HIV and Aging
A Changing Landscape
Improving Care Beyond EHE

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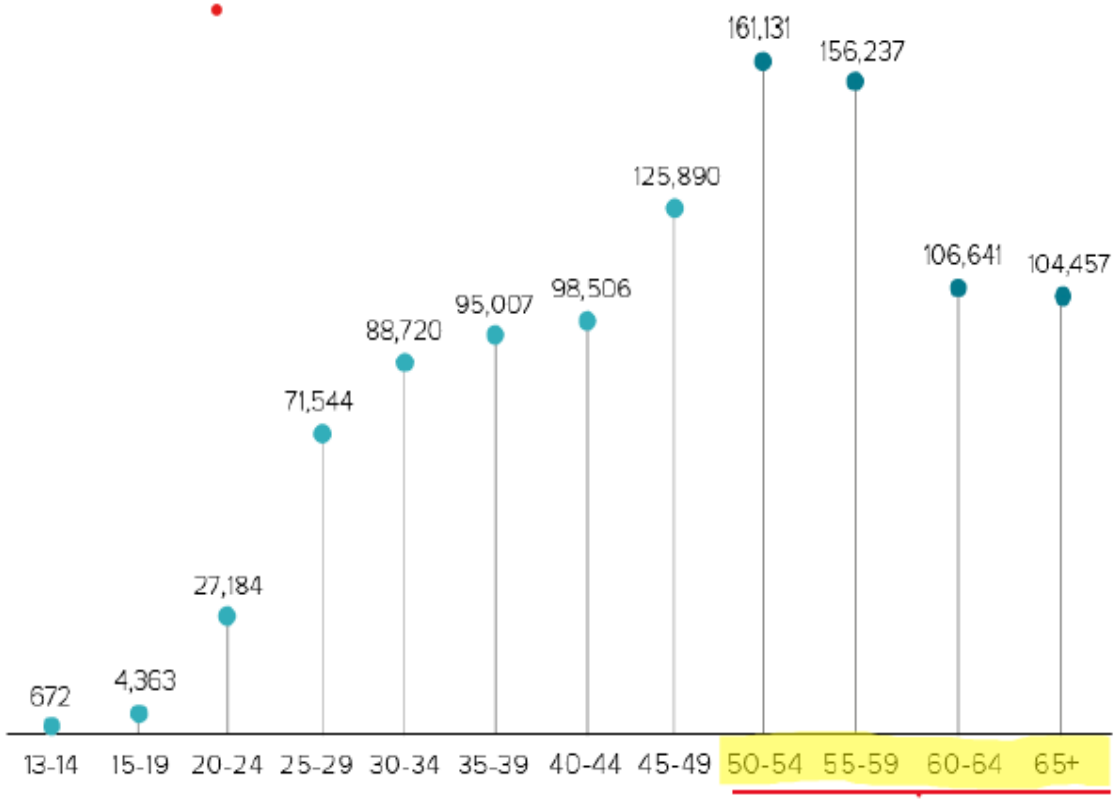
Objectives

- Describe the epidemiology of HIV in older adults
- Describe the evolving landscape of aging and HIV
- Identify comorbidities/complexities that impact care, treatment and adherence
- Describe ongoing strategies to improve overall health outcomes with Ending the HIV Epidemic

Adults and Adolescents with Diagnosed HIV in the US and Dependent Areas by Age, 2018

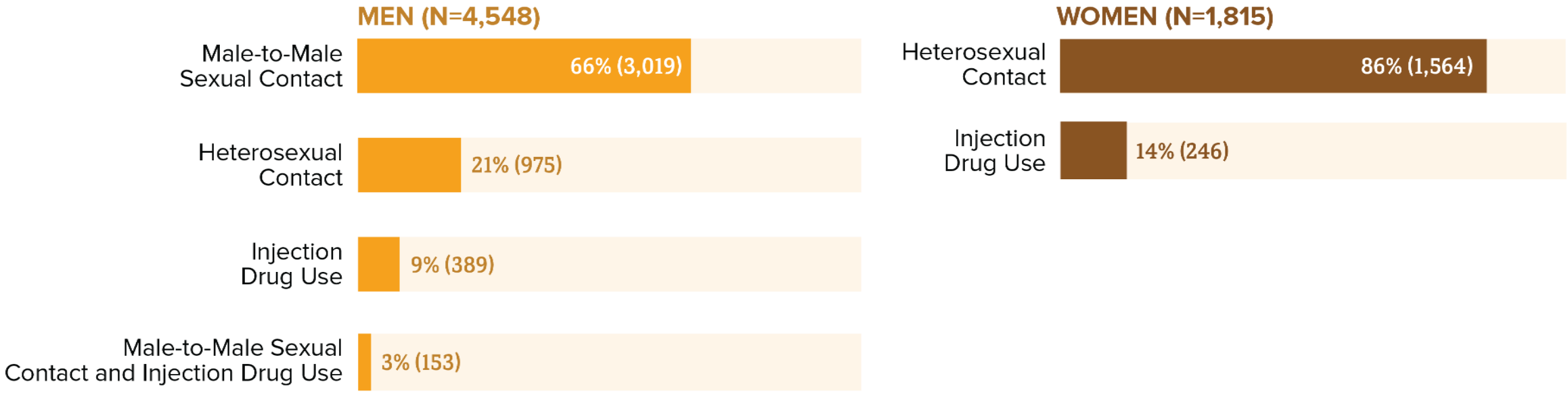
Over half of people with diagnosed HIV were aged 50 and older.



Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2018 (updated). *HIV Surveillance Report* 2020;31.

New HIV Diagnoses Among People Aged 50 and Older in the US and Dependent Areas by Transmission Category and Sex, 2018*

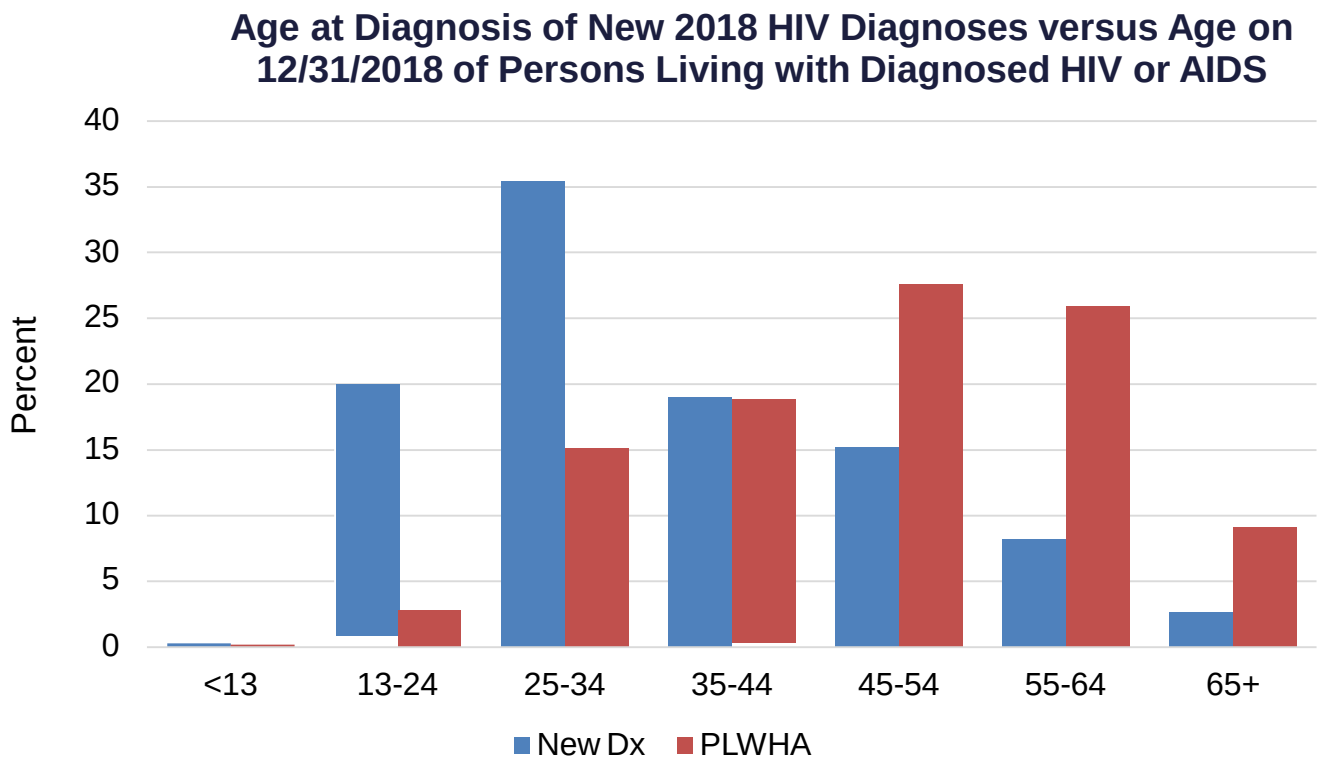
Among people aged 50 and older, most new HIV diagnoses were among men.



Total for men may not equal 100% due to rounding.
* Based on sex at birth and includes transgender people.

Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2018 (updated). *HIV Surveillance Report* 2020;31.

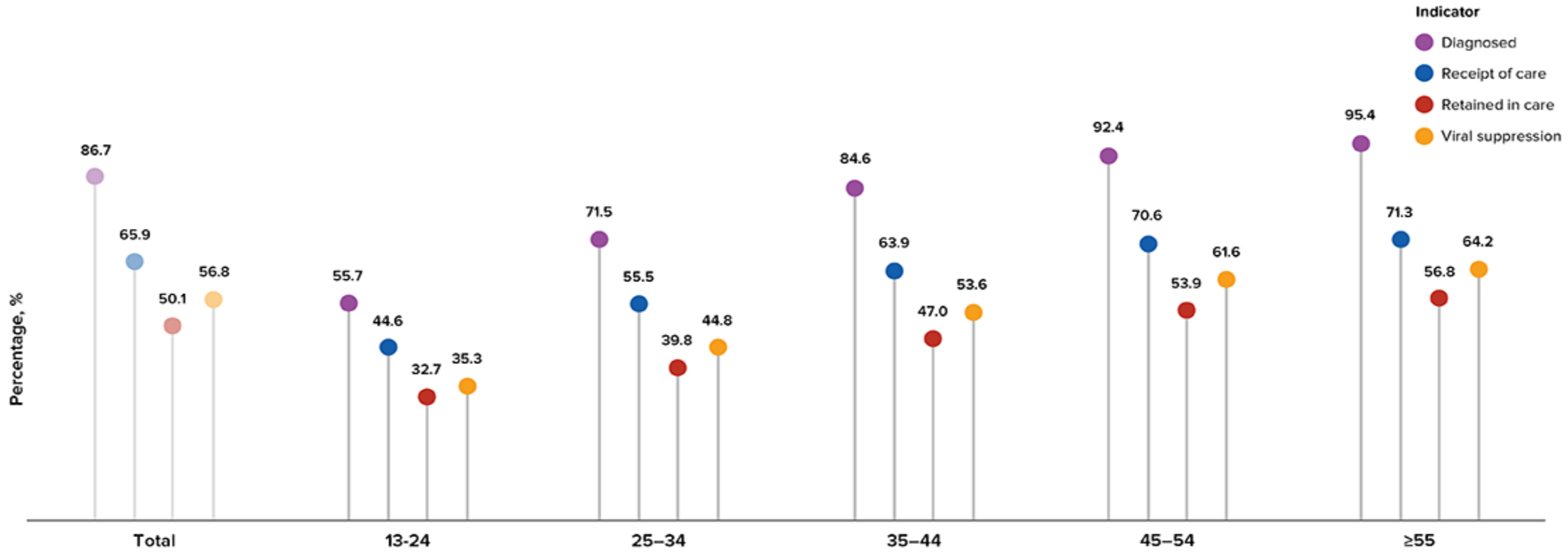
HIV Incidence and Prevalence by Age Group



PLWH are aging with HIV, while the new HIV diagnoses are getting younger

CDC. Estimated HIV Incidence and Prevalence in the United States 2014-2018. HIV Surveillance Supplemental Report 2020; 25(1

Figure 17. Prevalence-based HIV Care Continuum for Persons Aged ≥13 Years Living with HIV Infection (Diagnosed or Undiagnosed) at Year-end 2019, by Age —United States



Note. See Guide to Acronyms and Initialisms, Data Tables, and Technical Notes for more information on Definitions and Data Specifications.

http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2021.

Why is the Landscape Changing?

- Improved antiretroviral therapy particularly in 1996 increased the lifespan
- This is the first cohort of aging individuals
- Older adults are also included in new HIV diagnoses
  - In 2020, persons age 50 and older made up 10% of all new cases of HIV
- Among people aged 55 and older who received an HIV diagnosis in 2015, 50% had HIV for 4.5 years before they were diagnosed—the longest diagnosis delay for any age group.

Why is the Landscape Changing?

- Older people with HIV include many long-term survivors who have lived with HIV for 10 years or more https://www.reunionproject.net/
- Some long-term survivors were diagnosed before improved treatment was available 1996
- Some long-term survivors may be under the age of 50, including persons living with perinatal/vertical transmission

HIV and Aging Matters

- America is aging and quality eldercare is lacking in the general population
- Comorbidities among older persons with HIV is increasing
- Aging related syndromes may be seen earlier, before individuals are chronologically “elderly” or “senior” (65 the new 75)
- Identifying factors early, that may lead to disability and social isolation, can help prevent or slow down further disability and improve quality of life
- Requires the attention and expertise of providers from multiple health care domains and disciplines

HIV Declared a Chronic Disease

- HIV introduced as a chronic disease in 2012 by Kathleen Siebelius (former Secretary of DHHS)

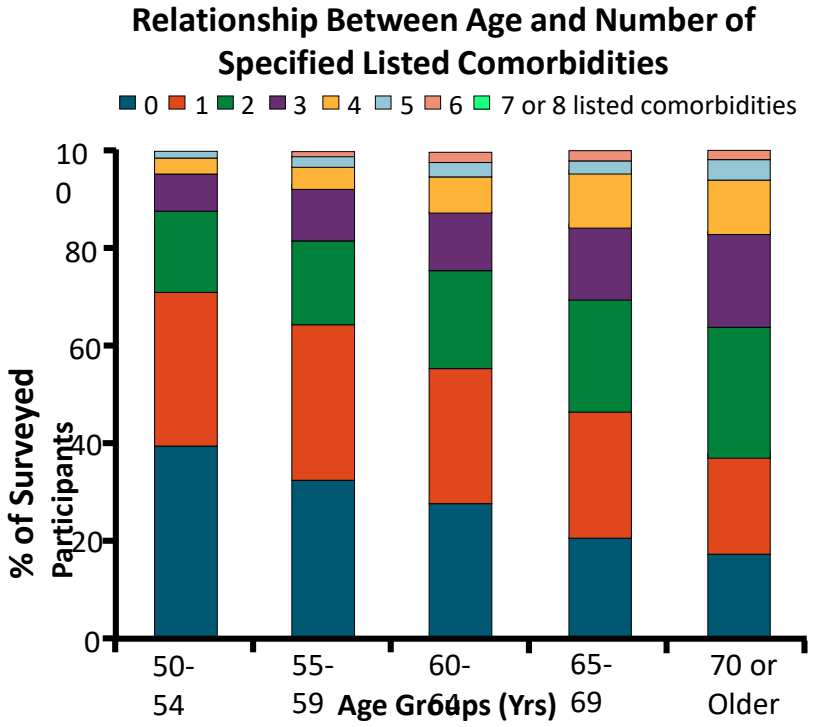
"Today, I am proud to announce that we will be issuing a rule to explicitly include HIV/AIDS on the list of chronic conditions that every state may target in designing effective Health Homes," continued Secretary Sebelius. "This will make it easier for states to provide coordinated care for people living with HIV/AIDS"

Aging with HIV and General Aging Population

- share many of the same health concerns as the general population aged 50 and older
- multiple chronic diseases or conditions (may occur earlier)
  - Kidney disease, heart disease, brain health impacted, COPD, hypertension
- multiple medications
- changes in physical and cognitive abilities
- increased vulnerability to stressors
- Aging in place or housing issues

Comorbidities Increasingly Common as PWH Age

- National survey of PWH aged ≥ 50 yrs in UK (N = 4959)
- 97% on ART with viral load measured in last 9 mos
- Comorbidities: hypertension, 31%; hyperlipidemia, 31%; depression, 24%; renal impairment, 15%; CVD, 12%; obesity, 11%; type 2 diabetes, 11%; osteoporosis, 5%
- Multiple comorbidities common in older age groups— more than 50% had ≥ 1 comorbidity



Slide credit: clinicaloptions.com

Ekong. HIV Medicine 2020;[Epub].

Conditions of Aging and Adherence

Typically, older adults do well with viral suppression, but as they age, there is a need for increased awareness of changes in the following areas that may affect adherence

- impaired hearing
- Impaired vision
- Cognitive impairment
- Polypharmacy
- Social isolation
- Depression
- Substance Use including prescription meds

Geriatrics and HIV

- Older adults with HIV can benefit from models of integrated care developed by geriatricians
- Rather than focusing on disease, focus on function to enhance the quality of life
- Geriatric consultation in HIV and primary clinics
  - Golden Compass Clinic in San Francisco 2017
- Diagnosing and treating comorbidities is not sufficient to address the complexities of aging

The 5M’s of Geriatrics

- **Mind:** Depression, Dementia, early detection of cognitive impairment
- **Mobility:** Gait, balance, activity level, fall risk, exercise
- **Multimorbidity:** Mgmt of multiple chronic conditions
- **Medications:** Polypharmacy, Drug to Drug Interactions
- **Matters Most:** Patient’s health outcome goals and care preferences

Functional Assessment

Basic and Instrumental Activities of Daily Living (ADLs)

Ambulation

Bathing

Eating

Dressing

Grooming

Toilet

Finances

Food Preparation

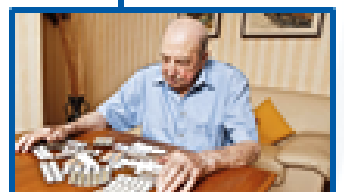
Housekeeping

Laundry

Medication

Shopping

Telephone



Rated as independent > needs assistance > dependent

MidAtlantic AIDS Education and Training Center
Integrating Geriatric Principles in the HIV Clinic

HIV care providers should strive to incorporate geriatric principles and assessments into the care of older adults with HIV, thus improving health outcomes and quality of life.

Aging Persons with HIV: Share the same health concerns as the general population, but also experience increased amounts of, and earlier, age-related multi-morbidity. They may have higher rates of specific age-related disease due to HIV and/or combination antiretroviral therapy. With the population of adults with HIV growing older, it is essential that HIV care providers incorporate geriatric principles and assessments into care along with standard age-based screenings and morbidity management.

Geriatric 5M's Principles

Focus on geriatric syndromes that impact functioning and quality of life.

1. MIND: Mentation, Dementia, Delirium, Depression
- Early detection of cognitive impairment can help patients plan.
- Treating depression can improve physical, social and cognitive functioning.

2. MOBILITY: Gait, Balance, Activity level, Fall risk, Exercise
- Assessment of frailty to identify interventions to maintain mobility.
- Assess history of falls, home safety issues and risk for falls can prevent injury and maintain mobility.

3. MULTIMORBIDITY: Management of Multiple Chronic Conditions
- Treatment of comorbidities to maintain health and quality of life.

4. MEDICATIONS: Polypharmacy and Drug-Drug Interactions
- Review medications to assess for potential drug-drug interactions.
- Optimize prescribing, eliminating unnecessary or side effect inducing meds.
- Assess pain and evaluate available medications for pain management.

5. MATTERS MOST: Patient's Health Outcome Goals and Care Preferences
- Identify persons' medical, social priorities, and sexual health issues.

Interprofessional teams (IP): can conduct screenings and assessments for geriatric conditions and refer to aging-related resources.
IP teams include: physicians, NPs, PA-Cs, nurses, pharmacists, social workers, case managers, behavioral health, navigators, community workers, occupational and physical therapists, speech therapists, nutritionists.
Community partners: faith-based organizations, non-profits, local agencies that specialize in the resources of older adults are important.

Clinic Implications

What clinics can do to provide welcoming environment for aging persons.

1
- Initial and ongoing mental status assessment at each visit
- Obtain input from caregivers on functioning
- Ask the patient and listen closely

2
- Assure mobility access in clinic and exam rooms
- Consider adding handrails, geriatric chairs, remove furniture for safety
- Referral to physical therapy, occupational therapy for home intervention

3
- Conduct physical exam including gait and other tests
- Coordinate consults and referrals for convenience of patient
- Involve case managers and navigators in enhancing coordination

4
- Have pharmacist review medications, and educate patient
- Instruct patient, caregivers about side effects, cognitive and balance changes

5
- Discuss advanced directives, power of attorney, long-term care, financial planning
- Discuss faith, social support needs, home care needs

Assessment Screening Tools

	Assess	Example Screening Tools
Mind	Cognition	MoCA; Mini-Cog; MMSE; Everyday memory questionnaire; neuropsychiatric testing
	Mental Health	Depression (PHQ-2, 4, or 9, Beck depression inventory); anxiety (GAD-7, HAM-A, OASIS); Assess and address patient's social support, daily activities, engagement with family, friends, and community.
	Substance Use	SBIRT; CAGE; AUDIT; TAPS; harm reduction
Mobility	Physical function	SSPB; falls risk assessment; ADLs (OARS, Lawton-Brody, Katz); TUG; need for assistive devices; home safety evaluation (loose rugs, rails, stairs, etc.)
	Fragility	Fried frailty phenotype, Gerontopole frailty screen
Multimorbidity	Cardiovascular & pulmonary	ASCVD risk calculator, coronary artery calcification score, COPD (PFT); AAA (abd US)
	Renal & liver	Cr/ GFR, UA, LFT
	Endocrine & MSK	BMD (FRAX, DXA, Vit D); sarcopenia (DXA); hypogonadism; Diabetes (hemoglobin A1c)
	Age-related cancers	Breast (mammogram); cervical/anal (Pap); colon (colonoscopy, Flex-sig, FIT); lung (LDCT)
	Age-related vaccinations	Influenza; Pneumococcus; COVID-19; Zoster; TDaP (CDC Adult Vaccination Schedule)
	Pain	Numeric, verbal, or visual scale, Faces Pain Scale-Revised; Consider addressing symptoms
Medications	Medication safety	Polypharmacy (# medications, prescribers, pharmacies); Beers Criteria; drug-drug interaction (Liverpool, Micromedex)
	Medication use	Medication reconciliation (OTC, herbal, prescribed), adherence barriers (memory, stigma, finances, side effects), adherence tools (pillbox, alarm)
Matters Most	Sexual Health	Assess sexual activity to promote healthy/ safe sex practices (age-appropriate terms, matter of fact style)
	Healthcare utilization	Review/consolidate # of providers, clinics, pharmacies; assess for frequent ED or hospital use
	Social Health	Social support, networks, family, community engagement, fulfillment, caregiving, housing situation, typical day
	Safety	IPV (HITS, WAST, PVS); elder abuse (EASI, VASS); caregiver abuse (CASE); driving
	Sensory Function	Vision testing, audiometry, hearing handicap inventory, whispered voice test
	Finances	Money management, income sources, food security, long term financial planning, ability to meet basic needs
	Nutrition	Determine score; Nutritional health risk assessment
	Quality of Life	PROMIS Global Health, QOL Scale, health related QOL, CASP-19

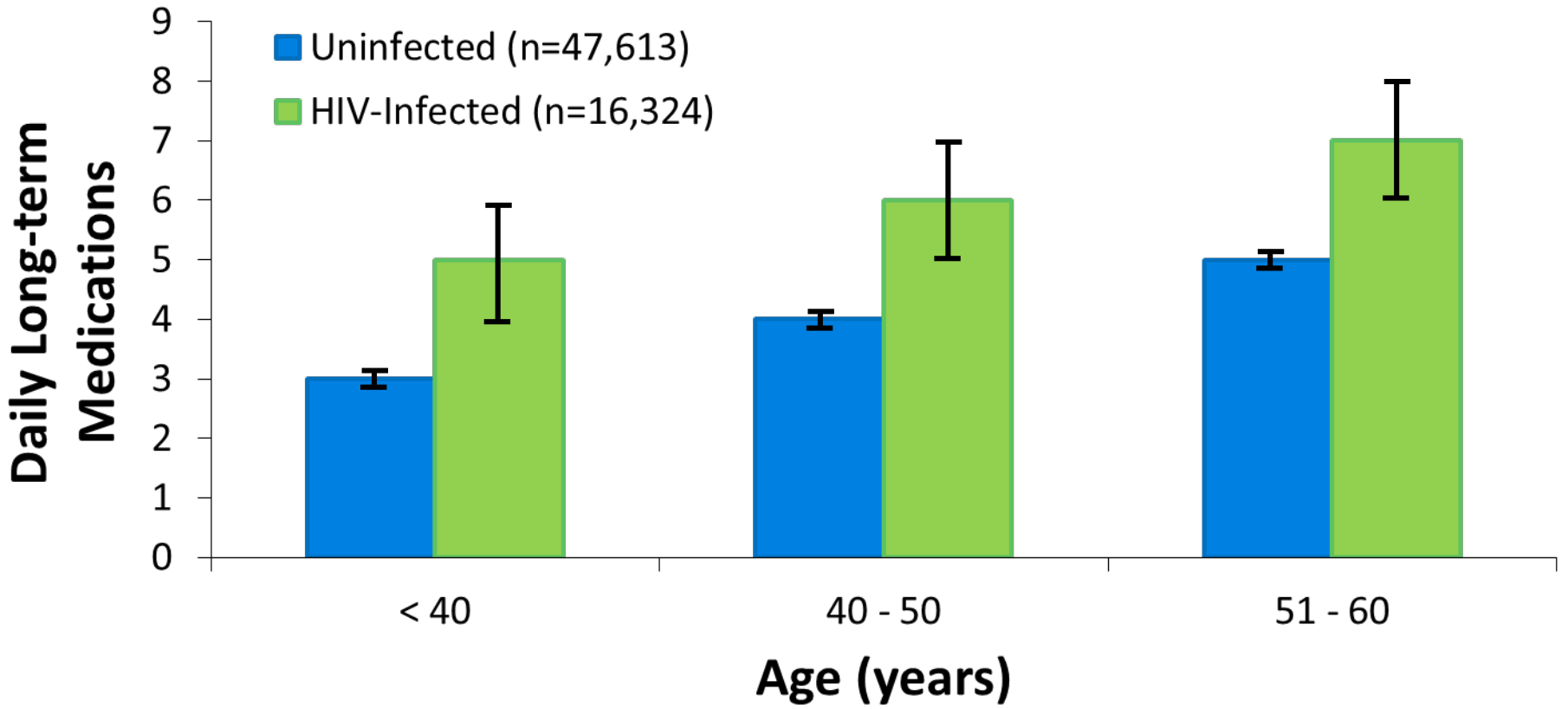
MIDATLANTIC AIDS EDUCATION AND TRAINING CENTER, University of Pittsburgh, Graduate School of Public Health, Department of Infectious Diseases and Microbiology, www.maaetc.org
HRSA, HIV/AIDS Bureau, Office of Program Support, Grant No. U10HA29295. Last Modified: May 2021. Please refer to most recent guidelines.

REFERENCES & RESOURCES
Tinetti, M, Huang A, Molnar F. The geriatrics 5M's: a new way of communicating what we do. J. Am. Geriatr. Soc. 2017; 65(2115-2115).
Care of People Aging with HIV: NECA AETC Toolkit
Greene,M. The Golden Compass Program: Overview of the Initial Implementation of a Comprehensive Program for Older Adults Living with HIV. J Int Assoc Provid AIDS Care. 2020 Jan-Dec;19.
Medical Care Criteria Committee. Clinical Guideline Program, New York State Department of Health AIDS Institute. Guidance for Addressing the Needs of Older Patients in HIV Care. July 2020.
HRSA's Ryan White HIV/AIDS Program. Optimizing HIV Care for People Aging with HIV: Incorporating New Elements of Care. Reference Guide for Aging with HIV. [Accessed 10 Feb 2021]

Aging and Polypharmacy

- 50% of adults > 65 years of age receive an average of > 5 medications
- 60% of clinic visits end with a written prescription
- Benefit vs. harm
  - Combination therapies
- Subspecialties, comorbid diseases
  - HIV, GI, Renal, Cardiology, Rheumatology, Endocrinology, Oncology, Hepatology etc.
  - Inadequate training in geriatrics

Chronic Medication Count by Age and HIV Status (VACS)



Edelman EJ, et al. *Drugs Aging*. 2013;30(8):613-628.

Common Issues Among Older Adults with HIV

- Difficulties in accessing and maintaining health care
-
- Difficulties in managing HIV care, comorbidities, and polypharmacy issues
- Gaps in health professionals' knowledge, experience, and sensitivity
- Concerns about long-term care/Advanced care planning

Common Issues Among Older Adults with HIV

- Lack of programs that respond to loneliness and social isolation
- Long Term Survivors exhibit 3-5 higher rates of depression and are largely socially disconnected
- Lack of mental health, alcohol and substance use treatment programs for older adults
- Stigma & discrimination heightened by ageism
- Concerns over emphasis on ending the HIV epidemic

Key Observations

- Too many older adults living with HIV feel that their needs and concerns are given less attention or ignored. Older adults living with HIV are a “forgotten majority”*

*Tez Anderson

Mental Health and Isolation

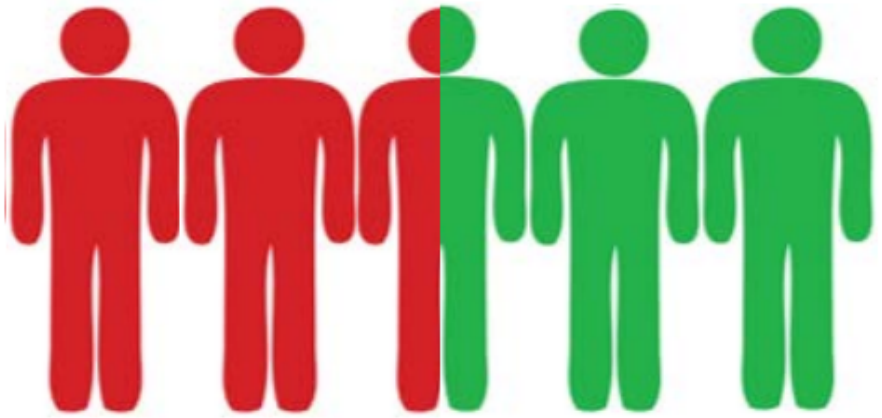
- Experience more mental health and neurocognitive impairment than their HIV-negative counterparts
- Experience more social isolation as a result of decreased social participation and engagement.
- Experience higher levels of anxiety, loneliness and depression
- COVID 19 pandemic exacerbated the experience

Isolation & Loneliness

- Multiple losses
- Grief
- Loss of social supports
- Loss of friends and partners
- Loss of jobs
- Loss of health even though alive
- Family rejection & estrangement
- Stigma(s)

Depression in Older Adults

- Sadness may not be a main symptom
- May be Less likely to talk about it
- Tired, trouble sleeping, Irritability
- Confusion or attention problems that can look like dementia
- Medical conditions such heart disease can cause depressive symptoms
- Medications with side effects can be a cause or contribute to depression



Depression affects nearly 50% of Americans living with HIV.

Health Care. For Life. At Home

AIDS Survivor Syndrome

- Psychological state resulting from living through the AIDS epidemic
- Especially for people diagnosed in the ‘80s and ‘90s, when AIDS was considered a death sentence.
- Varies in intensity
- Affects each Long - Term survivor differently
- Can change over time

Adapted from Tez Anderson, Let’s KICKASS

Moving Forward: Sustained Action

Priorities:

- Medical care
- Mental health and substance and alcohol use disorders
- Workforce development, education, and training
- Housing, transportation, and other support services
- Stigma and discrimination
- Intersection of HIV policy and older adult policy and advocacy
- Development of new models of care and service delivery
- Ending the HIV epidemic

Ending the HIV Epidemic: A Plan for America

HHS is proposing a once-in-a-generation opportunity to eliminate new HIV infections in our nation. The multi-year program will infuse 48 counties, Washington, D.C., San Juan, Puerto Rico, as well as 7 states that have a substantial rural HIV burden with the additional expertise, technology, and resources needed to end the HIV epidemic in the United States. Our four strategies – diagnose, treat, protect, and respond – will be implemented across the entire U.S. within 10 years.

GOAL:

75% reduction in new HIV infections in 5 years and at least **90%** reduction in 10 years.

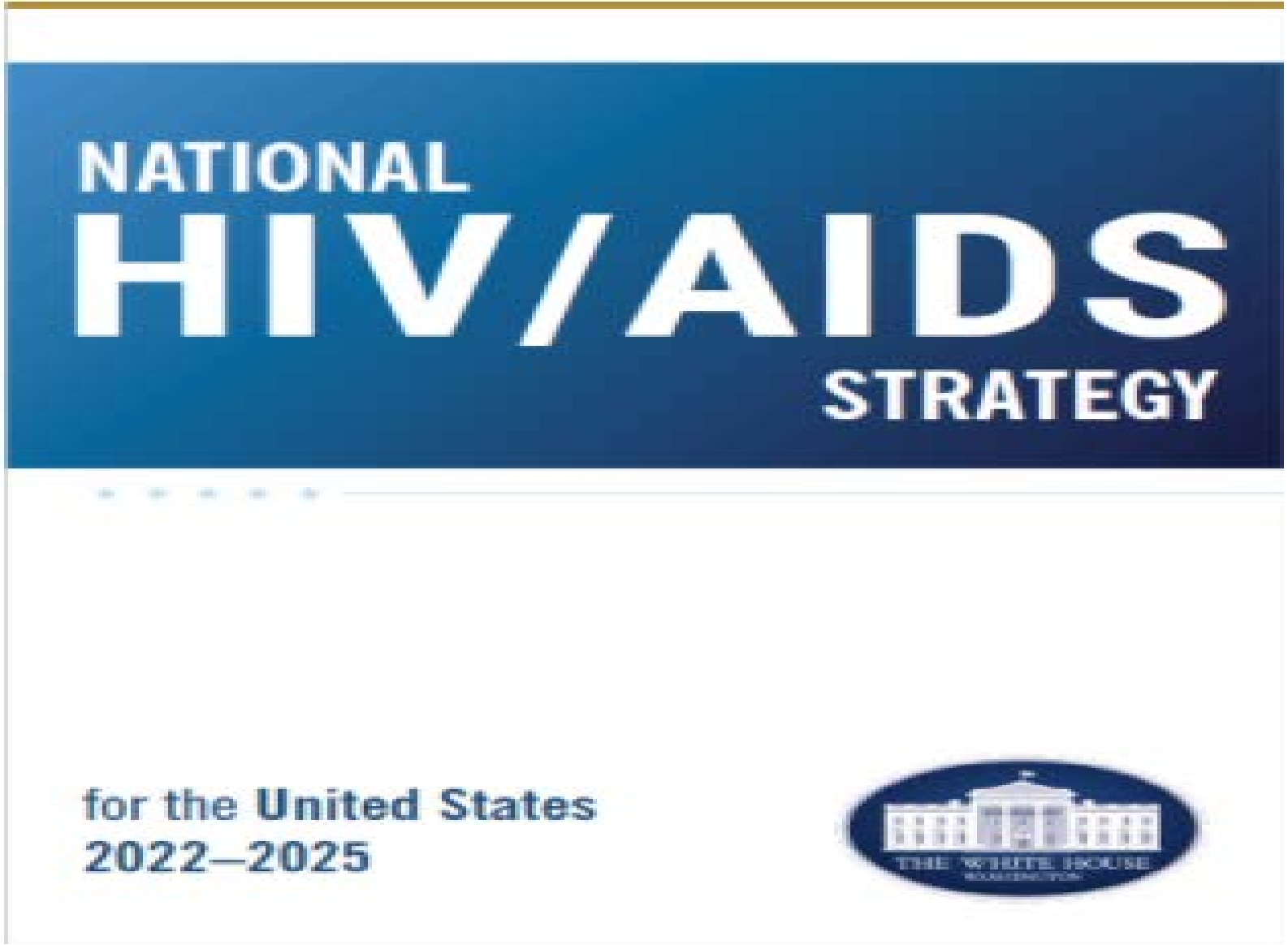
HHS will work with each community to establish local teams on the ground to tailor and implement strategies to:

Diagnose all people with HIV as early as possible.

Treat people with HIV rapidly and effectively to reach sustained viral suppression.

Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).

Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.



https://www.hiv.gov/federal-response/national-hiv-aids-strategy/national-hiv-aids-strategy-2022-2025

Goal #2 NHAS

Expand capacity to provide whole-person care to older adults with HIV and long-term survivors

1. Identify, implement and evaluate models of care

2. Identify and implement best practices related to psychosocial and behavioral health needs

3. Increase HIV awareness, capability and collaboration

4. Promote research, cross agency collaboration

5. Develop and optimize multi-agency strategies to address evolving changes

What Can be Done?

- Recognize the changing landscape
- Identify gaps in services and knowledge
- Develop interventions to close identified gaps
- Model of successful aging with possible prevention/intervention strategies

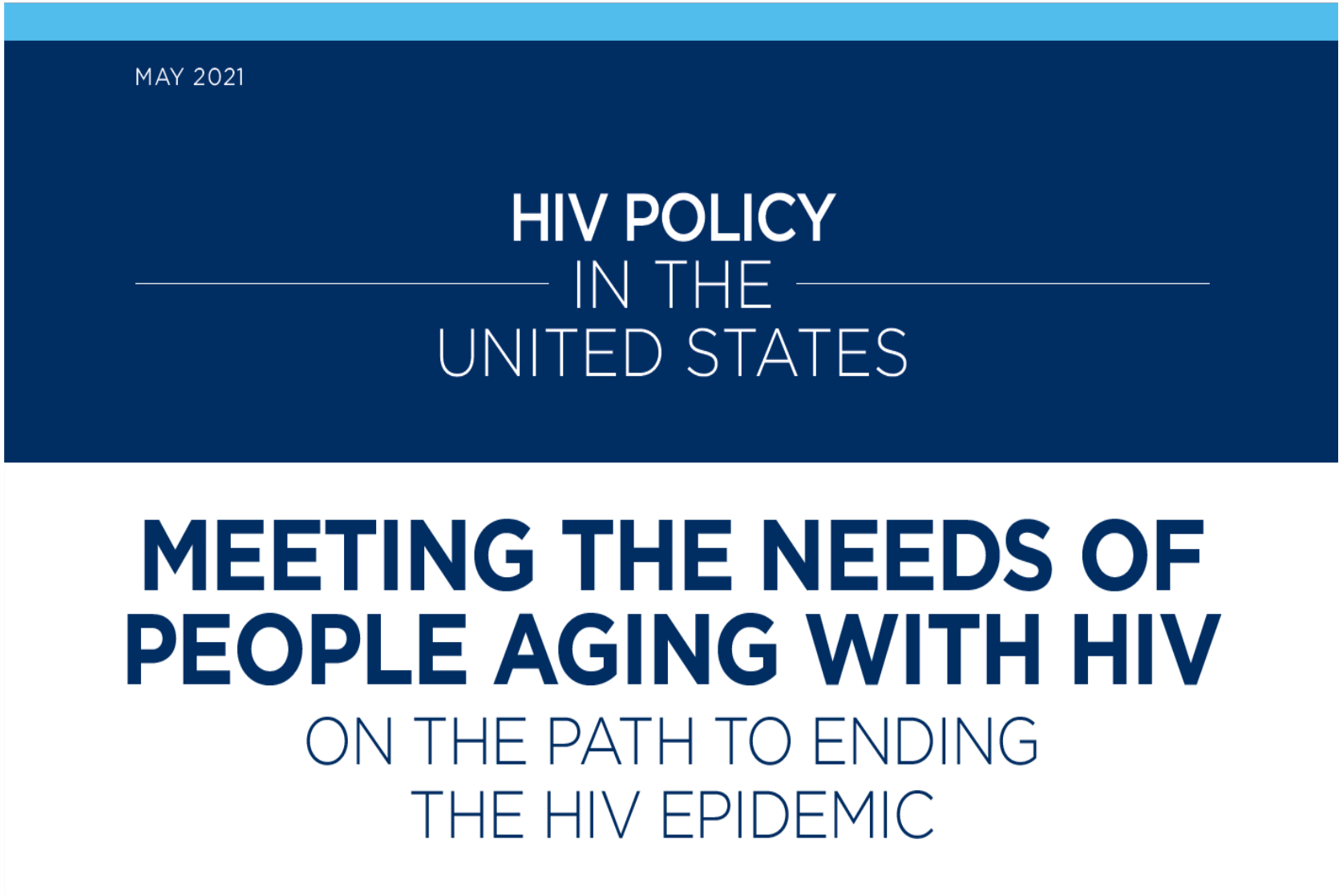
What Can Be Done?

Build a Multidisciplinary Team

- Clinicians
- Pharmacists
- Geriatricians
- Primary care,
- Long term care,
- Palliative care,
- Rehab
- Mental health workers
- Case managers,
- Community Health Workers
- Physical Therapists
- Occupational Therapists
- Social Workers,
- Long Term Survivors,
- Caregivers

What Can be Done?

- Promote the meaningful participation of older persons at all levels
- Equip the clinical and non-clinical workforce
- Provide more resources for prevention and treatment messaging
- Make social connections through community based programs addressing isolation, stigma and trauma
- Leverage technology
- Maintain treatment access and protection



https://oneill.law.georgetown.edu/wp-content/uploads/2021/05/Meeting-the-Needs-of-People-Aging-with-HIV.pdf

A greater focus on HIV and aging is needed. To meet the needs of older people living with HIV, policy action must address the following:

1	2	3	4	5
DEVELOP models of care and prevention for people aging with HIV and train and equip the clinical and non-clinical workforce.	**EXPAND** opportunities for older people living with HIV to make social connections through community-based programs that address isolation, stigma, and trauma.	**MAINTAIN** Medicare Part D drug access protections (e.g., Six Protected Classes) and expand focus on high-quality care and quality of life.	**ALLOCATE** more funding to programs that support financial security and access to employment, housing, food, and public benefits for the aging HIV population.	**PROMOTE** the meaningful participation of older people living with HIV in the Ending the HIV Epidemic (EHE) Initiative and in broader advocacy efforts.
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Maryland Coalition on HIV and Aging

- Started meeting in July 2018 monthly
- **A network of healthcare and community-based organizations**, long term thrivers, rehab agency, long term care, dentist, palliative care, dietician, geriatrician, primary care, social workers, pharmacists, MDH, BCHD, Dept on Aging, BCHD Division on Aging and Care Services, Chase Brexton, HIV specialty clinics and other stakeholders such as senior centers, Age Friendly Public Health System

Maryland Coalition on HIV and Aging

- **MISSION STATEMENT:** To identify, address, and advocate for the emerging and long-standing needs of persons who are aging with HIV.
- **VISION:** To assure the improved quality of life and overall health outcomes for persons aging and thriving with HIV

Resources

- https://aidsetc.org/resource/care-people-aging-hiv-northeastcaribbean-aetc-toolkit
- https://www.maaetc.org/files/attachment/attachment/6141/Geriatric%20assessments%20after%20outlines%20v6.17.21.pdf
- https://primeinc.org/resourcecenter/practical-toolkit-for-providing-holistic-care-for-aging-people-with-hiv
- National Institute on Aging https://www.nia.nih.gov/health/topics/hiv-aids
- https://www.nursesinaidscare.org/i4a/pages/index.cfm?pageid=4941
- https://www.tfah.org/initiatives/age-friendly-public-health/
- Healthy Aging through the SDOH https://ajph.aphapublications.org/doi/book/10.2105/9780875533162
- ROAH Study 2.0 file:///C:/Users/dbaker4/Documents/ROAH_2.0_San%20Francisco_ACRIA_HIV_Aging_White_Paper_FINAL.PDF
- National HIV Curriculum https://www.hiv.uw.edu/

Resources and Websites

- www.owelinc.org
- https://www.reunionproject.net/
- www.workingpositive.org
- www.aginghiv.org
- https://hab.hrsa.gov/sites/default/files/hab/clinical-quality-management/aging-guide-new-elements.pdf
- https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2020-updated-vol-33.pdf

QUESTIONS

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