HIV IN OLDER ADULTS

A Quick Reference Guide for HIV Primary Care Clinicians

Effective antiretroviral therapy (ART) has prolonged the lifespan of people living with HIV. Non-HIV/AIDS-related conditions now account for most morbidity and mortality among older people with HIV infection. Although ART reduces the effects of HIV disease and chronic inflammation, it does not restore normal immunologic function. The literature describes an aging HIV-infected population (between 50-65 years of age) with high rates of comorbid conditions compared with their non-HIV-infected counterparts. Medical care may be further complicated by neurocognitive decline and high rates of depression, alcohol and substance use, and social isolation. The goals of caring for older people with HIV infection are to minimize illness and frailty, optimize health and well-being, and prolong life.

This reference guide for care of older adults with HIV supplements, but does not replace, standard guidelines for all adults with HIV, which can be found at www.hivguidelines.org.

KEY POINTS

- People with HIV may develop chronic diseases associated with aging earlier in life, resulting in the development of multiple comorbid conditions.
- Aging can compound the immunological impact of HIV and accelerate HIV disease progression.
- Older people with HIV are at particular risk for polypharmacy, which increases the risk of drug-drug interactions and adverse events; it also can negatively affect cognitive function and quality of life.

To prevent or delay disability, the following assessments are particularly important for older adults with HIV/AIDS:

- Total HIV and non-HIV disease burden and functional status
- Medication adherence, side effects, drug-drug interactions, need for dose adjustments
- Alcohol and substance use, including prescription drugs
- Mental and cognitive status
- Social support

TOTAL DISEASE BURDEN AND FUNCTIONAL STATUS

ASSESS:

- Disease progression since last visit
- Consultations, specialty care visits, oral health care, ancillary tests, changes in medications
- New symptoms and diagnoses
- Changes in hearing and sight
- Basic and instrumental activities of daily living (ADLs)
- Pain, range of motion, gait
- Frailty
- Need for home care, assisted or congregate living, skilled nursing, or hospice services
- Hygiene: hair, nails, feet

Screening Tools:

- *Osteoporosis:* Bone density, vitamin D
- *Cardiovascular disease risk:* Framingham risk score assessment, lipid profile including total cholesterol, HDL, LDL, and triglycerides (at least annually, repeat before initiating ART, and within 4 to 8 months after initiating)
- *Activities of daily living*[a]*:* Ask patient and/or caregivers whether patient can perform the following activities with or without assistance from others or from assistive devices:
  - ✔ *Basic ADLs:* feeding, toileting, continence, bathing, grooming, dressing, ambulation, transfers (to or from bed or chair)
  - ✔ *Instrumental ADLs:* telephone, shopping, food preparation, housekeeping, laundry, transportation, medication management, financial management
- *Pain, range of motion, gait:* Note whether patient is impaired by pain, joint stiffness, or abnormal or unsteady gait and is at risk for falls
- *Frailty*[b]*:* Using a phenotype assessment, frailty is indicated by the presence of three or more of the following five factors. Assess:
  - ✔ Shrinking: unintentional weight loss (>10 lbs in prior year)
  - ✔ Weakness: as determined by grip strength
  - ✔ Poor endurance and energy: self-report of exhaustion
  - ✔ Slowness: more than 6-7 seconds (depending on height) to walk 15 ft
  - ✔ Decreasing physical activity
- *HIV disease progression*[c]*:* The VACS Index, a prognostic tool based on a calculation of age and eight routine laboratory tests, helps monitor HIV disease progression and response to therapy. An online calculator can be accessed at: http://vacs.med.yale.edu

INITIATION OF ART IN PATIENTS OVER 50

All patients, regardless of CD4 count, should be evaluated for ART. Patients >50 years of age are a high-risk group for whom initiation of ART is particularly urgent.

- Older untreated HIV-infected persons have more rapid disease progression than younger persons.[1]
- Immunologic response is less robust in older patients[2,3]; however, patients >50 years of age who initiate therapy with higher CD4 counts are more likely to achieve better immunologic responses.[4]
- Patients who have longstanding HIV infection have increased susceptibility to inflammation-induced diseases and have diminished capacity to fight certain diseases.[5]

POLYPHARMACY

Polypharmacy significantly increases the chances of serious drug-drug interactions, toxicity, and poor adherence.

RECOMMENDATIONS:

- Perform medication review at every visit
- Discontinue medications that are no longer needed
- Encourage patients to use one pharmacy
- Consider obtaining a dispensing history from the pharmacy

ASSESS:

- Current medications and adherence
- Potential drug interactions, adverse drug effects, allergies
- Dosing considerations: renal and hepatic function, pharmacokinetic changes with aging

Note: When patients report use of erectile dysfunction medications or products to relieve vaginal dryness, clinicians should use the opportunity to discuss safer-sex practices.

Screening Tools: ▪ Urine screen ▪ Blood panel

Medication List and Adherence Verification:

- ✔ Create/update medication list, including over-the-counter drugs, supplements, and complementary and alternative medications.
- ✔ Verify current pharmacy and check prescription pattern and fill dates.
- ✔ Ask patients to bring pill bottles to visits, compare with medication list, and perform pill counts.
- ✔ Cross-reference information with home health agency or other caregivers.
- ✔ Consider use of customized pill cards, pill boxes (for those who can fill them on their own), home delivery, prepackaging of medication, "easy-open" containers.
- ✔ Ensure that instructions on medication dosing are appropriately conveyed.

CONDITIONS OF AGING THAT MAY AFFECT ADHERENCE

Impaired hearing	Perform screening test to determine need for formal testing: www.asha.org/public/hearing/Self-Test-for-Hearing-Loss
Impaired vision	Perform vision screening every 1-2 years in pts >65; every 1-3 years in pts 55-64; annually for pts with CD4 <200, diabetes mellitus, or hypertension
Cognitive impairment	Assess cognitive function at baseline and at least annually*
Polypharmacy (higher pill burden, greater cumulative side effects, medication fatigue)	Perform medication review at every visit; discontinue medications that are no longer needed
Social isolation and lack of support	Assess social support at least annually*
Depression	Screen for depression at every visit*
Substance use, including misuse of prescriptions	Screen for substance use at baseline and at least annually

*See reverse side for sample screening tools and questions.

ALCOHOL AND SUBSTANCE USE

Patients >50 years of age are at risk for misuse of prescription drugs.
As with all HIV-infected patients, clinicians should screen for alcohol and substance use at baseline and at least annually.

Signs of Possible Abuse of Prescription Medications[d]:

- Frequent reports of "losing" prescriptions and requests for more to be written
- Seeking prescriptions from more than one doctor
- Taking higher doses than prescribed
- Change in sleep patterns
- Mood swings
- Poor decision-making

See *Substance Use Screening: A Quick Reference Guide for HIV Primary Care Clinicians* (available at www.hivguidelines.org).

MENTAL HEALTH AND COGNITIVE STATUS

As with all HIV-infected patients, clinicians should perform a comprehensive mental health screening at baseline and at least annually.

ASSESS:

- Depression, anxiety, PTSD
- Cognitive function
- Sleep habits and appetite
- Psychiatric history
- Suicidal/violent ideation
- Psychosocial status

Screening tools for cognitive function and depression are provided *(over)*. See *Mental Health Screening* card (available at www.hivguidelines.org) for sample screening tools for all components of the comprehensive mental health screening.

Cognitive Function Screening Tool: International HIV Dementia Scale (IHDS)

Memory-Registration—Give 4 words to recall (dog, hat, bean, red)—1 second to say each. Then ask the patient all 4 words after you have said them. Repeat the words if the patient does not recall them all immediately. Tell the patient you will ask for recall of the words again a bit later.

1. **Motor Speed:** Have the patient tap the first two fingers of the non-dominant hand as widely and as quickly as possible.
   - ✔ *Score:* 4 = 15 in 5 seconds, 3 = 11-14 in 5 seconds, 2 = 7-10 in 5 seconds, 1 = 3-6 in 5 seconds, 0 = 0-2 in 5 seconds
2. **Psychomotor Speed:** Have the patient perform the following movements with the non-dominant hand as quickly as possible:
   1) Clench hand in fist on flat surface. 2) Put hand flat on surface with palm down. 3) Put perpendicular to flat surface on the side of the 5th digit. Demonstrate and have the patient perform twice for practice.
   - ✔ *Score:* 4 = 4 sequences in 10 seconds, 3 = 3 sequences in 10 seconds, 2 = 2 sequences in 10 seconds, 1 = 1 sequence in 10 seconds, 0 = unable to perform
3. **Memory-Recall:** Ask the patient to recall the 4 words. For words not recalled, prompt with a semantic clue as follows: animal (dog); piece of clothing (hat); vegetable (bean); color (red).
   - ✔ *Score:* Give 1 point for each word spontaneously recalled. Give 0.5 point for each correct answer after prompting. Maximum – 4 points

Total International HIV Dementia Scale Score: This is the sum of the scores on items 1–3. The maximum possible score is 12. Patients with a score of ≤10 should be evaluated further for possible dementia.

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Questions to Identify Depression (PHQ-2)[e]:

Over the past 2 weeks, how often have you been bothered by any of the following problems?

1. **Little interest or pleasure in doing things:** 0 = Not at all, 1 = Several days, 2 = More than half the days, 3 = Nearly every day
2. **Feeling down, depressed, or hopeless:** 0 = Not at all, 1 = Several days, 2 = More than half the days, 3 = Nearly every day

✔ *Score:* A score of 3 or more indicates the need for further evaluation.

SOCIAL SUPPORT AND DAILY CARE

- **Update:**
  - ✔ Emergency contact information
  - ✔ Name of case manager, care coordinator, agencies providing services
  - ✔ Need for interpreter, family conference, advance directives, long-term care, or hospice discussion
  - ✔ HIPAA consents for communicating with support network

SAMPLE SCREENING QUESTIONS:

- **Social/household support.** Ask:
  - ✔ Do you do things socially with friends? What do you like to do?
  - ✔ Is there anyone who could come with you to medical appointments?
  - ✔ Is there anyone who you would call if you felt really sick?
  - ✔ Does anyone help you shop, cook, do the laundry, or take care of the house?
- **Nutrition.** Ask:
  - ✔ How often do you eat? What do you eat for breakfast? Lunch? Dinner?
- **Mobility**. Ask:
  - ✔ What do you do for exercise? How often to do you leave the house?
  - ✔ Do you ever use a cane, walker, or wheelchair?
  - ✔ Do you drive? Do you use the subway, buses, or taxis? Can you manage stairs?
  - ✔ Do you have friends or family members who could help with transportation?
- **Safety**. Ask:
  - ✔ Have you ever fallen in your home or outside? Do you ever feel that you might?
  - ✔ Is your telephone always working? Do you have a phone in your bedroom?
  - ✔ Currently, does anyone hit you, bully you, or yell at you? Do you feel safe in your home and neighborhood?
  - ✔ Do you manage your own money? Do you think that anyone is stealing from you or taking advantage of you financially?

DISCUSSING LONG-TERM CARE AND HOSPICE[f]

- Establish a supportive relationship, acknowledge patient feelings and concerns, and offer reassurance
- Identify and include other decision makers
- Help define expectations based on disease status and prognosis
- Discuss service needs, recommend level of care (home care, assisted living, skilled nursing, hospice), and establish consensus for treatment plan

COMMUNICATING WITH OLDER PATIENTS[g]

Establish rapport:
- Use respectful, preferred forms of address
- Engage the patient: maintain eye contact; use frequent, brief, affirmative responses; avoid rushing and interrupting; demonstrate empathy

Compensate for vision and hearing deficits:
- Ensure patients are wearing eyeglasses and/or working hearing aids, if needed
- Speak slowly and clearly; keep hands away from face
- Use large type, visual aids

Create opportunity for discussion of sex:
- Ask whether the patient is sexually active and has any problems to address
- Assess and enhance patient's knowledge of safer-sex practices

Ensure understanding:
- Write down important information
- Avoid jargon, ask if clarification is needed
- Summarize plan and next steps

Footnotes:

a Based on 1) Katz S. Assessing self-maintenance: Activities of daily living, mobility, and instrumental activities of daily living. *J Am Geriatr Soc* 1983;31:721-727. 2) Lawton MP, et al. Assessment of older people: Self-maintaining and instrumental activities of daily living. *Gerontologist* 1969;9:179-186.

b For the full validated assessment, refer to Fried LP, et al. Frailty in older adults: Evidence for a phenotype. *J Gerontol A Biol Sci Med Sci* 2001;56:M146-M156.

c Justice AC, et al. Predictive accuracy of the Veterans Aging Cohort Study index for mortality with HIV infection: A North American cross cohort analysis. *J Acquir Immune Defic Syndr* 2013;62:149-163.

d Adapted from www.mayoclinic.com/

e Reprinted from Kroenke K, et al. The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Med Care* 2003;41:1284-1292.

f Derived from 1) Balaban RB. A physician's guide to talking about end-of-life care. *J Gen Intern Med* 2000;15:195-200. 2) Casarett DJ, et al. "I'm not ready for hospice": Strategies for timely and effective hospice discussions. *Ann Intern Med* 2007;146:443-449.

g Derived from The National Institute on Aging. Talking with your older patient: A Clinician's Handbook. NIH Pub No. 08-7105. September 2011. www.nia.nih.gov/sites/default/files/talking_with_your_older_patient.pdf

For more quick reference guides for HIV primary care clinicians, visit www.hivguidelines.org.

ADDITIONAL RESOURCES

- **New York State Office for the Aging** *www.aging.ny.gov*
  Health Insurance Assistance (HIICAP): 1-800-701-0501
  Senior Citizens' Resource Guide:
  www.aging.ny.gov/ResourceGuide/ResourceGuide2012.pdf
  Senior Citizens' Help Line: 1-800-342-9871
- **New York State Department of Health**
  Long-Term Care (information, facilities, services, hotlines):
  www.health.ny.gov/facilities/long_term_care
  New York Elderly Pharmaceutical Insurance Coverage (EPIC) (for low income seniors): *www.health.ny.gov/health_care/epic*
  Red Ribbon Silver Threads: Healthy Aging in the Era of HIV/AIDS (AIDS Institute conference materials):
  www.health.ny.gov/diseases/aids/conferences
- **New York State Office of Mental Health**
  Geriatric Mental Health: *www.omh.ny.gov/omhweb/geriatric/*
  Geriatric Resources: *www.omh.ny.gov/omhweb/geriatric/resources.html*
- **New York State Adult Protective Services**
  Report abuse in NY State: 1-800-342-3009 (Option 6) *or* contact one of the county departments of social services:
  http://ocfs.ny.gov/main/localdss.asp
- **New York State Advance Directives**
  Health Care Proxy: *www.health.ny.gov/forms/doh-1430.pdf*
  Living Will (NY State Bar Association):
  www.nysba.org, Search "living will"
  Do Not Resuscitate (DNR) form: *www.health.ny.gov/forms/doh-3474.pdf*
- **New York City Department for the Aging**
  Senior Services: *www.nyc.gov/html/dfta/html/services/services.shtml*

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1. Phillips A, et al. Short-term risk of AIDS according to current CD4 cell count and viral load in antiretroviral drug-naïve individuals and those treated in the monotherapy era. *AIDS* 2004;18:51-58.
2. Gras L, et al. CD4 cell counts of 800 cells/mm³ or greater after 7 years of highly active antiretroviral therapy are feasible in most patients starting with 350 cells/mm³ or greater. *J Acquir Immune Defic Syndr* 2007;45:183-192.
3. COHERE Study Group. Response to combination antiretroviral therapy: Variation by age. *AIDS* 2008;22:1463-1473.
4. Li X, et al. CD4+T-cell counts and plasma HIV-1 RNA levels beyond 5 years of highly active antiretroviral therapy. *J Acquir Immune Defic Syndr* 2011;57:421-428.
5. Fauci A. NIH statement on National HIV/AIDS, www.nih.gov/news/health/sep2010/niaid-09.htm