Managing the Care of Older Patients with HIV

Meredith Greene, MD

Associate Professor of Medicine-Geriatrics
University of California San Francisco
San Francisco, California

2021 Ryan White HIV/AIDS Program CLINICAL CONFERENCE

Financial Relationships With Ineligible Companies (Formerly Described as Commercial Interests by the ACCME) Within the Last 2 Years

Dr Greene has received grant support from Gilead Sciences, Inc. (Updated 9/30/21)

Learning Objectives

After attending this presentation, learners will be able to:

- Describe key components of Geriatric Assessment through the 5Ms framework
- List practical assessment tools for cognitive impairment and falls
- Describe strategies to ask and address social isolation and loneliness

Audience Response 1:

Have you referred any of your older HIV+ patients to a geriatrician?

Yes

No, not sure who/where I would refer to

No, not sure what would be involved in a visit

Case

74 y/o diagnosed with HIV in 1984

- CD4 count 440, viral load undetectable
- Hypertension, CKD, osteoporosis, depression, treated anal SCC
- 9+ medications daily
- Quit his job when diagnosed with HIV, lost many friends in 80s/90s- feels isolated

Greene M. *JAMA* 2013

"When you got HIV in those days it was a death sentence. That was what was expected—you would die. To live even 5 years was a surprise to me…"

5Ms of Geriatrics

MULTICOMPLEXITY

...describes the whole person, typically an older adult, living with multiple chronic conditions, advanced illness, and/or with complicated biopsychosocial needs

MIND	■ Mentation ■ Dementia ■ Delirium ■ Depression
MOBILITY	■ Amount of mobility; function ■ Impaired gait and balance ■ Fall injury prevention
MEDICATIONS	■ Polypharmacy, deprescribing ■ Optimal prescribing ■ Adverse medication effects and medication burden
WHAT MATTERS MOST	■ Each individual's own meaningful health outcome goals and care preferences

5Ms and HIV Clinical Guidelines

- Adverse drug events from ART and concomitant drugs may occur more frequently in older persons with HIV than in younger individuals with HIV. Therefore, the bone, kidney, metabolic, cardiovascular, cognitive, and liver health of older individuals with HIV should be monitored closely.
- Polypharmacy is common in older persons with HIV; therefore, there is a greater risk of drug-drug interactions between antiretroviral drugs and concomitant medications. Potential for drug-drug interactions should be assessed regularly, especially when starting or switching ART and concomitant medications.
- The decline in neurocognitive function with aging is faster in people with HIV than in people without HIV. HIV-associated neurocognitive disorder (HAND) is associated with reduced adherence to therapy and poorer health outcomes including increased risk of death. For persons with progressively worsening symptoms of HAND, referral to a neurologist for evaluation and management or a neuropsychologist for formal neurocognitive testing may be warranted **(BIII)**.
- Mental health disorders are a growing concern in aging people with HIV. A heightened risk of mood disorders including anxiety and depression has been observed in this population. Screening for depression and management of mental health issues are critical in caring for persons with HIV.
- HIV experts, primary care providers, and other specialists should work together to optimize the medical care of older persons with HIV and complex comorbidities.

https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/hiv-and-older-person

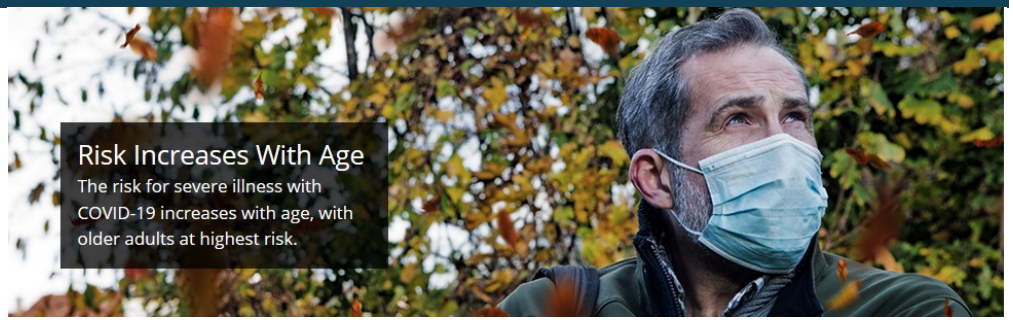
Box 6. Recommendations for Polypharmacy, Frailty, and Cognitive Function Screening for Older People With HIV

- Close and sustained attention to polypharmacy is recommended in the management of older people with HIV (evidence rating: AIII)
- Assessment of mobility and frailty is recommended for patients aged 50 years or older using a frailty assessment that is validated in all persons with HIV (evidence rating: BIa); the frequency of frailty assessment is guided by the baseline assessment and should be more frequent (every 1-2 years) in patients who are frail or before becoming frail, and less frequent (up to 5 yearly) in patients who are robust (evidence rating: BIII)
- In patients who are frail or prefrail, management of polypharmacy, referral for complete geriatric assessment, exercise and physical therapy, and nutrition advice is recommended (evidence rating: AIII)
- Routine assessment of cognitive function every other year using a validated instrument is recommended for people with HIV who are older than 60 years (evidence rating: BIII)

JAMA 2020

Even more important since Covid-19 pandemic

Other consequences COVID:



- Increased isolation
- Increase in mental health concerns & substance use
- Decreased physical activity (fear leaving home)
- Difficulty keeping caregivers

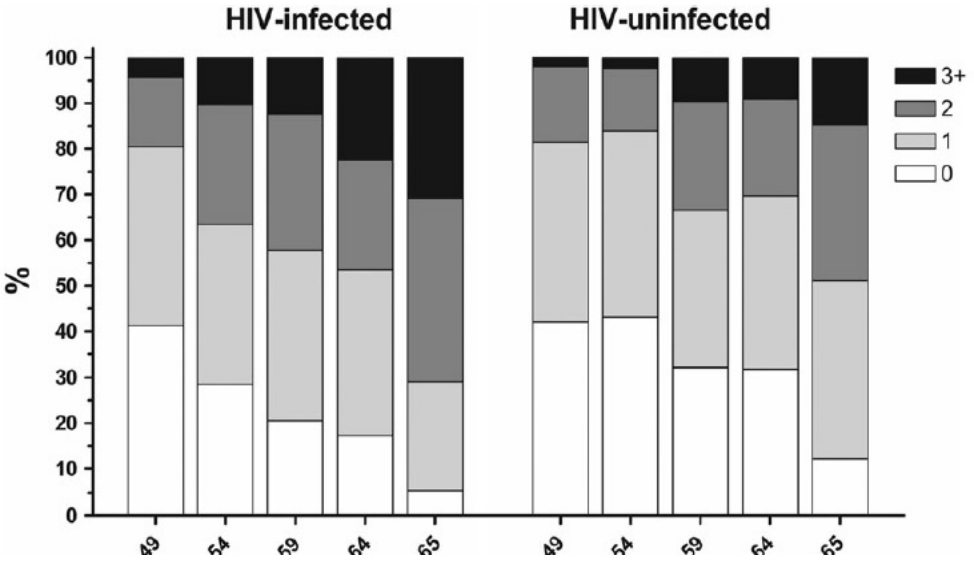
  Decline in cognitive and physical function, increase in falls

Multi-complexity: Relevance to HIV and geriatrics

Multi-morbidity
& polypharmacy

Geriatric Syndromes

Complex psychosocial situations



Multimorbidity Higher in PWH

Conditions included: CAD, HTN, PAD, CVD,COPD, DM, Renal Dz, Non-AIDS CA, Osteoporosis

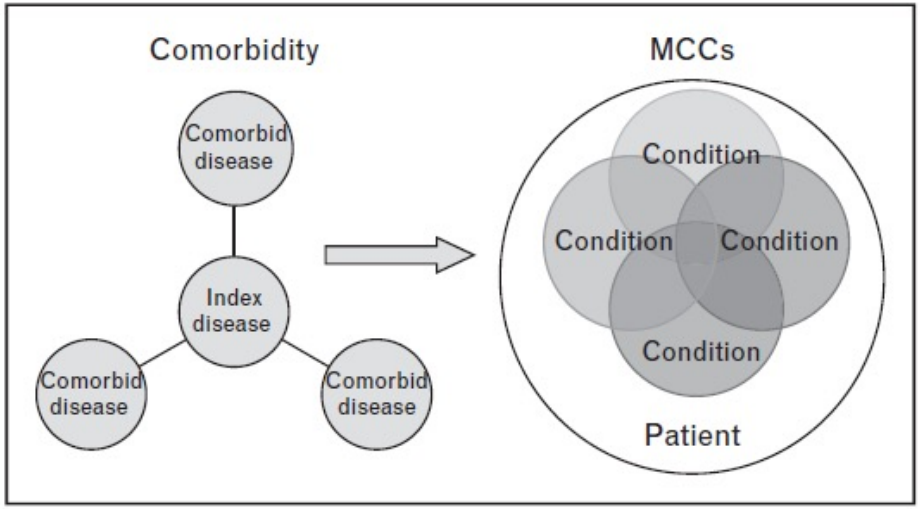
Schouten *CID 2014*

Multimorbidity Requires a Different Approach

Not just individual problems on a problem list:

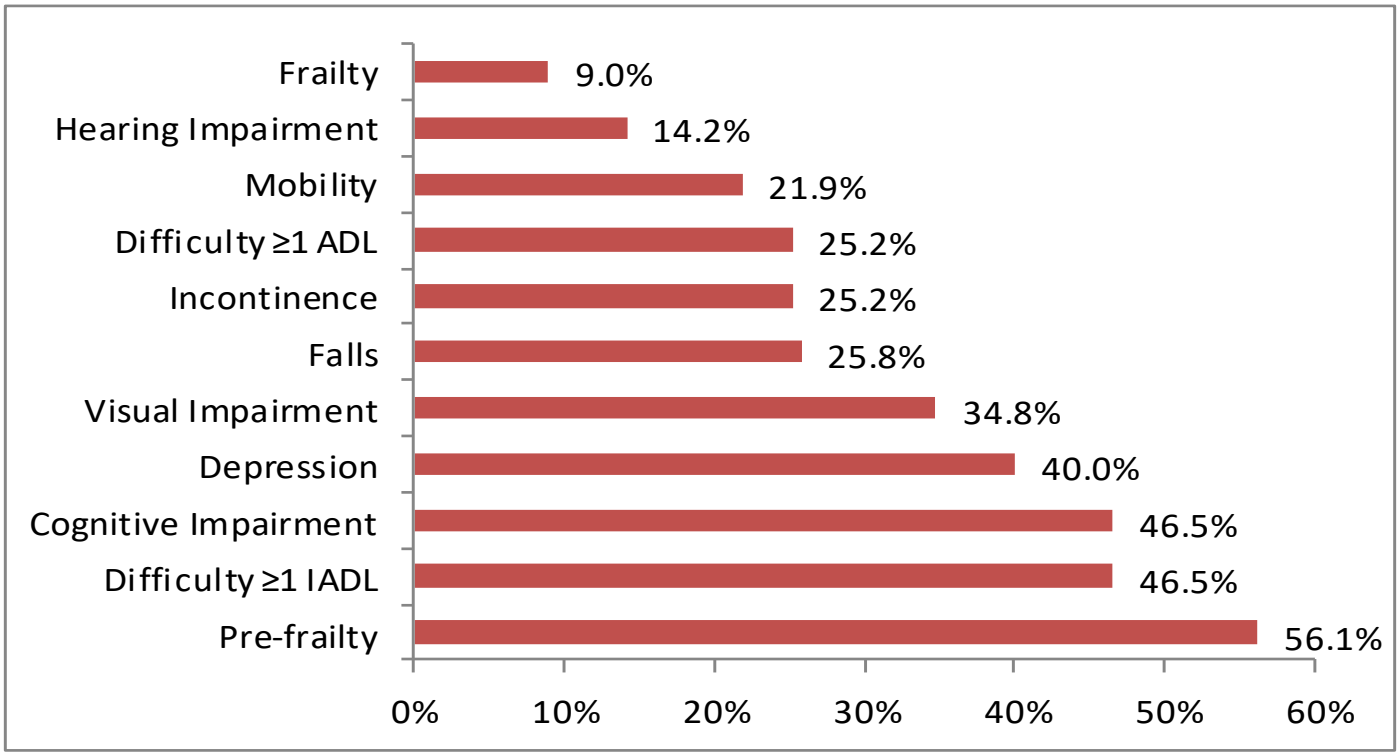
- Individual disease and screening guidelines focus on Dx and Rx- adding medications

- Treatment Interactions



Boyd, Lucas *Curr Opin HIV/AIDS 2014*

Geriatric Syndromes In PWH



Greene *JAIDS* 2015

5Ms: Mobility & Function

Mobility: Stairs
Room/House
Community

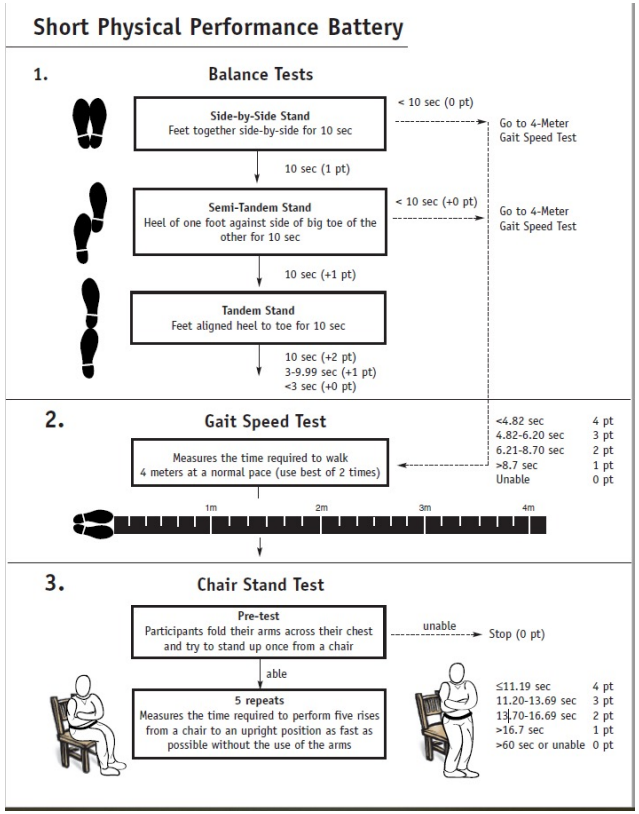
Activities of Daily Living (ADLs)

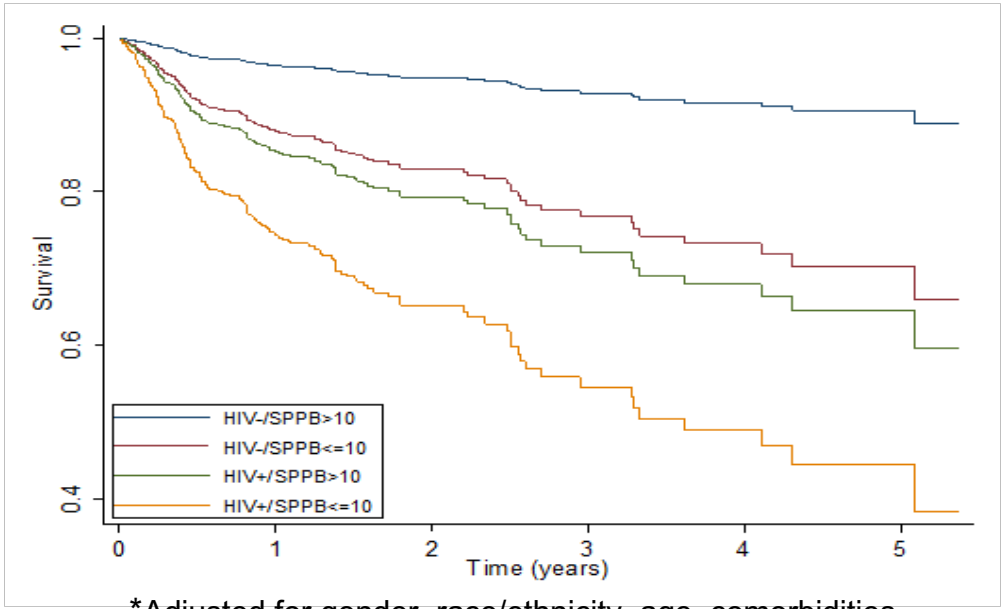
- Bathing
- Dressing
- Toileting
- Transferring
- Feeding

Instrumental Activities of Daily Living (IADLs)

- Telephone
  Finances
- Transportation
  Laundry
- Housekeeping
  Shopping
- Meal preparation
- Medications

5Ms: Mobility: Short Physical Performance Battery





*Adjusted for gender, race/ethnicity, age, comorbidities

Greene *AIDS* 2014

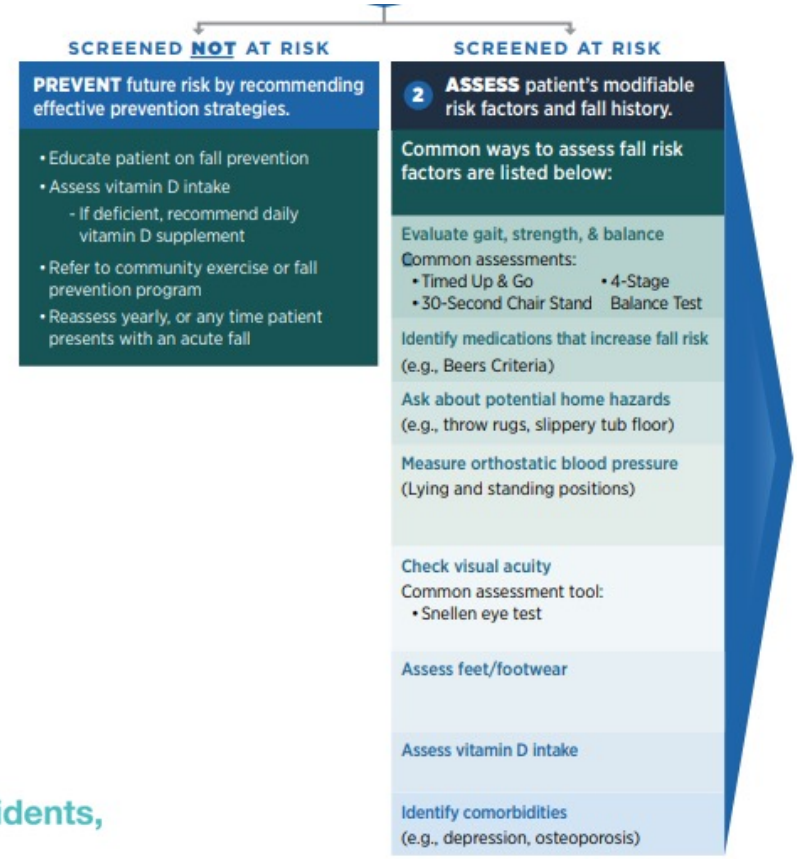
5Ms: Mobility : Falls in PWH

Cohort	Mean age (years)	Any Fall	Recurrent Falls
HAILO	51	18%	7%
Colorado	52	30%	18%
MACS/WIHS	51	24%	13%
MACS-BOSS	61	41%	20%
WIHS	48	41%	25%
San Francisco	57	26%	--

Tolentino *JAIDS* 2021; Womack *JAIDS* 2019; Tassiopoulos K *AIDS* 2017; Erlandson *HIV Med* 2016; Erlandson *JAIDS* 2012; Sharma *Antivir Ther* 2019; Sharma *Antivir Ther* 2018; Greene *JAIDS* 2015 Slide courtesy Kristine Erlandson

5Ms: Screen for Falls

- Do you feel unsteady when standing or walking?
- Do you worry about falling?
- **Have you fallen in the past year?**



cdc.gov

STEADI Stopping Elderly Accidents, Deaths & Injuries

CDC STEADI fall algorithm

30-Second Chair Stand Test

Use this test to assess a patient's leg strength and endurance. See our simple instructions, and watch the short video on how to conduct the test.

Download

- The 30-Second Chair Stand Test [178KB]

Watch How to Conduct the Test (2:08)

Low Resolution Video

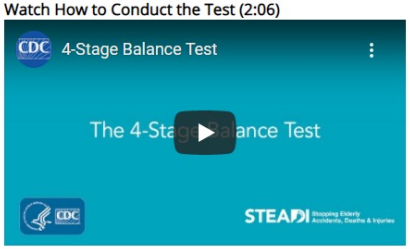
4-Stage Balance Test

Use this test to assess a patient's balance. See our simple instructions, and watch the short video on how to conduct the test.

Download

- The 4-Stage Balance Test [927KB]

Watch How to Conduct the Test (2:06)



Low Resolution Video

Timed Up and Go (TUG) Test

Use this test to assess a patient's mobility. See our simple instructions, and watch the short video on how to conduct the test.

Download

- The Timed Up and Go (TUG) Test [148KB]

Measuring Orthostatic Blood Pressure

Use this tool to determine if a patient may have postural hypotension.

Download

- Measuring Orthostatic Blood Pressure [558KB]

3 INTERVENE to reduce identified risk factors using effective strategies.

Reduce identified fall risk

- Discuss patient and provider health goals
- Develop an individualized patient care plan (see below)

Below are common interventions used to reduce fall risk:

Poor gait, strength, & balance observed

- Refer for physical therapy
- Refer to evidence-based exercise or fall prevention program (e.g., Tai Chi)

Medication(s) likely to increase fall risk

- Optimize medications by stopping, switching, or reducing dosage of medications that increase fall risk

Home hazards likely

- Refer to occupational therapist to evaluate home safety

Orthostatic hypotension observed

- Stop, switch, or reduce the dose of medications that increase fall risk
- Educate about importance of exercises (e.g., foot pumps)
- Establish appropriate blood pressure goal
- Encourage adequate hydration
- Consider compression stockings

Visual impairment observed

- Refer to ophthalmologist/optometrist
- Stop, switch, or reduce the dose of medication affecting vision (e.g., anticholinergics)
- Consider benefits of cataract surgery
- Provide education on depth perception and single vs. multifocal lenses

Feet/footwear issues identified

- Provide education on shoe fit, traction, insoles, and heel height
- Refer to podiatrist

Vitamin D deficiency observed or likely

- Recommend daily vitamin D supplement

Comorbidities documented

- Optimize treatment of conditions identified
- Be mindful of medications that increase fall risk

FOLLOW UP with patient in 30-90 days.

Discuss ways to improve patient receptiveness to the care plan and address barrier(s)

5Ms- Mind

Classic HAND symptoms:

Executive function (multi-tasking)

Attention (perceived as memory trouble)

Slowing, motor symptoms

Fluctuating Course

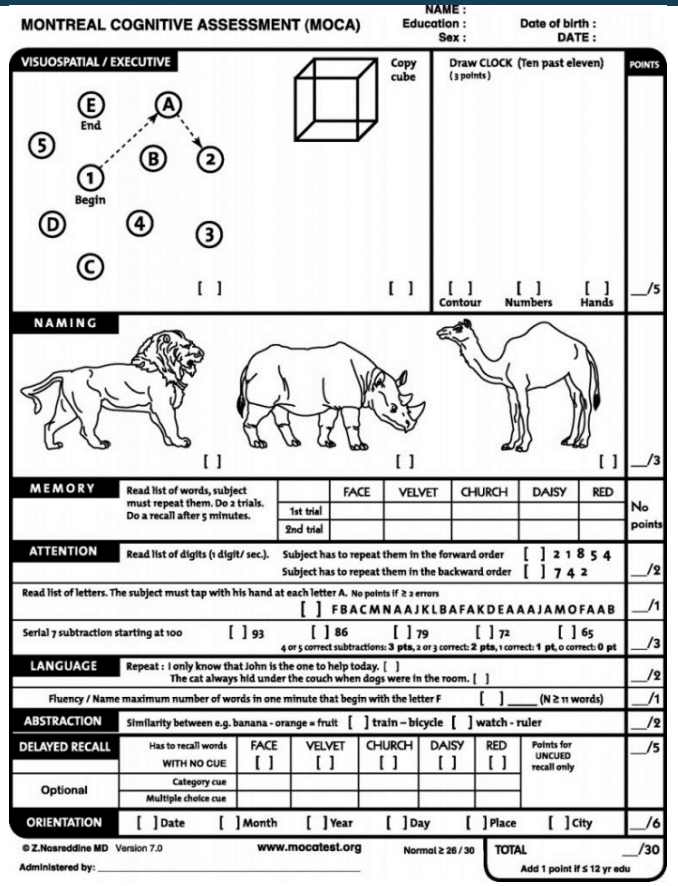
Typical age-related memory loss and other changes compared to Alzheimer's

Signs of Alzheimer's	Typical age-related changes
Poor judgment and decision making	Making a bad decision once in a while
Inability to manage a budget	Missing a monthly payment
Losing track of the date or the season	Forgetting which day it is and remembering later
Difficulty having a conversation	Sometimes forgetting which word to use
Misplacing things and being unable to retrace steps to find them	Losing things from time to time

Cognitive symptoms can have many contributing factors- comorbidities, medications, substance use

5MS– Mind

- Mini-cog
(3-item recall & clock draw)
- MMSE
- **MOCA**
  -Likely best for HIV, mild Alzheimer's
- HIV Dementia Scale
  -Detect severe cases
- Digital Assessments


MONTREAL COGNITIVE ASSESSMENT (MOCA)

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

VISUOSPATIAL / EXECUTIVE — Copy cube — Draw CLOCK (Ten past eleven) (3 points) — POINTS

E End, A, 5, B, 2, 1 Begin, D, 4, 3, C

[ ] [ ] [ ] Contour [ ] Numbers [ ] Hands /5

NAMING

[ ] [ ] [ ] /3

MEMORY — Read list of words, subject must repeat them. Do 2 trials. 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

		FACE	VELVET	CHURCH	DAISY	RED	Points for UNCUED recall only
	Has to recall words WITH NO CUE	[ ]	[ ]	[ ]	[ ]	[ ]	
Optional	Category cue						
	Multiple choice cue						

/5

ORIENTATION [ ] Date [ ] Month [ ] Year [ ] Day [ ] Place [ ] City /6

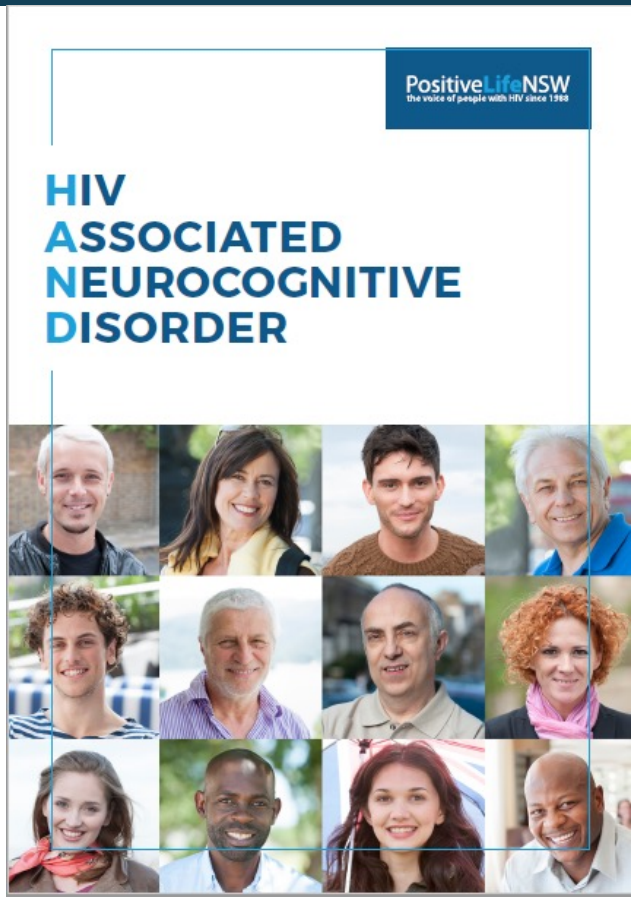
© Z.Nasreddine MD Version 7.0 www.mocatest.org Normal ≥ 26 / 30

TOTAL /30
Add 1 point if ≤ 12 yr edu

Administered by: _____

5Ms- Mind- Addressing Cognitive Symptoms

- CSF escape is rare- consider if rapid progression
- ART! ART!
- Address polypharmacy
- Treat comorbidities –vascular risk factors
- Treat depressive symptoms
- Address sleep
- Address Sensory impairment
- Exercise
- Compensatory strategies – using lists, calendars, avoid multitasking
- Advanced care planning



Mind =Mental Health

- Depression more common in HIV+

<u>Not just depression:</u>

- PTSD
- Intersection stigmas
- Loneliness

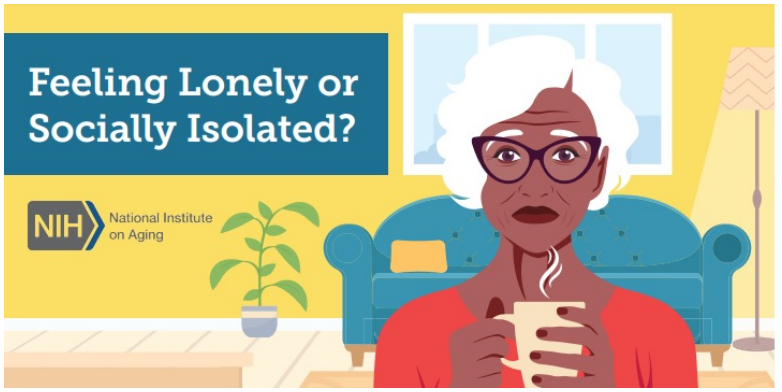
Co-exist with substance use

5Ms: Matters Most
Addressing Loneliness & Isolation

Loneliness is the *subjective* feeling of being alone.

Social Isolation relates to a *quantifiable* number of relationships

Not the same as living alone



Health impacts:

-Depression

-Cognitive & functional decline

-Increase mortality – similar to smoking 15 cigarettes/day

Ask!

- Controversy over asking directly
"do you feel lonely?"

- Ask about social support

"How many people do you feel you can depend on or feel close to?

Related:

- Ask about access phone, video
- Ask about emergency contact

leading to surrogate decision maker

3-item UCLA Loneliness scale

1. **I feel left out**
2. **I feel isolated**
3. **I lack companionship**

Hardly Ever, Some of the Time, Often

Cudjoe *JAGS* 2020;Campaigntoendloneliness.org; Natl Academies of Science, Engineering & Medicine 2020 *Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System*.

Interventions for Loneliness in HIV+

- Online support groups
- Mindfulness based cognitive therapy
- Telephone based interventions
- Group interventions for smoking cessation, peer counseling sessions on sexual risk behaviors

- Choose questions and services feasible to you
- Partner with community organizations
  - Direct interventions
  - Reaching most lonely
- Recognizing resilience

Mo *Pt Educ & Couns* 2013; Stanton *AIDS Care* 2015; Samhkaniyan *J Med Life* 2015; Heckman *Ann Int Med* 2006; Hart *Plos One* 2016, Wu *Health Psych & Behav Med* 2014

How will I be able to do This?

- What are your local resources?
  - Telehealth options with geriatrics?
  - Community partners
- Which areas (like in 5Ms) are you already addressing?
  - Pick one to start
- What is your staffing and availability to help with doing assessments?
  - And follow-up after screening/assessment
  - Team approach but can break into visits or telehealth sessions

Geriatric Assessment During COVID

- Telehealth is here to stay
- Self-report of falls, function can be asked on phone
- Can still observe gait, getting up out of chair
- Advantages to video visits in home:
  - See parts of environment
  - Med review!!!
  - Improve access limited mobility

UCSF Geriatrics Workforce Enhancement Program Presents:

Caring for Older Adults During COVID-19: Assessment and Management via Telehealth

https://bit.ly/UCSFGWEP_TELEHEALTH

Summary

5Ms of Geriatrics Approach can help improve care & address **Multi-complexity** many Older PWH experience

Mobility: Ask about function (ADL, IADL) and falls
--Objective assessments –SPPB, TUG complementary

Mind: Assess mental health and cognition
-- MOCA may be best clinic based tool for HAND, cognitive symptoms

Matters most: Ask about loneliness & social isolation (normalize!)
-UCLA loneliness scale

Question-and-Answer Session

2021 Ryan White HIV/AIDS Program CLINICAL CONFERENCE