think most people are better off than you are?	<u>yes</u> /no

Score 1 point for each of the underlined answers.

Score ≥ 5 suggests depression.

Scores above 10 are strongly suggestive of depression.

What if my patient has pre-existing dementia?

Use the [Cornell Scale for Depression in Dementia](#)

- Clinician assesses signs and symptoms during the week preceding the interview
- Interview with patient and “an informant” (caregiver/ nursing staff member):
19 items cover 5 domains
- Each item is scored 0 (absent), 1 (mild or intermittent), or 2 (severe).

Mood-related signs

Physical signs

Behavioral disturbance

Changes in daily/nightly mood/behaviors

Ideational disturbance

<u>Medication</u>	<u>Comments</u>
SSRIs	Adverse effects (AEs): SIADH, lower bone mineral density (avoid if hx of falls, fractures)
Citalopram (Celexa)	risk of QT prolongation
Escitalopram (Lexapro)	risk of QT prolongation
Fluoxetine (Prozac)	sedating, long half-life
Paroxetine (Paxil)	short half-life (risk of withdrawal), anticholinergic AEs
Sertraline (Zoloft)	GI AEs
SNRIs	AEs: SIADH, lower bone mineral density (avoid if hx of falls, fractures)
Duloxetine (Cymbalta)	anticholinergic AEs (most commonly dry mouth, nausea, urinary hesitancy), contraindicated if CrCL <30
Venlafaxine (Effexor)	less risk of anticholinergic AEs, can cause increase in BP and QTc
Other	-
Bupropion (Wellbutrin)	activating, safe in HF, lowers seizure threshold
Mirtazapine (Remeron)	increases appetite, may be sedating initially

Dementia Screening Tools

Test	Items	Time	Sensitivity/Specificity	Notes
<u>Mini-Cog</u>	3 items	5 minutes	76%/89%	Short, uses clock and 5-item recall
<u>Montreal Cognitive Assessment (MoCA)</u>	12 (30 pts)	10-15 min	90% for MCI, 100% for AD/ 90-94%	Heavily based on language; available in many languages: mocacognition.com
<u>Rowland Universal Dementia Assessment Scale (RUDAS)</u>	6 (30 pts)	10-15 min	89%/98%	Less affected by education and primary language, also tests praxis.
<u>International HIV Dementia Scale</u>	3 (12 pts)	5-10 minutes	74.3%/54.7% for HAD 64.3%/66% for milder forms of HAND	Greater emphasis on psychomotor speed; 5-item recall
<u>AD8</u>	8 items	5 minutes	74-84%/90-86%	Caregiver assessment

MONTREAL COGNITIVE ASSESSMENT (MOCA) Impossible Version

NAME :
Education :
Sex :
Date of birth :
DATE :

VISUOSPATIAL / EXECUTIVE

Copy

Draw a keyboard with all the letters.
(3 points)

POINTS

End
Begin

18 3 4
N
9 13
F T
6 S

[] [] []

___/5

NAMING

[] [] []

___/3

MEMORY

Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

	INCUMBENT	ENGENDERING	CONTENTIOUS	CENTRIFUGE	SATIATE
1st trial					
2nd trial					

No points

ATTENTION

Read list of digits (1 digit/ sec.).

Subject has to repeat them in the forward order [] 7 3 1 8 2 7 3 4 9 5

Subject has to repeat them in the backward order [] 8 5 9 4 1

___/2

Read list of letters.
Tap for each letter that is not the first letter of a month.

No points if ≥ 2 errors.

[] F B A C M N A A J K L B A F A K D E A A A J A M O F A A B

___/1

Serial square with 3.

[] 9 [] 27 [] 81 [] 243 [] 729

4 or 5 correct: 3 pts, 2 or 3 correct: 2 pts, 1 correct: 1 pt, 0 correct: 0 pt

___/3

LANGUAGE

Repeat : How can a clam cram in a clean cream can? []

The thirty-three thieves thought that they thrilled the throne []

___/2

Fluency / Name maximum number of words in one minute that end with the letter F [] ____ (N ≥ 11 words)

___/1

ABSTRACTION

Similarity between e.g. banana - orange = fruit [] Light -- Sound [] The Sun -- Brad Pitt

___/2

DELAYED RECALL

Has to recall words	INCUMBENT	ENGENDERING	CONTENTIOUS	CENTRIFUGE	SATIATE	Points for UNCUE recall only
WITH NO CUE	[]	[]	[]	[]	[]	

___/5

Optional

Category cue	INCUMBENT	ENGENDERING	CONTENTIOUS	CENTRIFUGE	SATIATE
Multiple choice cue					

ORIENTATION

[] Galaxy [] Planet [] Latitude [] Time [] Date [] Year

___/6

MONTREAL COGNITIVE ASSESSMENT (MOCA) Version 7.1 Original Version

NAME :
Education :
Sex :
Date of birth :
DATE :

VISUOSPATIAL / EXECUTIVE

Copy cube

Draw CLOCK (Ten past eleven)
(3 points)

POINTS

End
Begin

5 1 2
A B
4 3
D C

[] [] []

___/5

Contour Numbers Hands

NAMING

[] [] []

___/3

MEMORY

Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

	FACE	VELVET	CHURCH	DAISY	RED
1st trial					
2nd trial					

No points

ATTENTION

Read list of digits (1 digit/ sec.).

Subject has to repeat them in the forward order [] 2 1 8 5 4

Subject has to repeat them in the backward order [] 7 4 2

___/2

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors

[] F B A C M N A A J K L B A F A K D E A A A J A M O F A A B

___/1

Serial 7 subtraction starting at 100 [] 93 [] 86 [] 79 [] 72 [] 65

4 or 5 correct subtractions: 3 pts, 2 or 3 correct: 2 pts, 1 correct: 1 pt, 0 correct: 0 pt

___/3

LANGUAGE

Repeat : I only know that John is the one to help today. []

The cat always hid under the couch when dogs were in the room. []

___/2

Fluency / Name maximum number of words in one minute that begin with the letter F [] ____ (N ≥ 11 words)

___/1

ABSTRACTION

Similarity between e.g. banana - orange = fruit [] train - bicycle [] watch - ruler

___/2

DELAYED RECALL

Has to recall words	FACE	VELVET	CHURCH	DAISY	RED	Points for UNCUE recall only
WITH NO CUE	[]	[]	[]	[]	[]	

___/5

Optional

Category cue	FACE	VELVET	CHURCH	DAISY	RED
Multiple choice cue					

ORIENTATION

[] Date [] Month [] Year [] Day [] Place [] City

___/6

Now what?

“The loss of cognitive abilities must be...
present in several cognitive domains (often memory with at least 1 other domain such as language, visuospatial, executive, or other),
and
represent a **decline** from the prior level of function,
and
impair functional abilities in day-to-day life (eg, social, occupational, self-care).”

Common Dementia Syndromes: A Differential Diagnosis

HIV-associated neurocognitive disorder/HIV-associated dementia

Alzheimer's disease

Cerebral small vessel disease/vascular dementia

Lewy body dementia/Parkinsonism

Frontotemporal dementia

Dementia Syndrome	Risk Factors	Distinguishing Features	MRI Findings
HIV-associated neurocognitive disorder (HAND)	<ul style="list-style-type: none"> duration of HIV infection low nadir CD4 count detectable HIV RNA 	<ul style="list-style-type: none"> cognitive slowing poor concentration global slowing of movement depressive/affective Δs 	<ul style="list-style-type: none"> gray matter atrophy enlargement of ventricles/sulci hyperintense signal in deep white matter
Alzheimer's disease (AD)	<ul style="list-style-type: none"> advancing age family history social isolation uncorrected hearing loss 	<ul style="list-style-type: none"> initially amnesic (\downarrow learning <u>and</u> recall) impaired visuo-construction and language 	<ul style="list-style-type: none"> medial temporal lobe atrophy (hippocampus)
Vascular dementia	<ul style="list-style-type: none"> vascular disease diabetes tobacco use 	<ul style="list-style-type: none"> deficits in processing speed and executive function 	<ul style="list-style-type: none"> evidence of cerebrovascular disease
Lewy body dementia	<ul style="list-style-type: none"> family history of Parkinson's disease genetic polymorphisms ?hx of depression 	<ul style="list-style-type: none"> fluctuating alertness parkinsonism features impaired attention and visuospatial function 	<ul style="list-style-type: none"> less atrophy than in AD reduced striatal uptake on DaT scan
Frontotemporal dementia (FTD)	<ul style="list-style-type: none"> family history genetic polymorphisms 	<ul style="list-style-type: none"> socially inappropriate behavior, impulsivity apathy, loss of empathy executive dysfunction relative sparing of episodic memory 	<ul style="list-style-type: none"> focal atrophy of the frontal and/or temporal cortices relative sparing of hippocampi

Versus...

Normal Aging

- A decrease in mental flexibility
- Some word-finding difficulty
- A mild decrease in short-term (working) memory
- Intact memory for current events
- Independence in ADL/IADLs
- Making a bad decision once in a while
- Needing help with new devices
- More time/energy to encode new information

Mild Cognitive Impairment (MCI)

- May have problems with memory, language, judgement, and/or thinking, *but does not fulfill criteria for dementia*
- No changes in ADL/IADL ability
- 10-20% of cases progress to dementia per year

Older adults with HIV have higher rates of social isolation.

More than half (56%) of participants in one study live alone.

SUPPORTING SENIOR CENTERS IN KING COUNTY

- [Ballard NW Senior Center](#)
- [Black Diamond Community Center Senior Center](#)
- [Central Area Senior Center](#)
- [Center for Active Living](#) (formerly Senior Center of West Seattle)
- [City of Auburn Senior Activity Center](#)
- [City of Bellevue North Bellevue Community Center](#)
- [City of Burien Community Center](#)
- [City of Enumclaw Senior Center](#)
- [City of Issaquah Senior Center](#)
- [City of Pacific Senior Center](#)
- [City of Redmond Senior & Community Center](#)
- [City of SeaTac Senior Program](#)
- [City of Tukwila Community Center](#)
- [Club Bamboo at Asian Counseling and Referral Service](#)
- [East African Senior Center](#)
- [El Centro de la Raza Senior Center](#)
- [Eritrean Association in Greater Seattle](#)
- [Federal Way Senior Center](#)
- [Filipino Community of Seattle](#)
- [GenPride Senior Center](#)
- [Greater Maple Valley Community Center](#)
- [Greenwood Senior Center](#)
- [Indian American Community Services Senior Center](#)
- [International Drop-In Center](#)
- [Kenmore Senior Center](#) (a branch of Northshore Senior Center)
- [Kent Senior Activity Center](#)
- [Korean Women's Association](#)
- [Lake City Senior Center](#)
- [Mt Si Senior Center](#)
- [Northshore Senior Center](#)
- [Peter Kirk Community Center](#)
- [Pike Market Senior Center](#)
- [Seattle Indian Health Board Elders Program](#)
- [Shoreline Lake Forest Park Senior Center](#)
- [Sno-Valley Senior Center](#)
- [South Park Senior Center](#)
- [Southeast Seattle Senior Center](#)
- [Sunshine Garden Chinese Information and Service Center](#)
- [United Indians of All Tribes Elders Program](#)
- [Vashon-Maury Senior Center](#)
- [Wallingford Community Senior Center](#)



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