HRSA
Health Resources & Services Administration

Understanding the Medical Conditions and Psychosocial Needs of Older Adults with HIV Who are Aging in the Ryan White HIV/AIDS Program

2022 National Ryan White Conference on HIV Care and Treatment

August 23, 2022

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Kelli Abbott, MSW, Public Health Analyst, Division of State HIV/AIDS Programs
HIV/AIDS Bureau (HAB)

Vision: Healthy Communities, Healthy People

Session Agenda

- **Overview of Ryan White HIV/AIDS Program**
  - Legislation
  - Purpose
  - Structure
- **Ryan White HIV/AIDS Program's HIV and Aging Data**
- **Health Resources and Services Administration's (HRSA) HIV/AIDS Bureau (HAB) HIV and Aging Activities**

Health Resources and Services Administration (HRSA)

Overview

Supports more than 90 programs that provide health care to people who are geographically isolated, economically or medically challenged

HRSA does this through grants and cooperative agreements to more than 3,000 awardees, including community and faith-based organizations, colleges and universities, hospitals, state, local, and tribal governments, and private entities

Every year, HRSA programs serve tens of millions of people, including people with HIV, pregnant individuals, mothers and their families, and those otherwise unable to access quality health care

HRSA Ryan White HIV/AIDS Program

HRSA's HIV/AIDS Bureau Vision and Mission

Vision

Optimal HIV care and treatment for all to end the HIV epidemic in the U.S.

Mission

Provide leadership and resources to advance HIV care and treatment to improve health outcomes and reduce health disparities for people with HIV and affected communities.

HRSA's Ryan White HIV/AIDS Program (RWHAP) Overview

- **Provides a comprehensive system of HIV primary medical care, medications, and essential support services for low-income people with HIV.**
- **Funds grants to states, cities, counties, and local community-based organizations to improve health outcome and reduce HIV transmission.**
  - Recipients determine service delivery and funding priorities based on local needs and planning process.
- **Provided services to nearly 562,000 people in 2020—more than half of all people with diagnosed HIV in the United States.**
- **89.4% of RWHAP clients receiving HIV medical care were virally suppressed in 2020, exceeding national average of 64.6%[i].**

i. Centers for Disease Control and Prevention. Core indicators for monitoring the Ending the HIV Epidemic initiative (early release): National HIV Surveillance System data reported through December 2020; and pre-exposure prophylaxis (PrEP) data reported through September 2020. HIV Surveillance Data Tables [Table 5a] 2021;2(No. 2). http://www.cdc.gov/hiv/library/reports/surveillance-data-tables/vol-2-no-2/index.html. Published March 2021.

HRSA Ryan White HIV/AIDS Program

Disclosures

- R. Chris Redwood has no relevant financial or non-financial interests to disclose.
- Kelli Abbott has no relevant financial or non-financial interests to disclose.

Learning Objectives

By the end of this session, participants will be able to:

- Understand the RWHAP data about people with HIV who are aging
- Learn the medical and psychosocial needs of people aging with HIV
- Identify HRSA initiatives aimed at addressing the increase in the number of people aging with HIV in the RWHAP

Aging and HIV among RWHAP Clients

Older Adults Aged 50 Years and Older

In 2020, the RWHAP served more than half a million people in the United States and 3 territories[a]

SERVED **561,416** clients in **2020**

MORE THAN **50%** of people with **diagnosed HIV in the United States**

73.6% were **racial/ethnic minorities**

47.9% were aged **50 years and older**

4.8% had **unstable housing**

60.9% were living at or below **100% of the Federal Poverty Level**

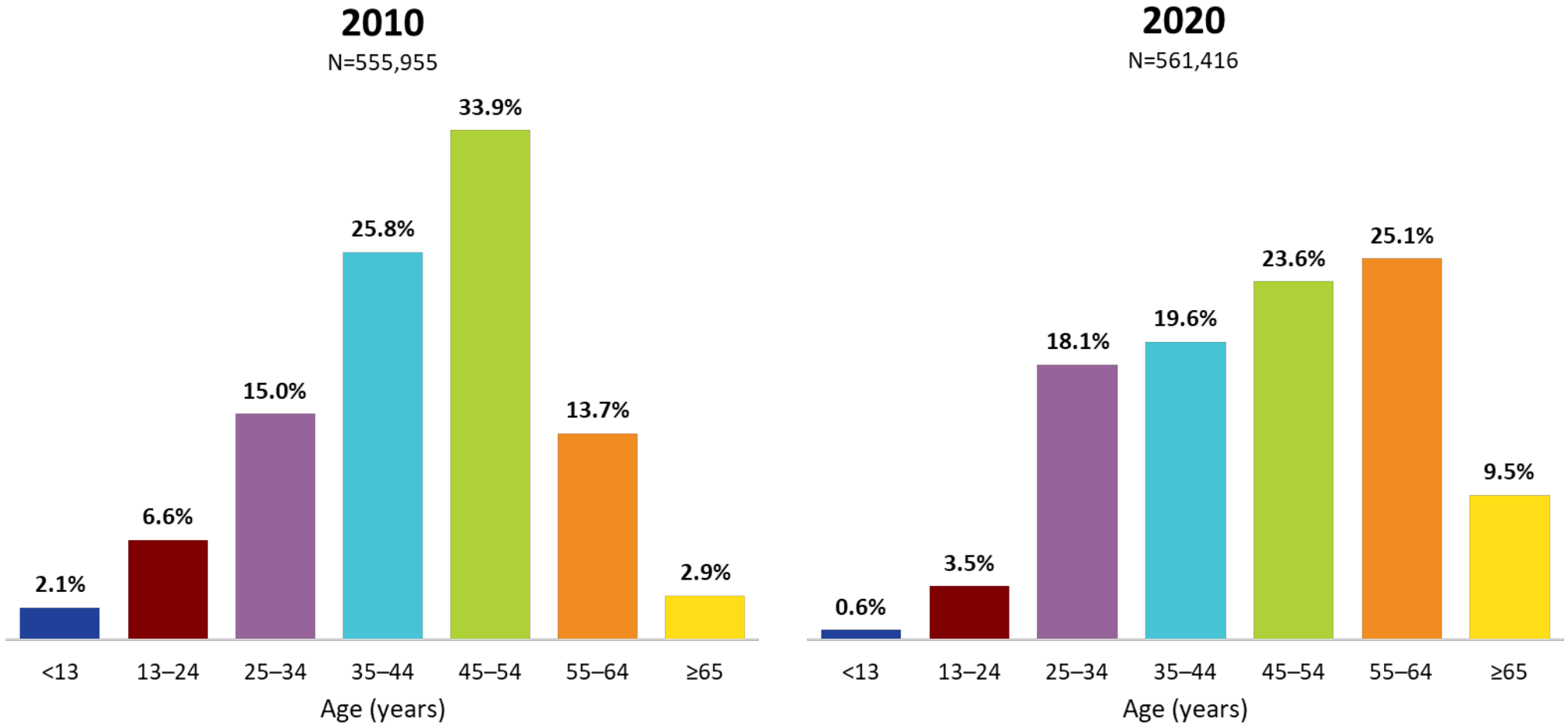
19.4% had no **health care coverage**

[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Ryan White HIV/AIDS Program Clients, by Age Group, 2010 and 2020—United States and 3 Territories[a]

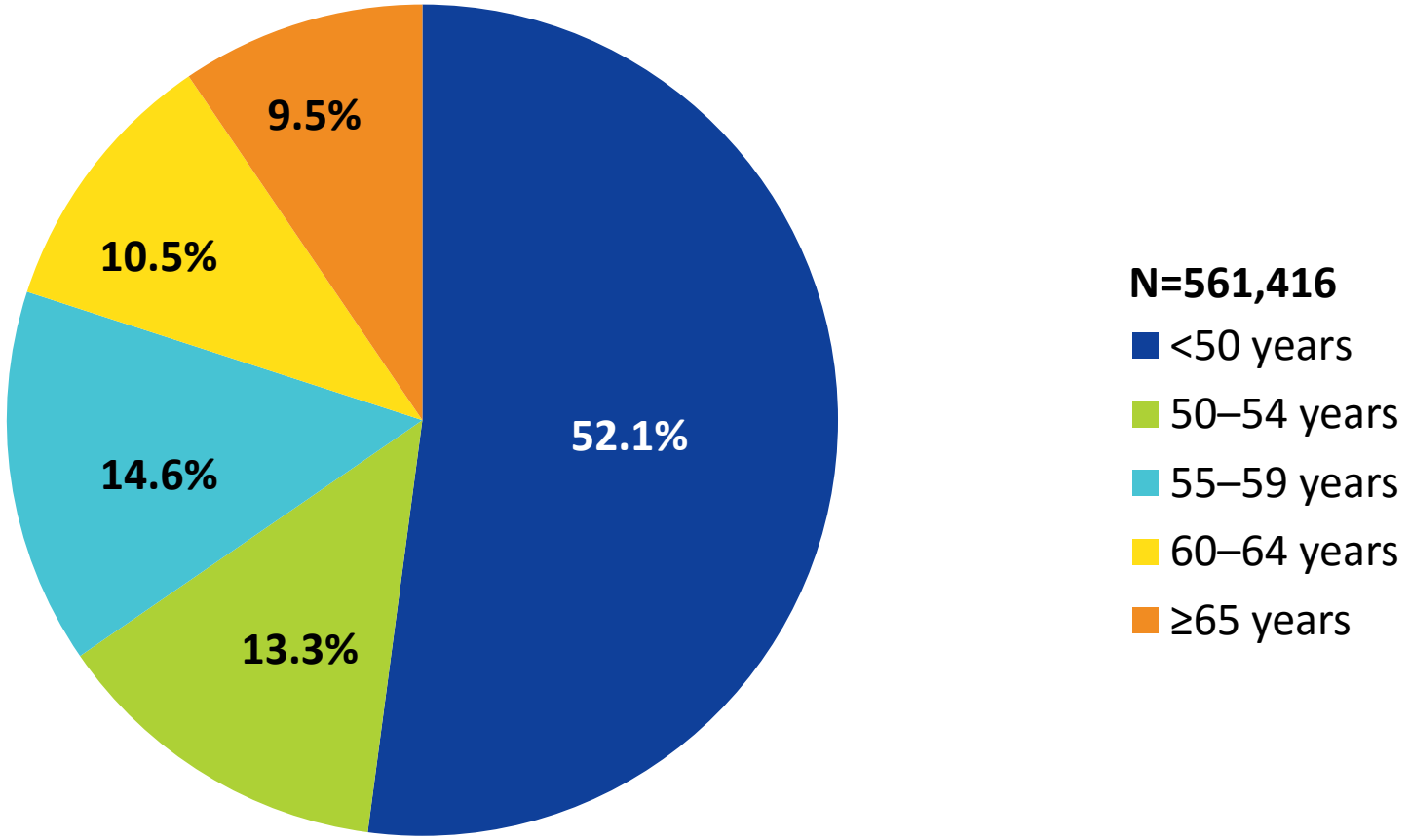


[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

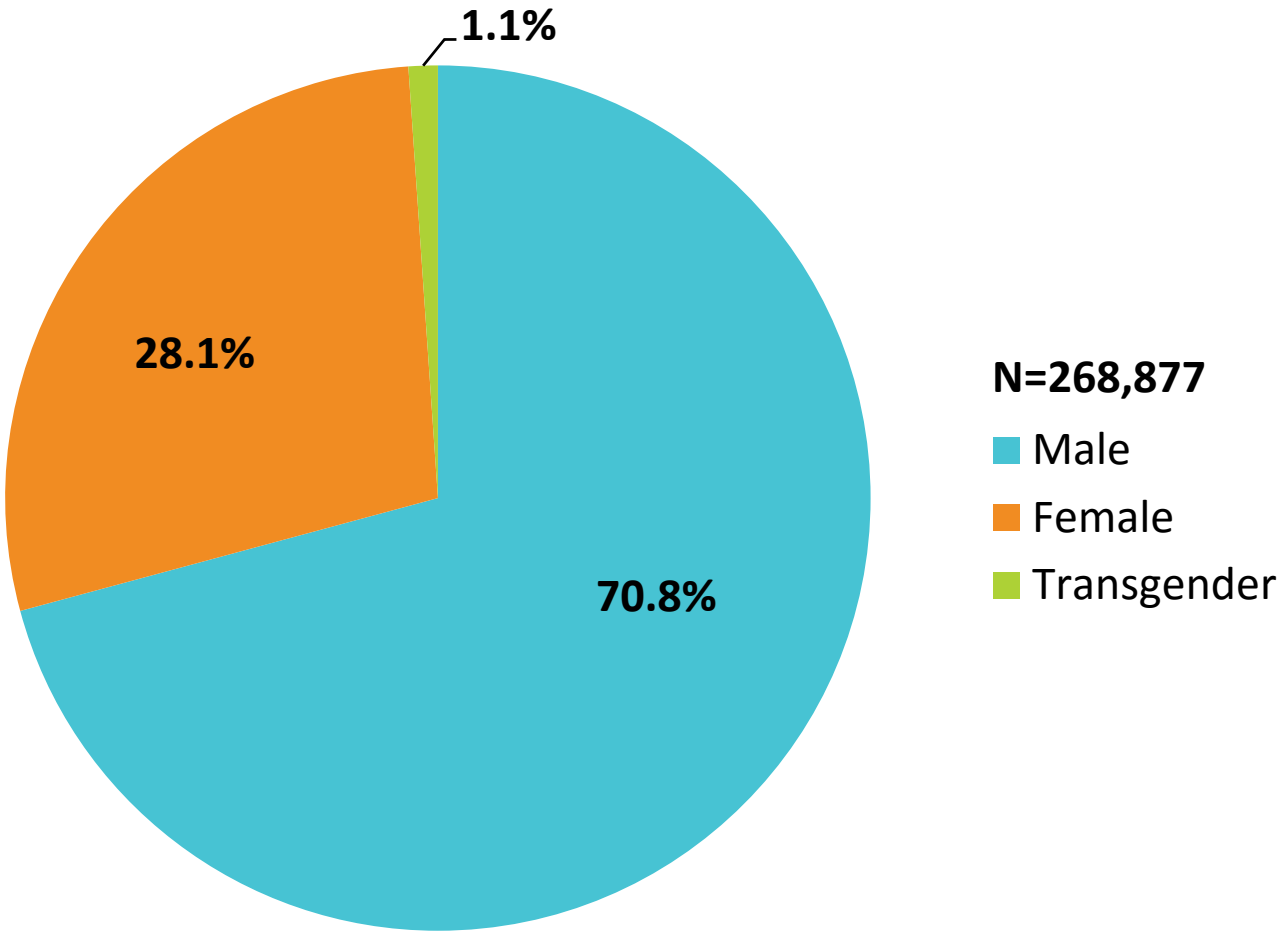
Clients Served by the Ryan White HIV/AIDS Program, by Age Group, 2020—United States and 3 Territories[a]



[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Gender, 2020—United States and 3 Territories[a]

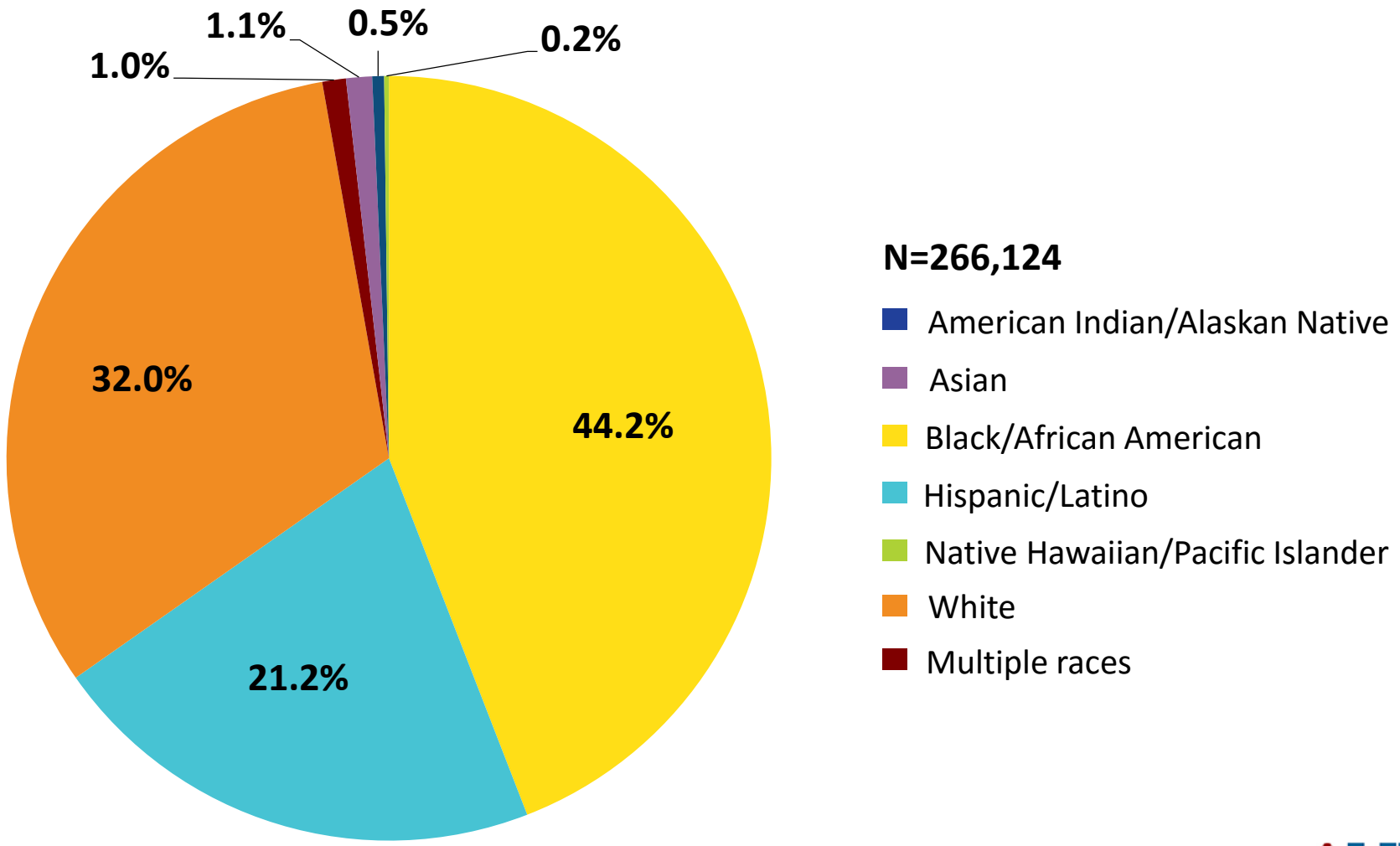


[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Race/Ethnicity, 2020—United States and 3 Territories[a]



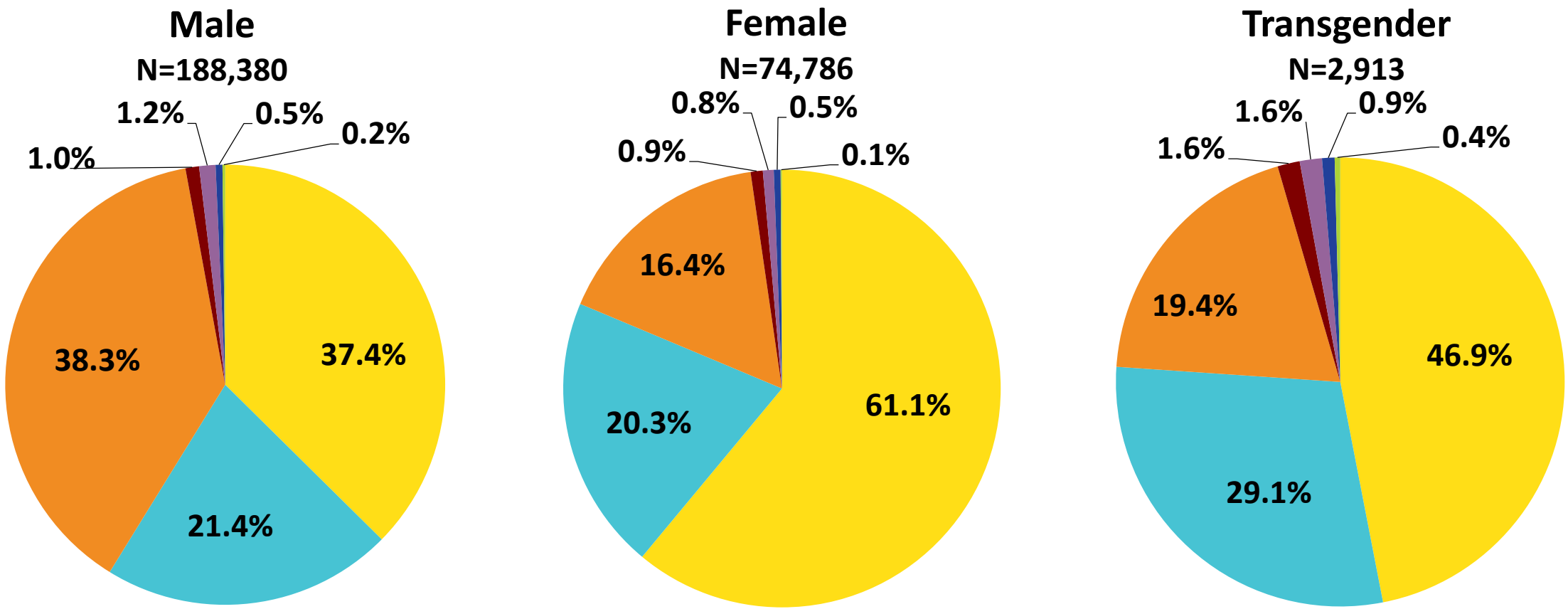
Hispanics/Latinos can be of any race.

[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Gender and Race/Ethnicity, 2020—United States and 3 Territories[a]



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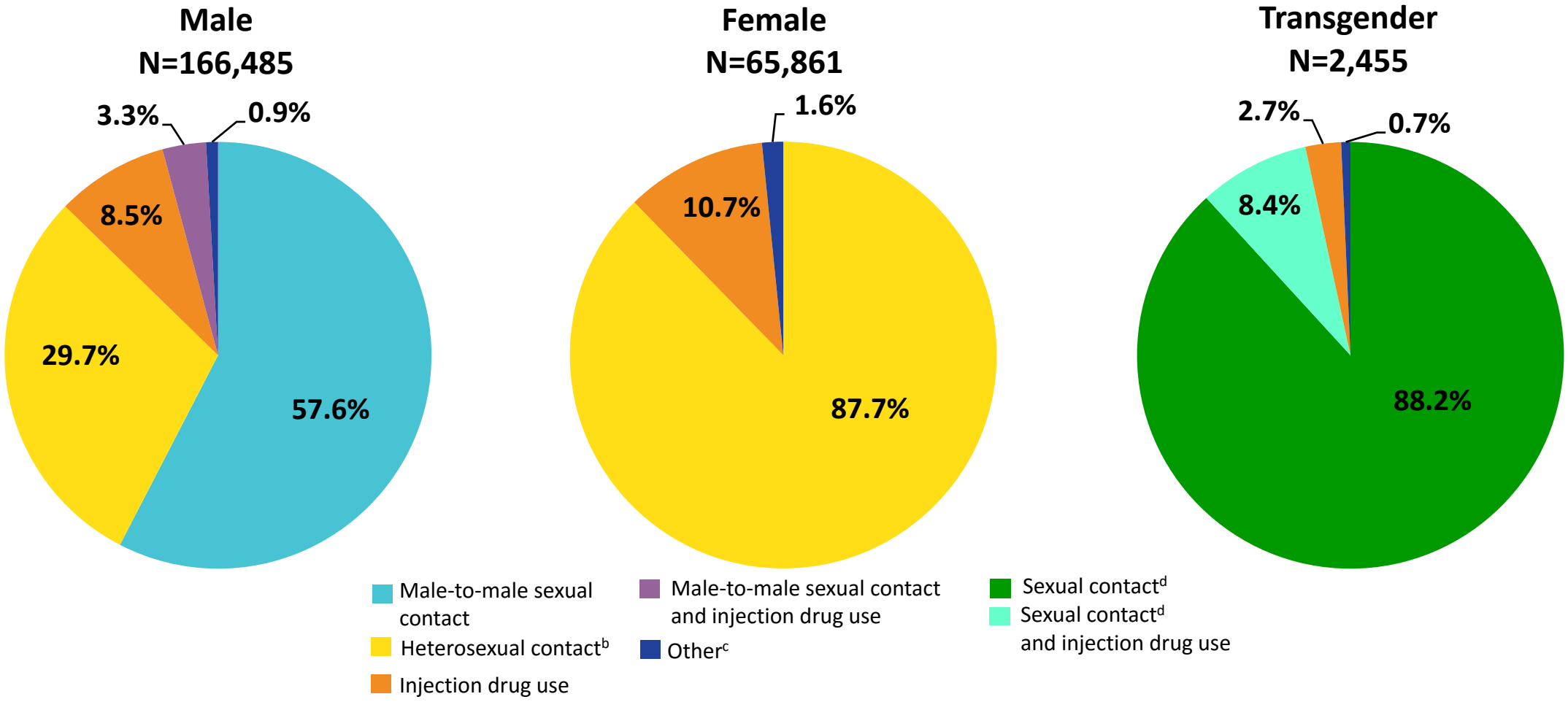
HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Gender and Transmission Category, 2020—United States and 3 Territories[a]

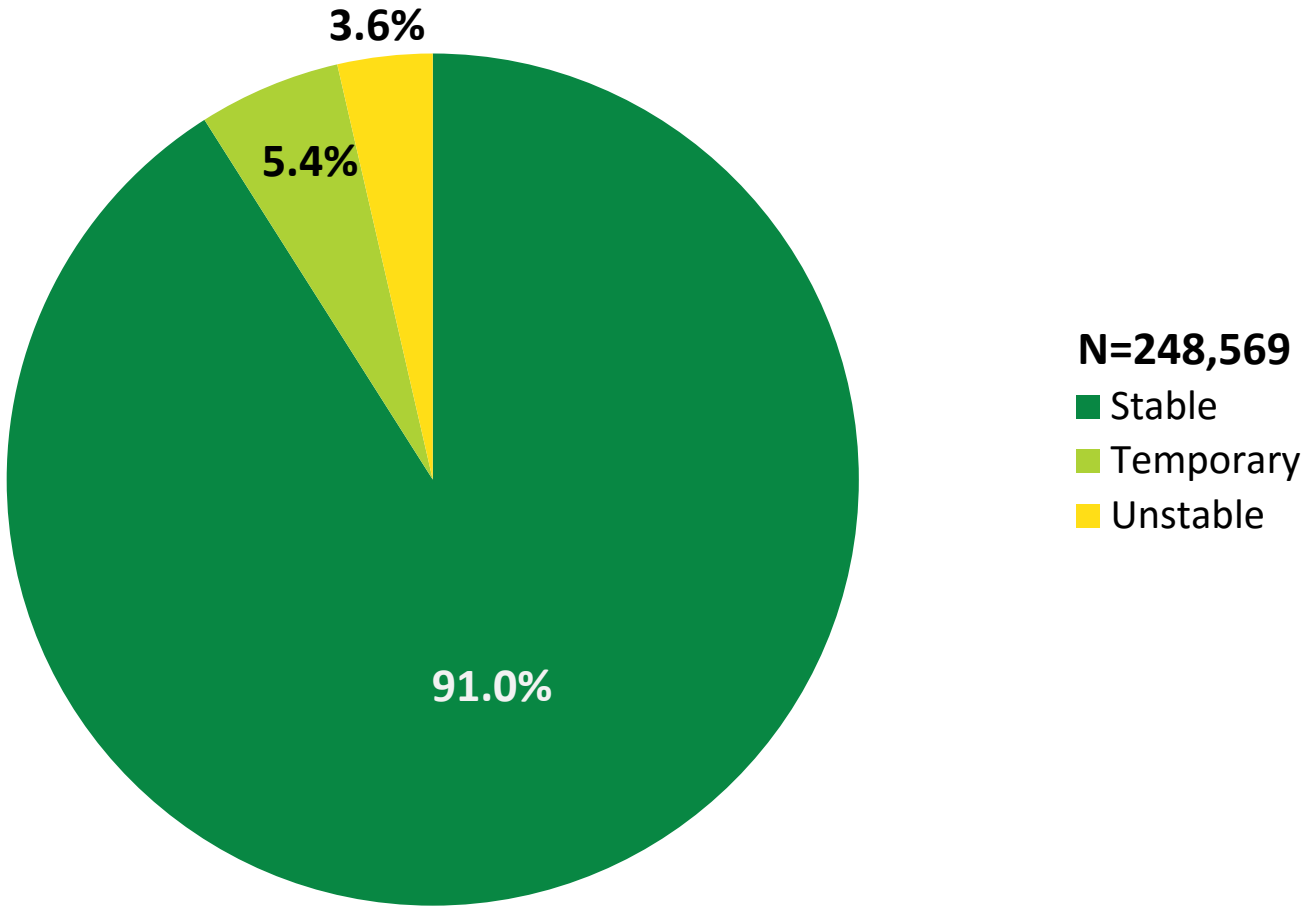


[a] Guam, Puerto Rico, and the U.S. Virgin Islands.
[b] Heterosexual contact with a person know to have, or be at high risk for, HIV.
[c] Includes hemophilia and blood transfusion.
[d] Includes any reported sexual transmission category.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

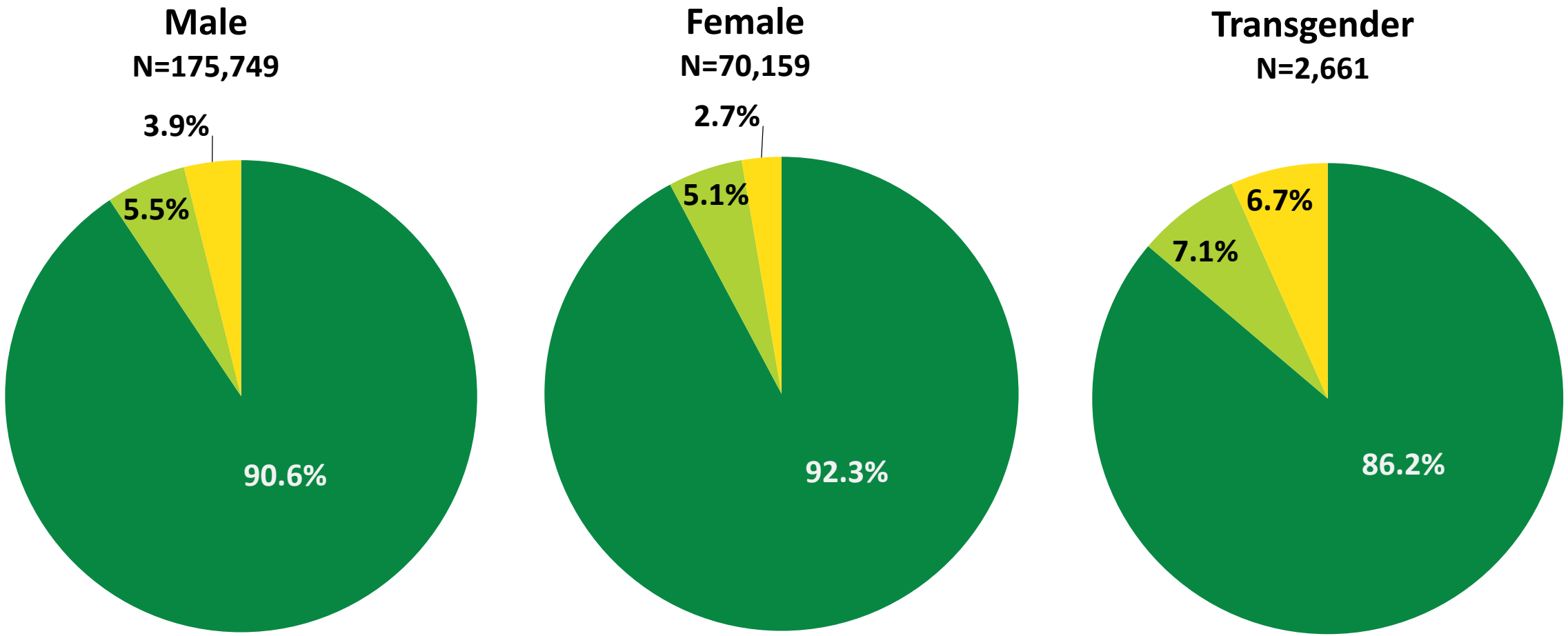
Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Housing Status, 2020—United States and 3 Territories[a]



[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

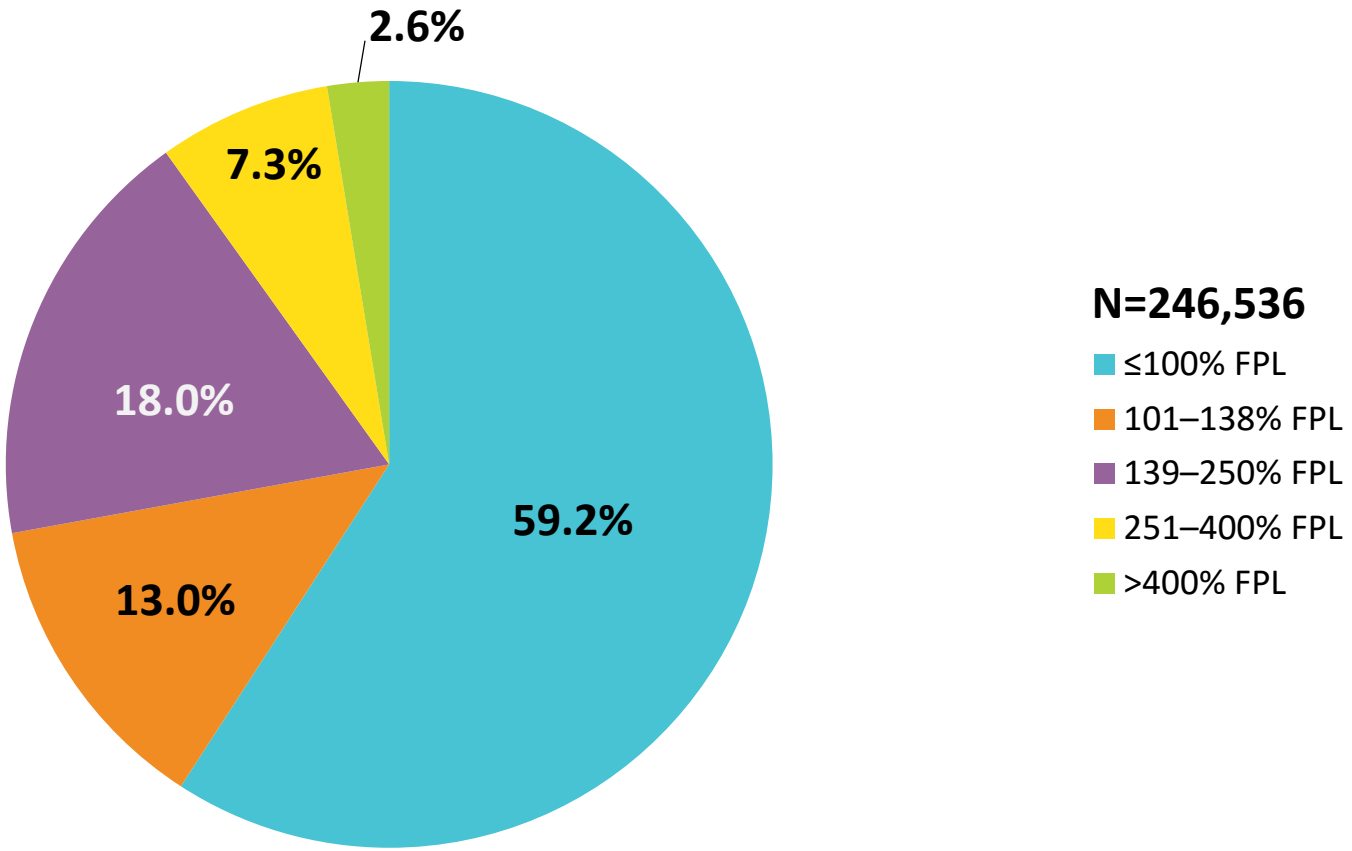
Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Gender and Housing Status, 2020—United States and 3 Territories[a]



[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Federal Poverty Level, 2020—United States and 3 Territories[a]



FPL: federal poverty level.
[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

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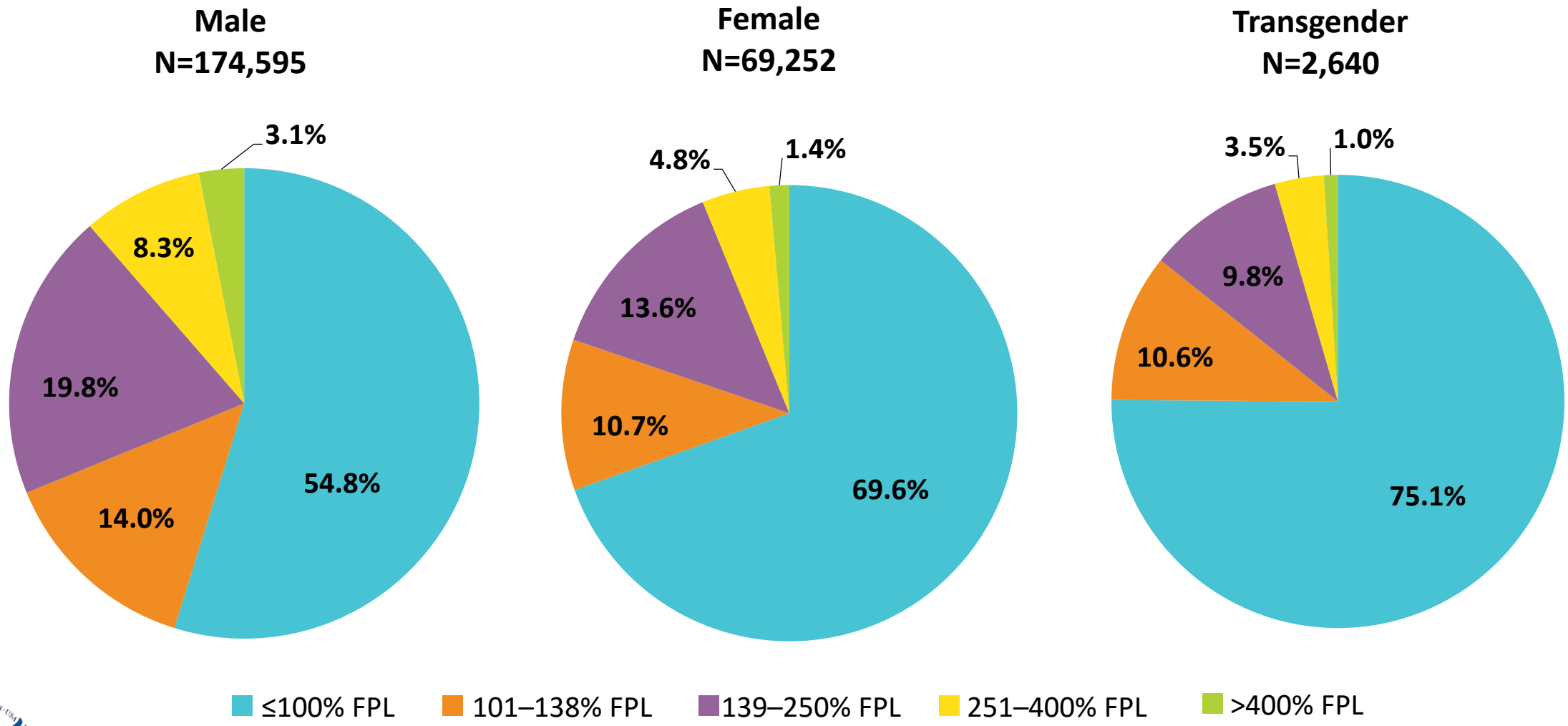
Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Clients Aged 50 Years and Older Served by the Ryan White HIV/AIDS Program, by Gender and Federal Poverty Level, 2020—United States and 3 Territories[a]



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[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

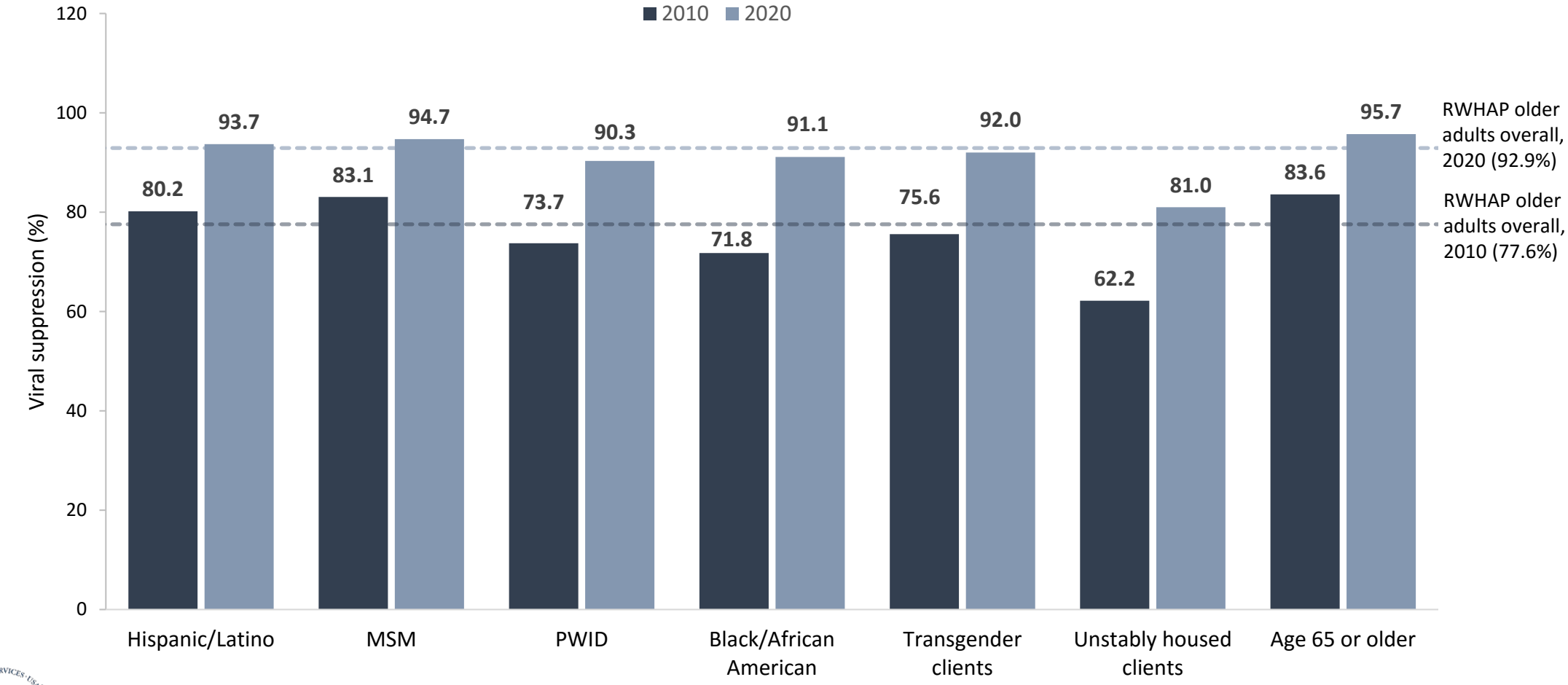
HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

Viral Suppression

Older Adults Aged 50 Years and Older

Older Adults Aged 50 Years and Older - Viral Suppression among Key Populations Served by the Ryan White HIV/AIDS Program, 2010 and 2020—United States and 3 Territories[a]



Hispanics/Latinos can be of any race.

Viral suppression: ≥1 OAHS visit during the calendar year and ≥1 viral load reported, with the last viral load result <200 copies/mL.

[a] Guam, Puerto Rico, and the U.S. Virgin Islands.

HRSA Ryan White HIV/AIDS Program

Source: HRSA. Ryan White HIV/AIDS Program Data Report (RSR) 2020. Does not include AIDS Drug Assistance Program data.

HRSA HIV/AIDS Bureau

HIV and Aging Activities and Resources

National HIV Curriculum HIV in Older Adults Module

- Offers free online continuing education for novice-to-expert health care professionals, students, and faculty
- Module devoted to HIV in older adults

https://www.hiv.uw.edu/go/key-populations/hiv-older-patients/core-concept/all

HRSA Ryan White HIV/AIDS Program

ACE TA Center

- **Builds the capacity of the RWHAP community to navigate the changing health care landscape and help people with HIV to access and use their health care coverage to improve health outcomes.**
- **Medicare Coverage for People with HIV**
  - The Basics of Medicare for RWHAP Clients
  - Medicare Prescription Drug Coverage for RWHAP Clients
  - How Medicare Enrollment Works
  - Transitioning from Marketplace to Medicare Health Coverage
  - Financial Help for Medicare
  - Resources for Consumers

https://targethiv.org/ace

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HHS Clinical Guidelines for Use of Antiretroviral Agents When Caring for Older Patients with HIV

Considerations for Antiretroviral Use in Special Patient Populations

Updated: Dec. 18, 2019
Reviewed: Dec. 18, 2019

HIV and the Older Person

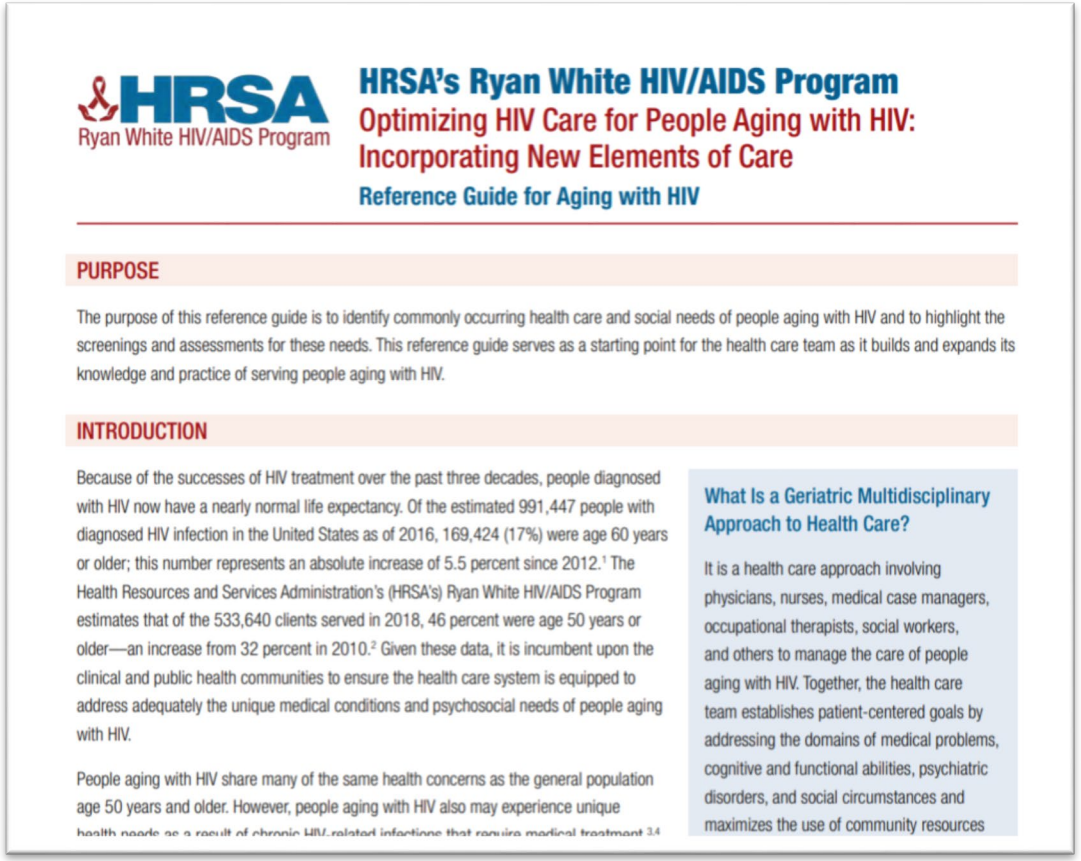
Key Considerations and Recommendations When Caring for Older Persons with HIV

Key Considerations and Recommendations When Caring for Older Persons with HIV
• Antiretroviral therapy (ART) is recommended for all people with HIV regardless of CD4 T lymphocyte cell count **(AI)**. ART is especially important for older individuals because they have a greater risk of serious non-AIDS complications and potentially a blunted immunologic response to ART.
• Given that the burden of aging-related diseases is significantly higher among persons with HIV than in the general population, additional medical and social services may be required to effectively manage both HIV and comorbid conditions.
• 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

HRSA Ryan White HIV/AIDS Program

Two Reference Guides: Optimizing HIV Care for People Aging With HIV

Incorporating New Elements of Care



HRSA Ryan White HIV/AIDS Program

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

PURPOSE

The purpose of this reference guide is to identify commonly occurring health care and social needs of people aging with HIV and to highlight the screenings and assessments for these needs. This reference guide serves as a starting point for the health care team as it builds and expands its knowledge and practice of serving people aging with HIV.

INTRODUCTION

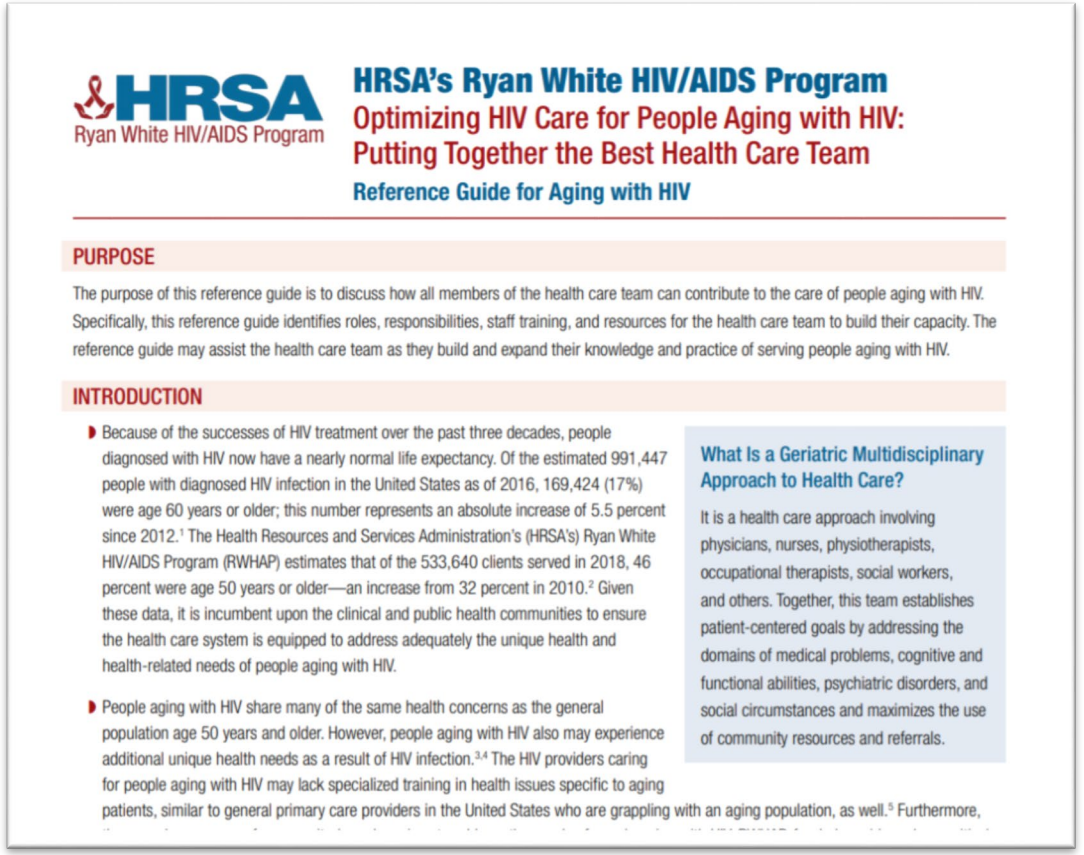
Because of the successes of HIV treatment over the past three decades, people diagnosed with HIV now have a nearly normal life expectancy. Of the estimated 991,447 people with diagnosed HIV infection in the United States as of 2016, 169,424 (17%) were age 60 years or older; this number represents an absolute increase of 5.5 percent since 2012.[1] The Health Resources and Services Administration's (HRSA's) Ryan White HIV/AIDS Program estimates that of the 533,640 clients served in 2018, 46 percent were age 50 years or older—an increase from 32 percent in 2010.[2] Given these data, it is incumbent upon the clinical and public health communities to ensure the health care system is equipped to address adequately the unique medical conditions and psychosocial needs of people aging with HIV.

People aging with HIV share many of the same health concerns as the general population age 50 years and older. However, people aging with HIV also may experience unique

What Is a Geriatric Multidisciplinary Approach to Health Care?

It is a health care approach involving physicians, nurses, medical case managers, occupational therapists, social workers, and others to manage the care of people aging with HIV. Together, the health care team establishes patient-centered goals by addressing the domains of medical problems, cognitive and functional abilities, psychiatric disorders, and social circumstances and maximizes the use of community resources

Putting Together the Best Healthcare Team



HRSA Ryan White HIV/AIDS Program

HRSA's Ryan White HIV/AIDS Program

Optimizing HIV Care for People Aging with HIV: Putting Together the Best Health Care Team

Reference Guide for Aging with HIV

PURPOSE

The purpose of this reference guide is to discuss how all members of the health care team can contribute to the care of people aging with HIV. Specifically, this reference guide identifies roles, responsibilities, staff training, and resources for the health care team to build their capacity. The reference guide may assist the health care team as they build and expand their knowledge and practice of serving people aging with HIV.

INTRODUCTION

- Because of the successes of HIV treatment over the past three decades, people diagnosed with HIV now have a nearly normal life expectancy. Of the estimated 991,447 people with diagnosed HIV infection in the United States as of 2016, 169,424 (17%) were age 60 years or older; this number represents an absolute increase of 5.5 percent since 2012.[1] The Health Resources and Services Administration's (HRSA's) Ryan White HIV/AIDS Program (RWHAP) estimates that of the 533,640 clients served in 2018, 46 percent were age 50 years or older—an increase from 32 percent in 2010.[2] Given these data, it is incumbent upon the clinical and public health communities to ensure the health care system is equipped to address adequately the unique health and health-related needs of people aging with HIV.
- People aging with HIV share many of the same health concerns as the general population age 50 years and older. However, people aging with HIV also may experience additional unique health needs as a result of HIV infection.[3,4] The HIV providers caring for people aging with HIV may lack specialized training in health issues specific to aging patients, similar to general primary care providers in the United States who are grappling with an aging population, as well.[5] Furthermore,

What Is a Geriatric Multidisciplinary Approach to Health Care?

It is a health care approach involving physicians, nurses, physiotherapists, occupational therapists, social workers, and others. Together, this team establishes patient-centered goals by addressing the domains of medical problems, cognitive and functional abilities, psychiatric disorders, and social circumstances and maximizes the use of community resources and referrals.

https://hab.hrsa.gov/clinical-quality-management/clinical-care-guidelines-and-resources

HRSA Ryan White HIV/AIDS Program

Aging Manuscript

Assessing the health status and mortality of older people over 65 with HIV

Gina Turrini, Stephanie S. Chan, Pamela W. Klein, Stacy M. Cohen, Antigone Dempsey, Heather Hauck, Laura W. Cheever, Andre R. Chappel

Published: November 5, 2020 • https://doi.org/10.1371/journal.pone.0241833

Article | Authors | Metrics | Comments | Media Coverage

Abstract
Introduction
Methods
Results
Discussion
Supporting information
References

Reader Comments
Figures

Abstract

Background

Nearly half of people with HIV in the United States are 50 years or older, and this proportion is growing. Between 2012 and 2016, the largest percent increase in the prevalence rate of HIV was among people aged 65 and older, the eligibility age for Medicare coverage for individuals without a disability or other qualifying condition. Previous work suggests that older people with HIV may have higher rates of chronic conditions and develop them more rapidly than older people who do not have HIV. This study compared the health status of older people with HIV with the older US population not living with HIV by comparing: (1) mortality; (2) prevalence of certain conditions, and (3) incidence of these conditions with increasing age.

Methods and findings

We used a sample of Medicare beneficiaries aged 65 and older from the Medicare Master Beneficiary Summary File for the years 2011 to 2016, including 100% of individuals with HIV (N = 43,708), as well as a random 1% sample of individuals without diagnosed HIV (N = 1,029,518). We conducted a survival analysis using a Cox proportional hazards model to assess mortality and to determine the need to adjust for differential mortality in our analyses of the incidence of certain chronic conditions. These results showed that Medicare beneficiaries living with HIV have a significantly higher hazard of mortality compared to older people without

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HRSA HIV/AIDS Bureau

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https://doi.org/10.1371/journal.pone.0241833

Collaboration with the Administration for Community Living (ACL)

- HRSA HAB presented high-level overview of RWHAP and services to ACL leadership and staff
- ACL presented high level overview of program and services to HRSA HAB leadership and staff
- ACL presented a training for ACL and RWHAP recipients on Older Americans Act and Area Agencies on Aging
- HRSA HAB presented to ACL recipients and beneficiaries about how to leverage partnerships to support and enhance networks for older adults who are aging with HIV

HRSA Aging Initiatives (August 1, 2022-July 2025)

Emerging Strategies to Improve Health Outcomes for People Aging with HIV

HRSA-22-027: Capacity-Building Provider (1 Recipient)

- Provides technical assistance and capacity development to the demonstration sites within the context of the RWHAP and develops a communication plan to create, replicate, and disseminate products.

HRSA-22-028: Demonstration Sites (10 Recipients)

- Supports 10 demonstration sites to identify, demonstrate, refine, and assess emerging strategies to comprehensively screen and manage comorbidities, geriatric conditions, behavioral health, and psychosocial needs of people aged 50 years and older with HIV.

HRSA-22-029: Evaluation Provider (1 Recipient)

- Develops and carries out a multi-site evaluation that includes a customized site-specific evaluation for each of the 10 demonstration sites.

HRSA Contact Information

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HIV and Aging 101

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2022

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Disclaimers and Disclosures

- Disclaimers:
  - HIV and aging is a HUGE field and I cannot review each condition in detail
  - I will cover some concepts, touch on some of the most common or frequent comorbidities, raise questions about how we prioritize care
- Disclosures:
  - I receive grant and/or research support from: Gilead Sciences
  - I have provided or currently provide consultation on issues pertaining to HIV/aging to ViiV and Jannsen.

Disclosure will be made when a product is discussed for an unapproved use.

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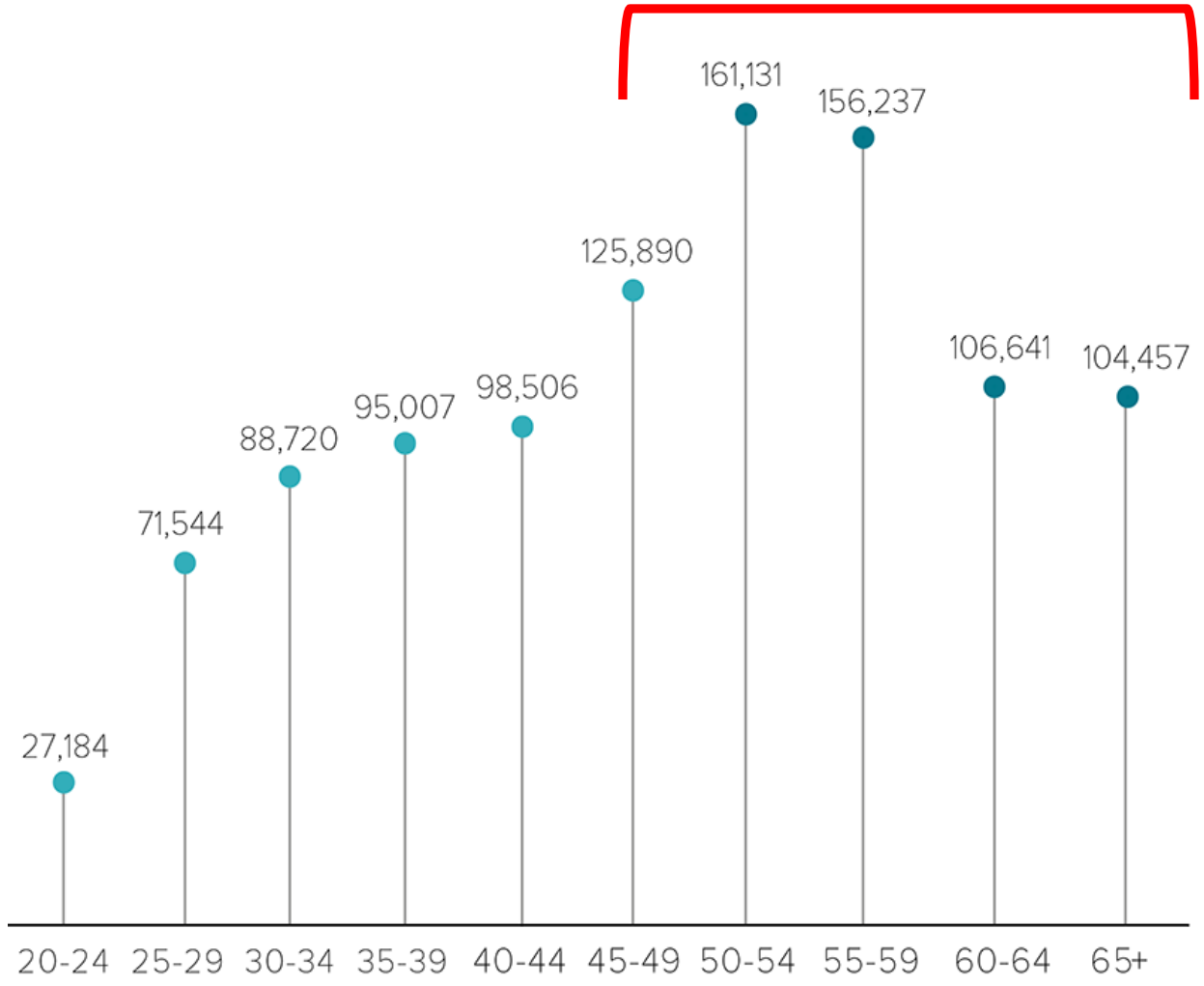
There was no commercial support for this activity.

Learning Objectives

At the conclusion of this activity, participants will be able to:

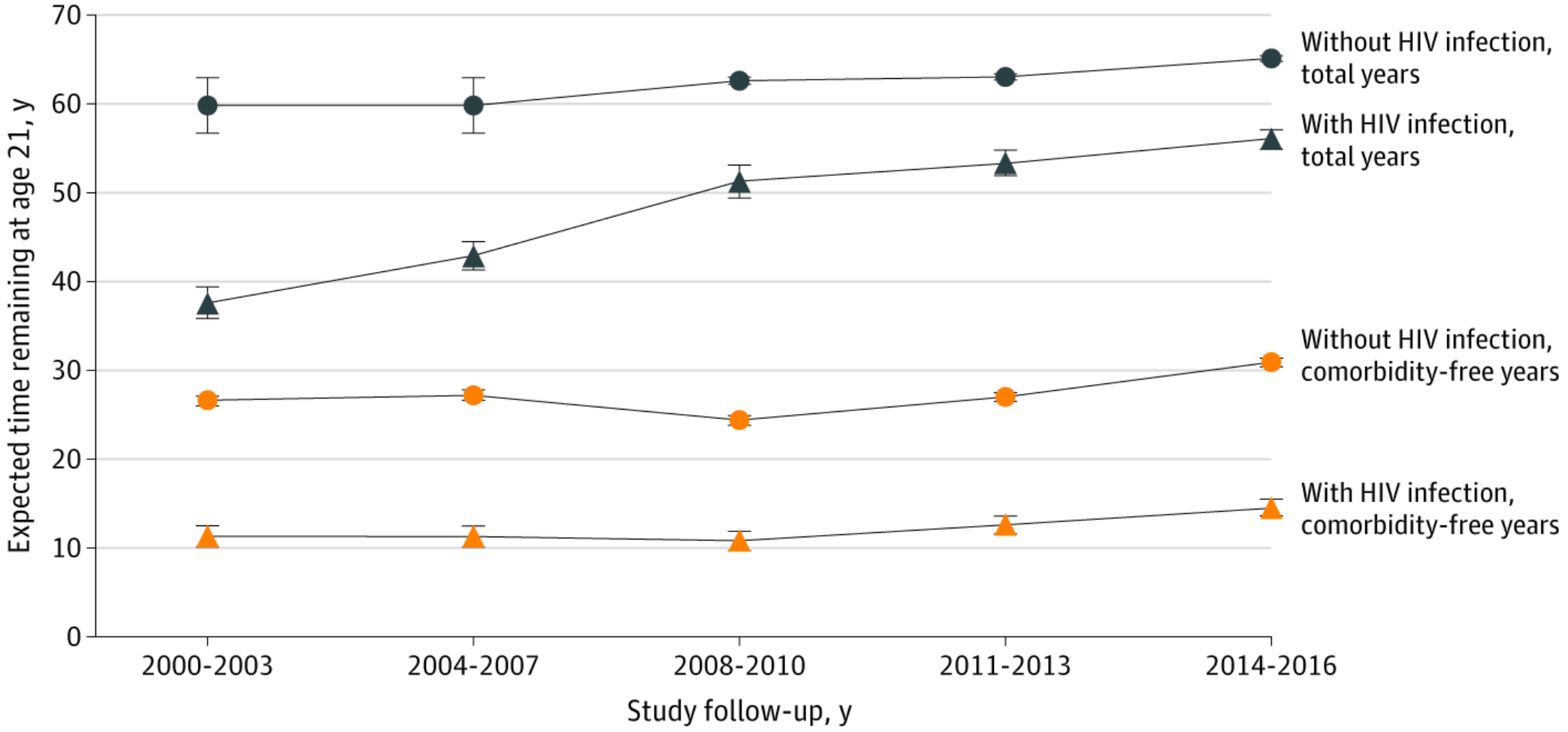
1. Describe the changing demographics of people with HIV
2. Utilize the concept of accelerated or accentuated aging to inform screening and treatment
3. Consider the 5 M's framework when caring for older adults in the HIV clinic

More than 50% of People with HIV in the US are Aged 50 or Older



- Those infected with HIV at a younger age are successfully growing older
- New diagnoses in older people
- Proportion of people living with HIV ≥ 50 years of age is estimated to reach ~ 75% by 2030

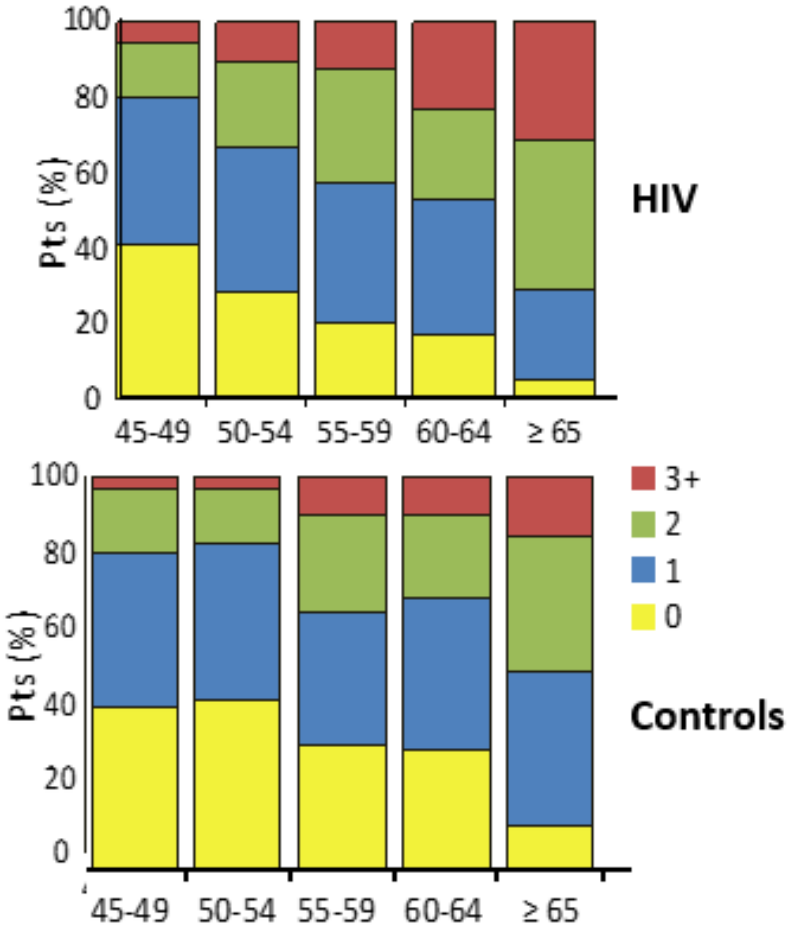
Improved Life Expectancy but not Comorbidity-Free Years

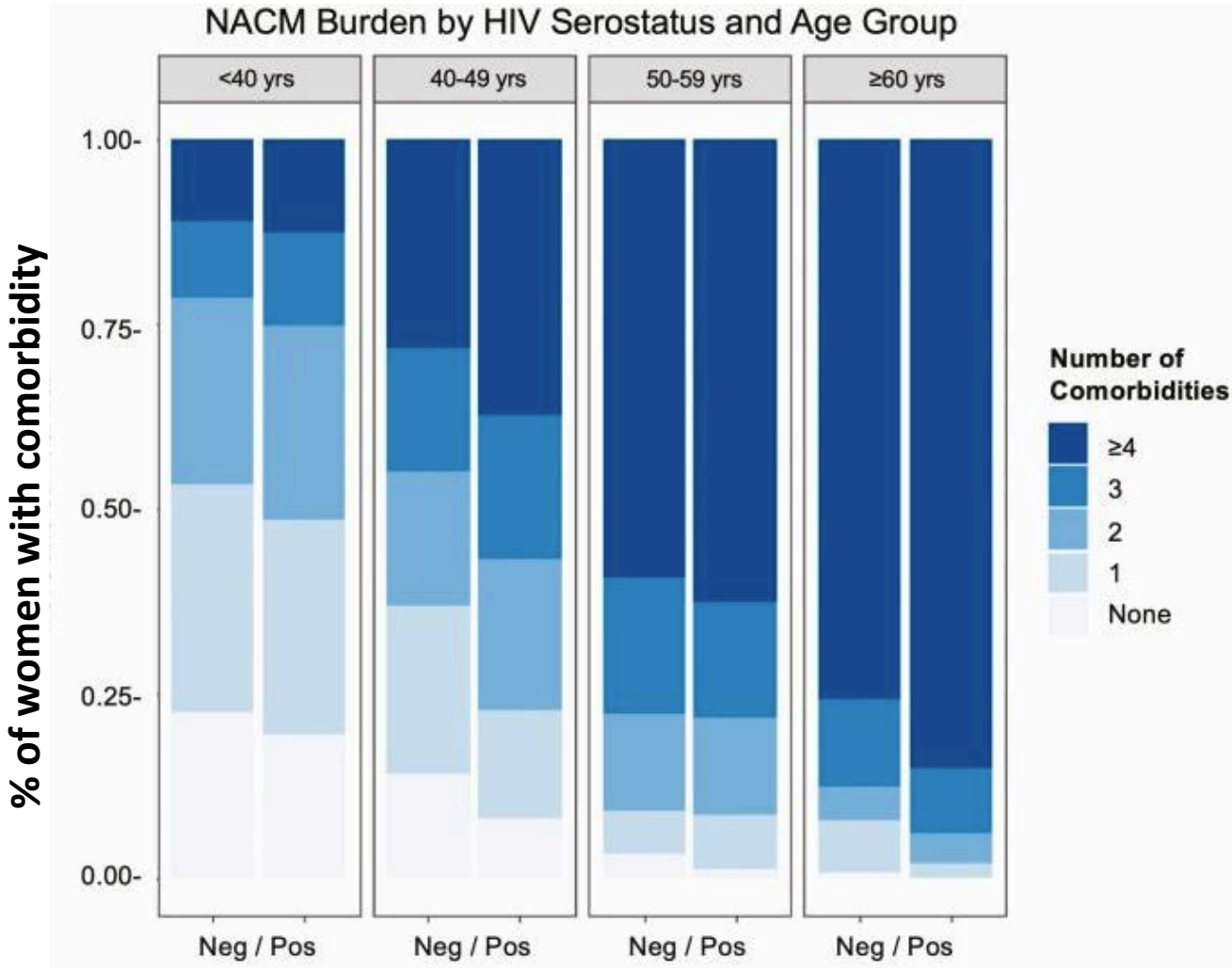


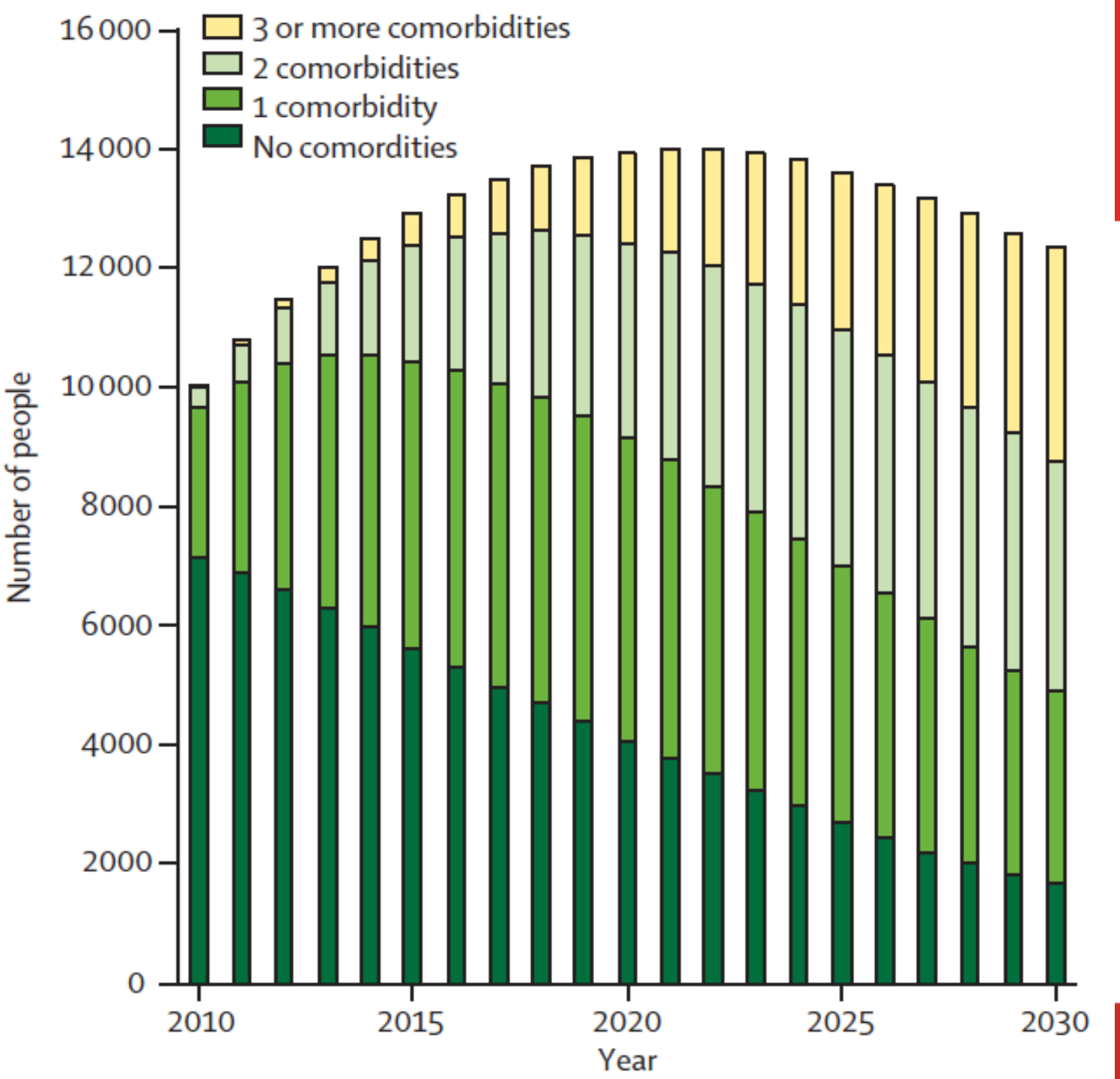
Comorbidity-free years: chronic liver, kidney and/or lung disease, diabetes, cancer, or cardiovascular disease.

JAMA Netw Open. 2020

Greater Comorbid Burden Among PWH







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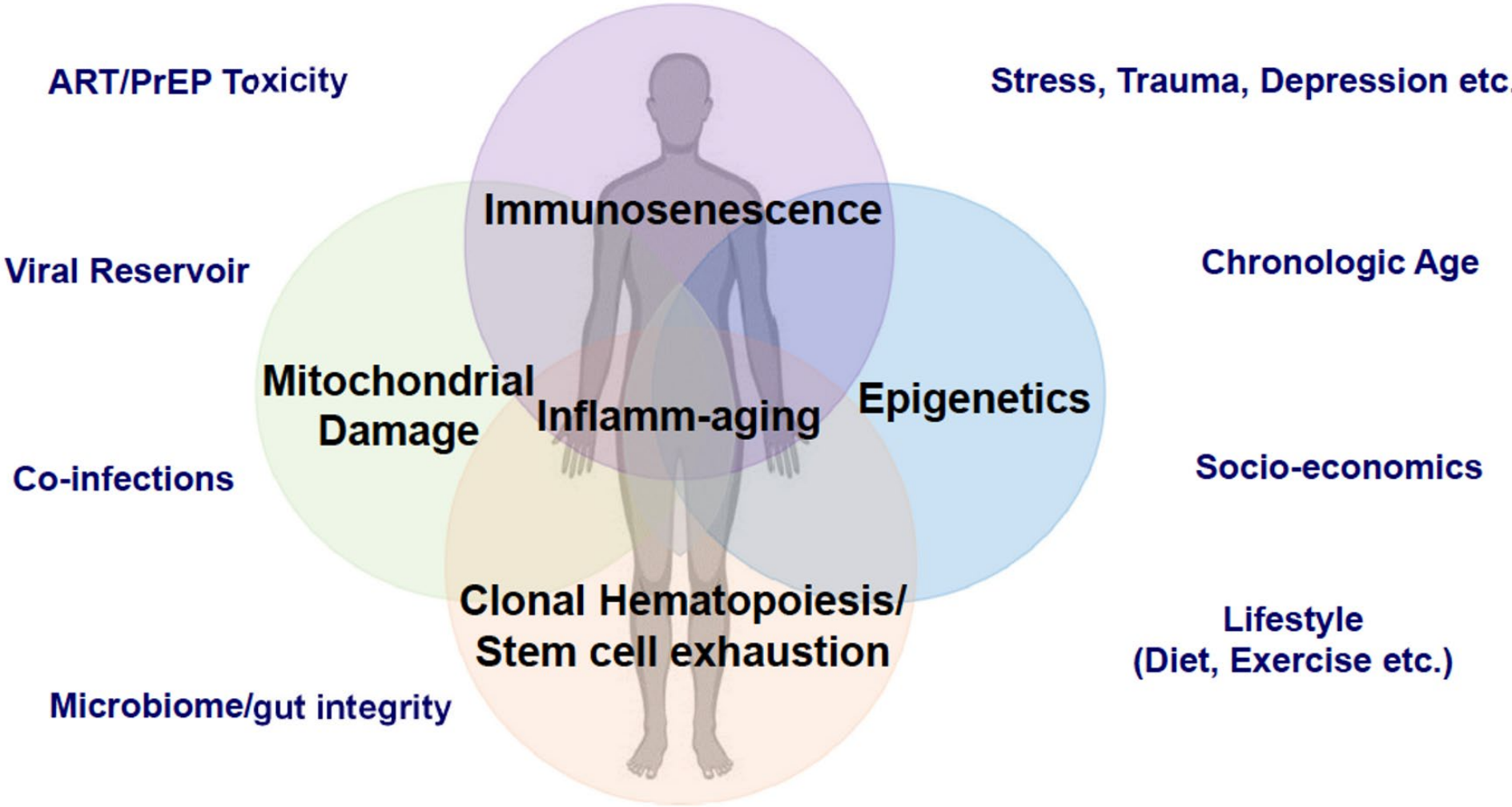
Burden of Multimorbidity is Expected to Increase

Smit, et al. Lancet HIV 2015

Numerous Factors Contribute to Aging Sequelae in HIV



Gabuzda, et al. Pathogens and Immunity 2020

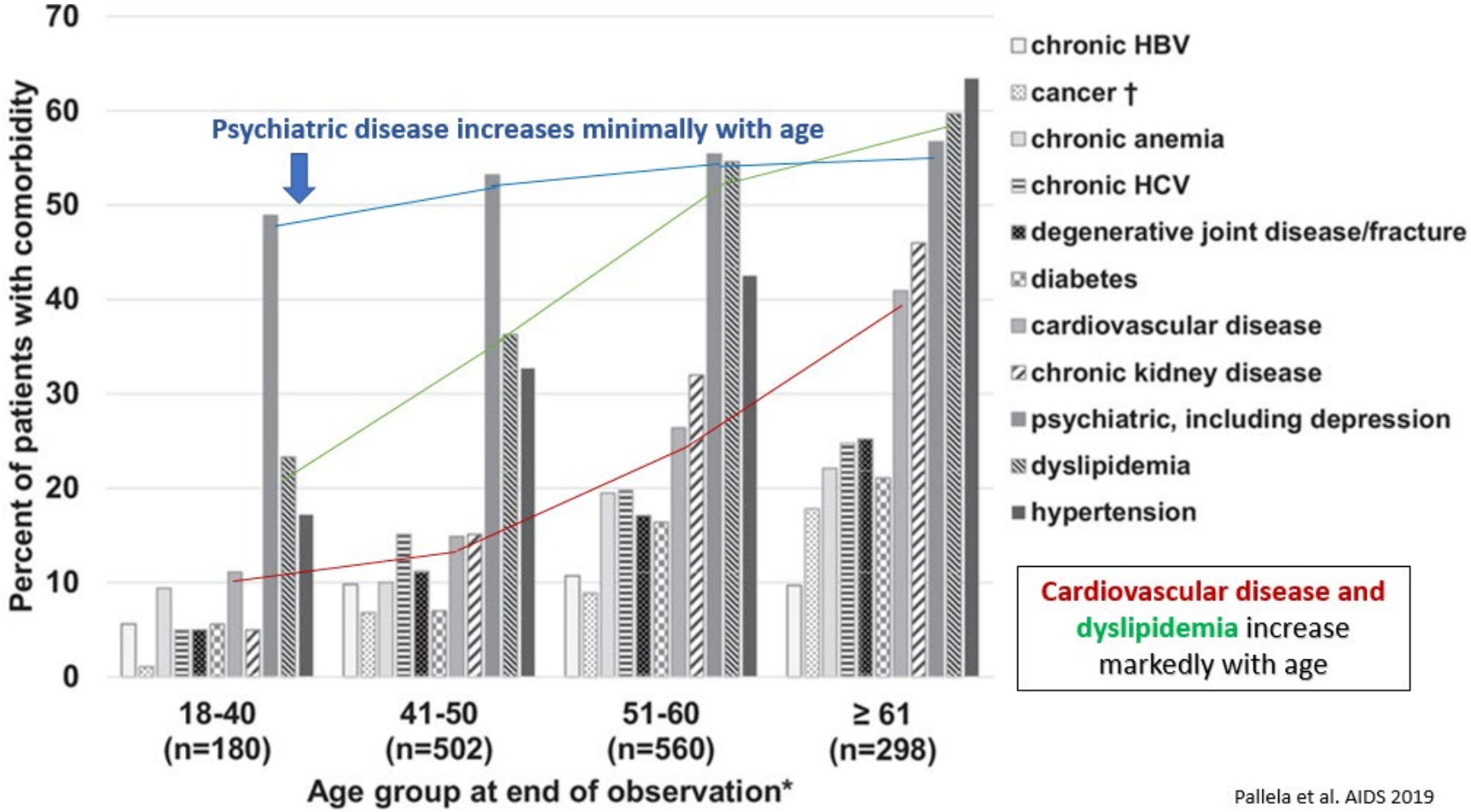
Condition	PWH n=2492	Controls without HIV n=1524	P-value
Overweight or obese	73%	71%	0.70
Diabetes	**23%**	**21%**	**0.04**
HTN	55%	56%	0.83
Metabolic syndrome	**40%**	**33%**	**<0.001**
Dyslipidemia	65%	63%	0.33
CKD	**14%**	**7%**	**<0.001**
Liver disease	**3%**	**2%**	**0.005**
Depression	**30%**	**25%**	**0.002**
Cancer	8%	6%	0.10

Which Comorbidities Occur More Commonly in People *with* Compared to *without* HIV?

CKD defined by eGFR <60, liver disease defined by FIB-4 score >3.25, Depression by CES-D ≥16

D'Souza, et al. Am J Epidemiol 2021

Risk Changes with Increasing Age

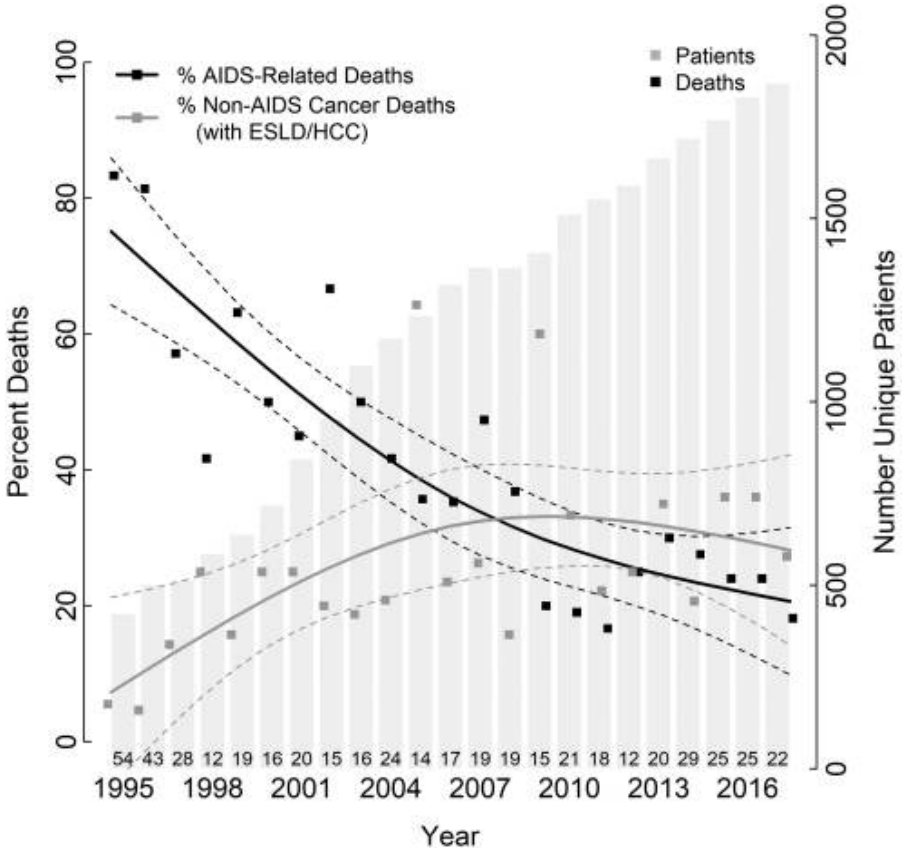


Pallela et al. AIDS 2019

Causes of Death Among PWH

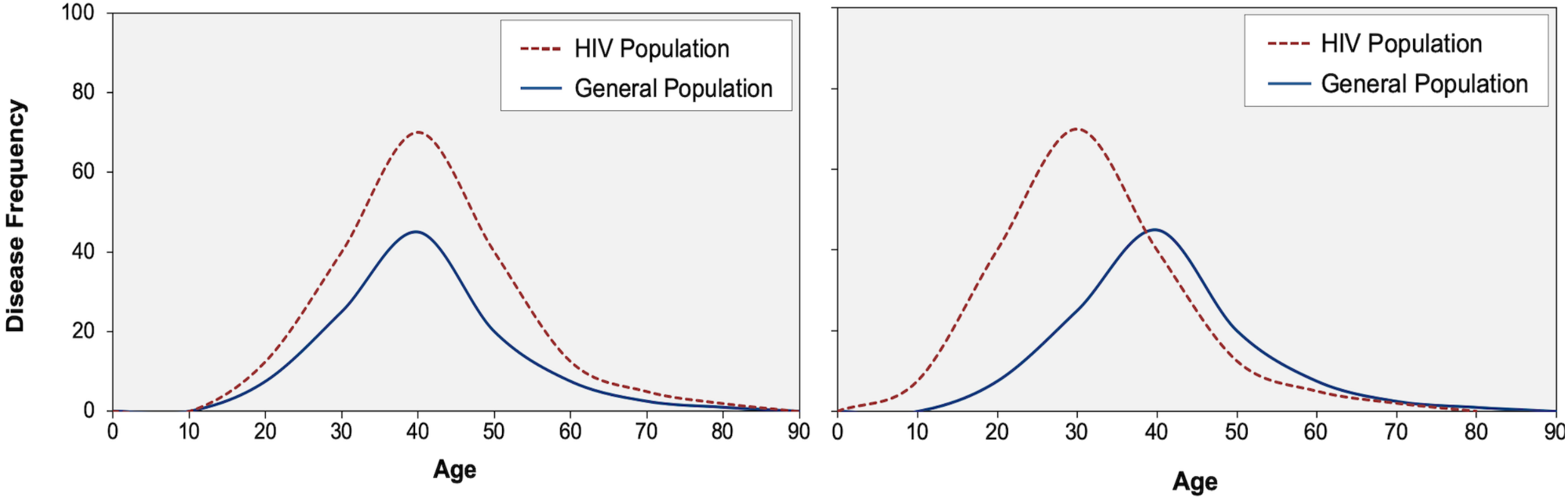
SMR>1: Rate of OBSERVED deaths > Rate of EXPECTED deaths

People diagnosed with HIV	Standardised mortality ratio (95% CI)
All-cause mortality	5.7 (5.5-5.8)
Non-AIDS deaths	2.2 (2.1-2.3)
Non-AIDS infections	10.8 (9.8-12.0)
Non-AIDS cancers	1.3 (1.2-1.4)
Cardiovascular disease and stroke	1.7 (1.5-1.9)
Liver disease	3.7 (3.3-4.2)
Accident	1.4 (1.2-1.7)
Suicide	2.0 (1.6-2.4)
Substance misuse	2.6 (2.1-3.1)
Other causes	2.5 (2.2-2.7)



Croxford Lancet Public Health 2017; Ressler ....Erlandson KM. AIDS Res Hum Retroviruses 2019

‘Accentuated’ or ‘Accelerated’ Influences Care



- Accentuated– occurs commonly, emphasizes the importance of screening/prevention
- Accelerated– should screening/prevention occur earlier?

Examples of Conditions that may be Accelerated vs Accentuated?

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- *Accelerated*:
  - Cardiovascular disease
  - Osteoporosis/osteopenia
  - Cognitive impairment
  - Mobility impairments

→ Yearly lipid and diabetes screening after starting ART, regardless of age in PWH

→ Bone density screening starts at @ 50 for men with HIV vs 65+ for men AND additional risk factors for men without HIV

- *Accentuated*:
  - Anal and cervical cancer
  - Diabetes
  - Substance use
  - Mental health conditions

→ Routine/more frequent screening in people with HIV

→ A1C/glucose after ART initiation and at least yearly

What Guidelines Exist for *Older* Adults with HIV?

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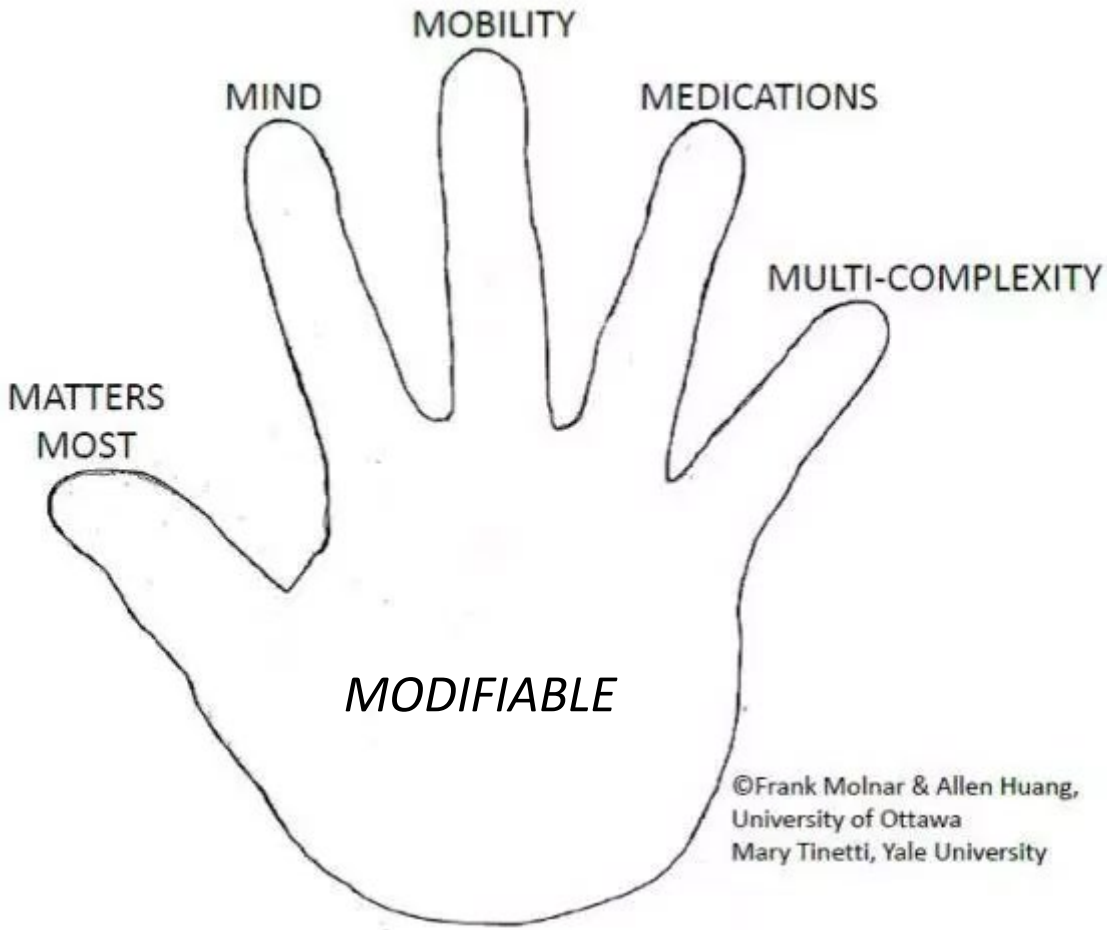
- US Preventative Task Force Recommendations
- Society guidelines (often differ from USPTF recommendations)
- Advisory Committee on Immunization Practices (CDC)
- HIV Primary Care Guidelines
- Department of Health and Human Services HIV Treatment Guidelines
- HIV-Age.org (age-specific recommendations)
- Expert opinion (Up-To-Date), reviews, etc.

How do we prioritize this long list of recommendations?

A Team Approach to Care: "The Geriatrics 5 (or 6) M's"



Tinetti M et al. J Am Geriatr Soc 2017; Erlandson KM & Karris MY, Infect Dis Clin North America 2019

1. MODIFIABLE

- Prioritize *modifiable/preventable* risk factors to maximize health span and minimize comorbidities and polypharmacy
  - Update immunizations
  - Smoking cessation
  - Nutrition & food security
  - Physical activity
  - Safe driving
  - Vision/hearing
  - Develop social networks, meaningful engagement (work, volunteer, advocacy)

Erlandson KM & Karris MY, under review 2019; Lake et al CID 2018; Abrass CK et al. HIV-age.org; Montoya et al. AIDS 2019.

2. MULTICOMPLEXITY/ MULTIMORBIDITY

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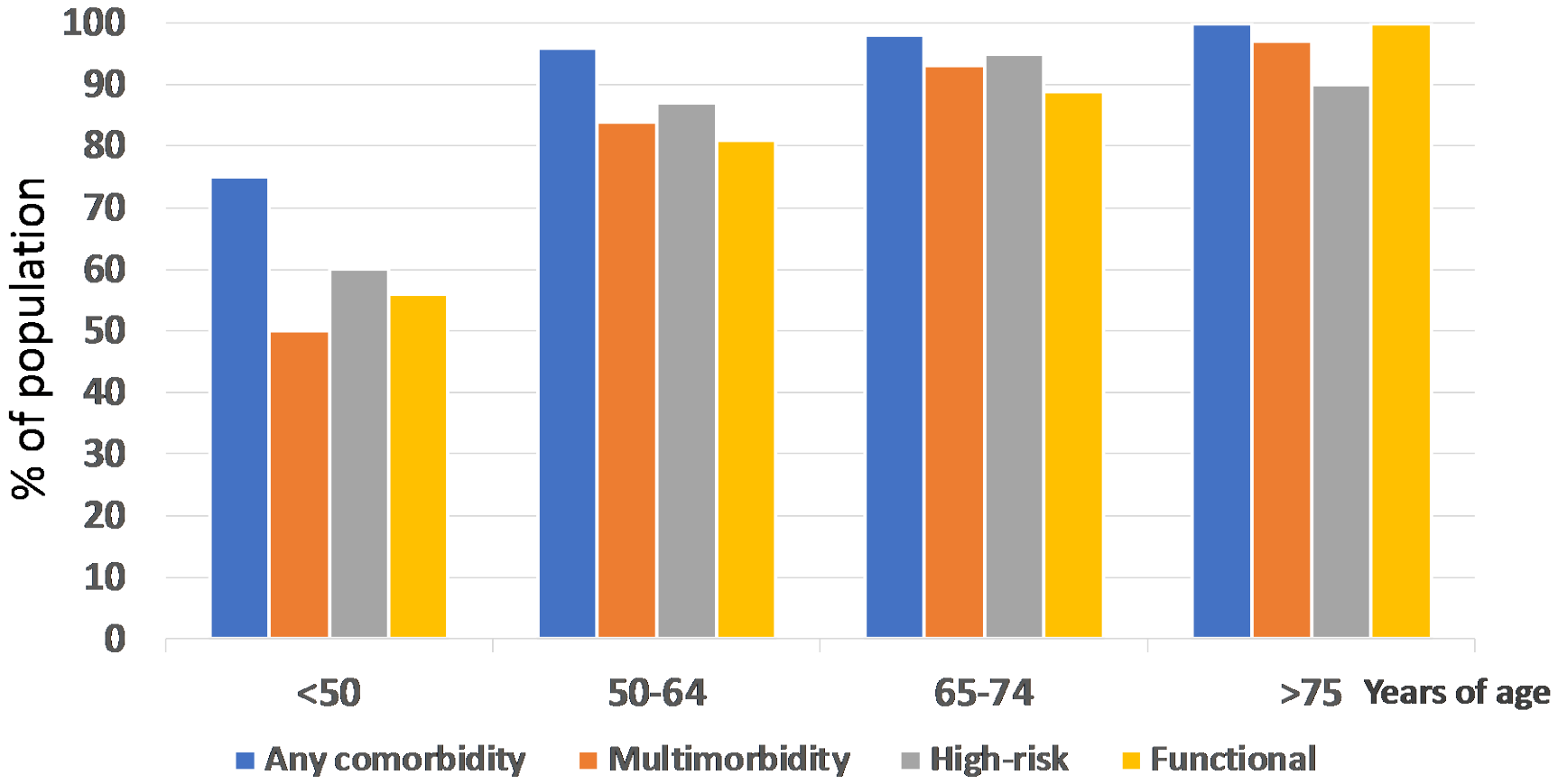
- Guidelines focus on **disease specific** treatments
- Treatments for one condition may worsen another condition
- Consider treatments that benefit multiple comorbidities, with least complexity



US DHHS Multiple Chronic Conditions 2010; Boyd CM, JAGS 2012; Boyd CM, et al. JAGS 2019; Siegler BMJ Open 2021

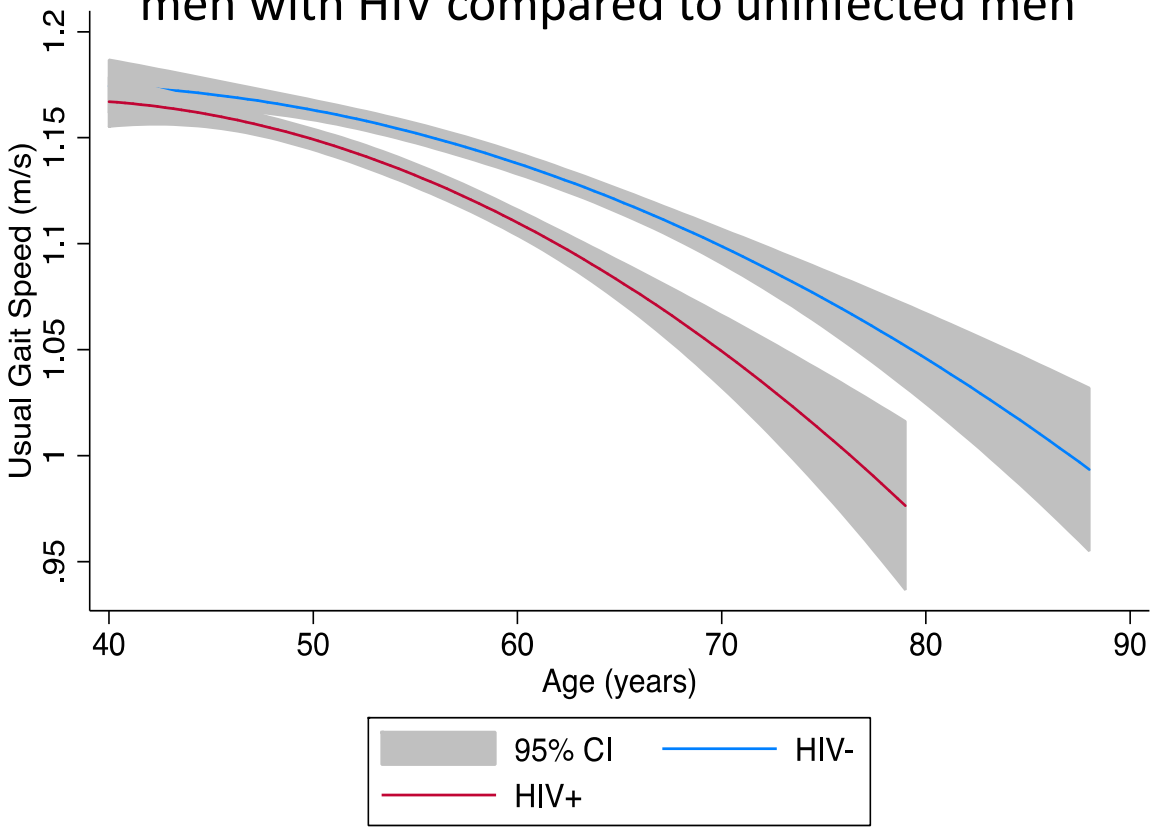
3. MIND

- HIV-associated Neurocognitive Disorders (HAND)
  - Impairments in concentration, memory, planning, organizing, decision making (can impact adherence)
- Alzheimer's risk will increase with increasing age of the population
- Mood disorders complicate treatment and diagnosis of dementia and other comorbidities
  - Many treatments are higher-risk for older adults, may worsen falls risk or mobility impairments
- Substance use
- Loneliness, social isolation

Milianin B & Valcour V; Curr HIV/AIDS Rep 2017; Sangarlangkarn A and Applebaum JS. HIV-Age.org, HIV-Associated Neurocognitive Disorders Case Study; Sheikh JI, Yesavage JA, Clinical Gerontol 1986; Nasreddine et al. JAGS 2005.

4. MOBILITY: Gait, Balance, Falls

Faster decline in gait speed with aging among men with HIV compared to uninfected men

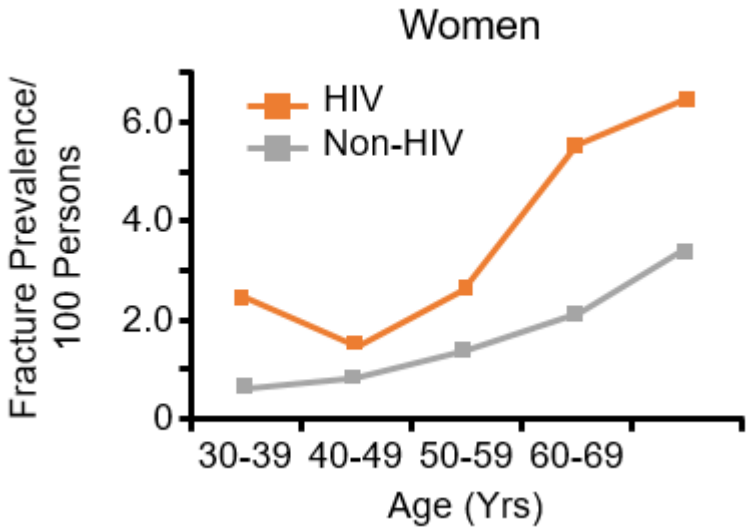


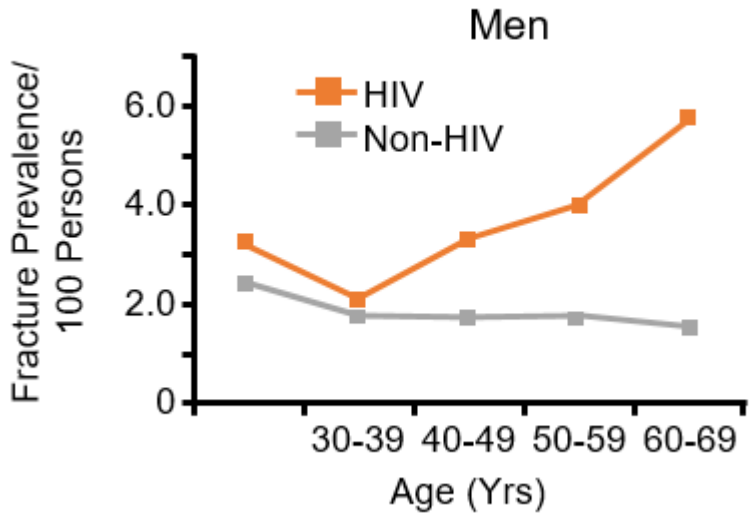
Cohort	Any Fall	Recurrent Falls
HAILO	18%	7%
Colorado	30%	18%
MACS/WIHS	24%	13%
MACS-BOSS	41%	20%
WIHS	41%	25%
San Francisco	26%	--
ARCH 4F	34%	12% with 5+

Schrack JAIDS 2015; Tassiopoulos K, et al. AIDS 2017; Erlandson, et al. HIV Med 2016; Erlandson, et al. JAIDS 2012; Sharma A, et al. Antivir Ther 2019; Sharma A, et al. Antivir Ther 2018; Kim S, et al. HIV/Aging CFAR Conference 2019; Greene, M, JAIDS 2015.

4. MOBILITY: Falls Lead to Fractures

- People with HIV have a nearly 4-fold increased risk of osteoporosis
- 5% of falls in MACS and 13% of falls in ARCH 4F were associated with fracture





- 8525 PWH vs 2,208,792 uninfected pts in Partners HealthCare System, 1996-2008

Slide credit: clinicaloptions.com

Brown TT, et al. J Infect Dis. 2015;212:1241-1249. Erlandson KM et al, under review; Triant V, et al. J Clin Endocrinol Metab. 2008;93:3499-3504; Kim S, et al. accepted as oral abstract at HIV/Aging CFAR 2019

5. MEDICATIONS

- Polypharmacy = 5 or more medications
- This is a major problem in HIV!
  - Average # of medications = 14 (11.6 non-HIV medications)
  - 35% taking ≥ **16 medications;** 63% had at least one inappropriate prescription
- Are additional medications really adding benefit?
  - Decreased adherence
  - Increased risk of side effects (treated with more medications)
  - Drug-drug interactions with ART AND with non-ART
  - Greater mortality

McNicholl IR, et al. Pharmacotherapy 2017; Hiv-age.org; Edelman Drugs Aging 2013; Dumond JB, et al. HIV Med 2013; Dumond JB, et al. CPT Pharmacometrics Syst Pharmacol 2017

6. MATTERS MOST (*to the patient*)

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- Understand the *patient/family preferences*
  - Tools available (www.patientprioritiescare.org) to assess current treatment burden and acceptability – case managers can review & complete
  - Associated with greater adherence
- Incorporate the patient's health trajectory to prioritize and guide decision making
  - Interventions/treatments with long-term benefit may cause more harm if life-expectancy is short (www.eprognosis.com)
  - Is there a benefit in cancer screening?
  - Is there time to benefit from *smoking cessation* (vs patient quality of life?)

6. MATTERS MOST

- Less than 50% of middle-aged/older PWH had a documented AD
- In separate study, 47% of PWH ***who died*** had completed AD and 73% assigned MPOA (formal or informal)
- Many older PWH do not anticipate living until “old age”, no retirement plans, long-term care insurance
- Older PWH frequently have social networks comprised of partners and friends (may not be legally recognized representatives)
- Designate a medical power of attorney, discuss end of life care EARLY!

Erlandson, J Palliative Med 2012; Ressler...Erlandson KM; JANAC 2021

Summary

- As the population of older adults with HIV continues to grow, they will face an increasing burden of comorbidities, many of which occur more commonly and at an earlier age
- Our screenings and treatments may need to differ for these patients, to ensure the most effective care
- The 5 M's framework can help prioritize key components of care for older adults with HIV
- Tune in on Thursday to hear more about how to implement the 5 M's with Dr. Jacob Walker in HIV & Aging 201!

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Psychosocial Issues Impacting Older Adults with HIV

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New York, NY

2022

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Disclosures

- Research Support from Gilead Sciences
- Consultant to Theratechnologies, Inc.
- These relationships are not related to or relevant to this presentation

Objectives

- While physical health and clinical care are important for people with HIV to experience health aging, psychosocial issues play a major role in quality of life for these older adults.
- Focus of my talk today:
  - Behavioral Health
  - Social Isolation and Social Support

Behavioral Health

Depression

- One of the most frequently self-reported comorbid conditions:
  - Study of older PLWH in NYC found **52%** reported depression. [a]
- Depression is often related to:
  - Prior history of depression
  - Comorbidity (*i.e.,* physical illness, psychiatric, substance use)
  - Chronic stress
  - History of trauma/abuse and PTSD
  - HIV stigma, and concomitant loneliness and social Isolation

[a] Applebaum, A**.,** & Brennan, M. (2009). Mental health and depression. In M. Brennan, S. E. Karpiak, A. R., Shippy, & M. H. Cantor, (Eds). *Older Adults with HIV: An in-depth examination of an emerging population, pp.27-34.* New York: Nova Science Publishers.

Importance of Depression in PLWH

- Can suppress immune responses (*e.g.*, Tiemeier, van Tuijl, Hofman, Kiliaan, & Breteler, 2002)
- Associated with an increased inflammatory response (Kiecolt-Glaser & Glaser, 2002)
- Contributes to neuropsychological impairment or exacerbates cognitive deterioration caused by normal aging in HIV-infected adults (Gibbie *et al.*, 2006)
- Decreased functional ability
- **Difficulty with adherence to antiretroviral therapy (ART) and other treatments**

Depression in PLWH vs. Other Older Adults

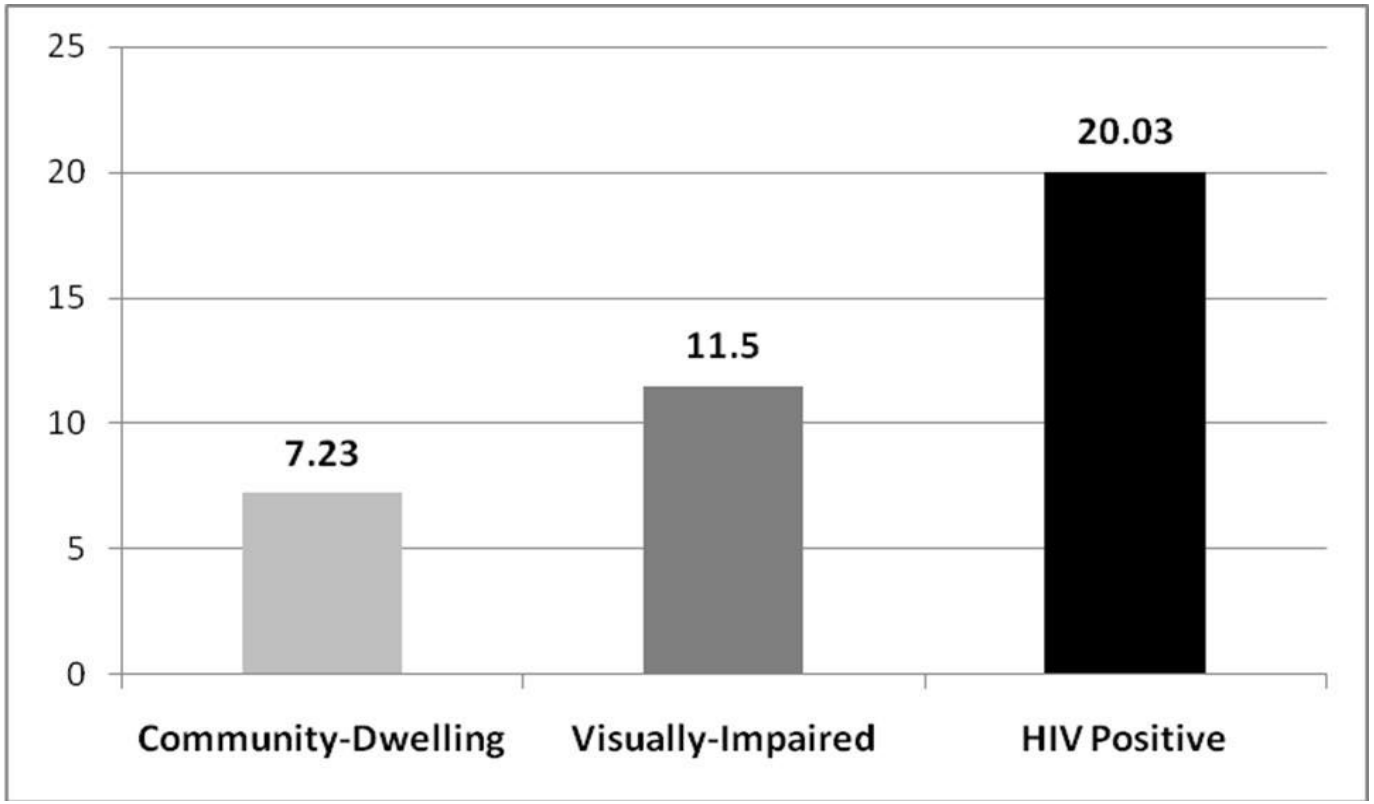


Figure 2. Comparison of Average CES-D Scores among Middle-age and Older Adults who are Community-dwelling, Visually-Impaired, or Living with HIV in ROAH. Data on Community-dwelling adults and visually impaired adults were obtained from Gump et al. (2005) and Horowitz et al. (2006), respectively.

Applebaum, A., & Brennan, M. (2009). Mental health and depression. In M. Brennan, S. E. Karpiak, A. R., Shippy, & M. H. Cantor, (Eds). *Older Adults with HIV: An in-depth examination of an emerging population, pp.27-34.* New York: Nova Science Publishers.

Covariates of Severe Depression in Older PLWH

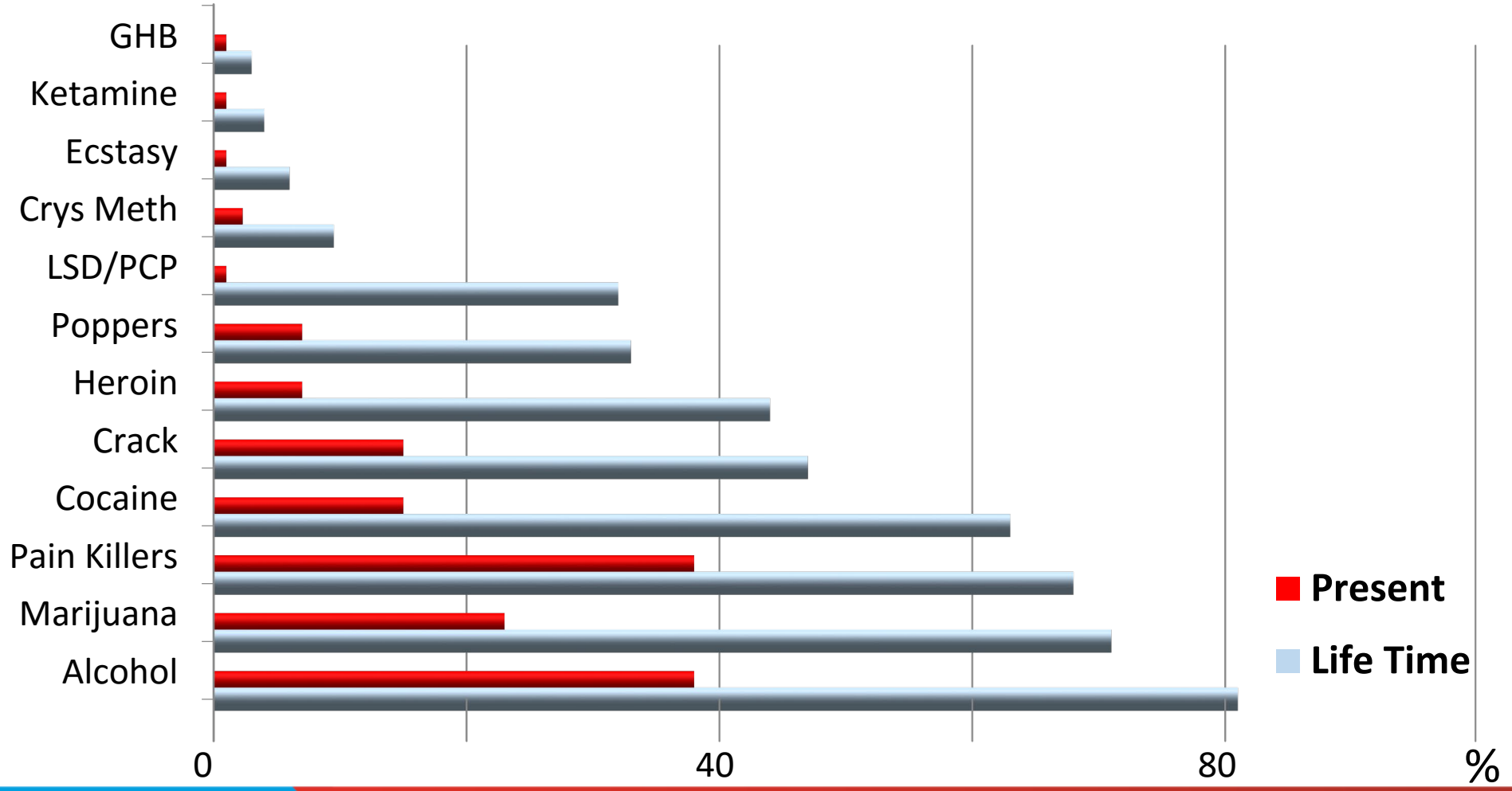
Covariate	AOR	Δ R^2
Female (1=yes)	1.06	-
Gay/Bisexual/Lesbian	0.68	-
Age	**0.96**	-
White (1 = yes)	1.25	-
Latino (1 = yes)	**1.06**	**.05**
MOS-HIV Physical Function	1.00	-
MOS-HIV Social Function	1.00	-
MOS-HIV Cognitive Function	**0.98**	-
MOS-HIV Pain	0.99	-
MOS-HIV Energy/Fatigue	**0.97**	**.29**
Berger Stigma Scale	**1.013**	-
UCLA Loneliness Scale	**1.06**	**.08**

Grov, C., Golub, S. A., Parsons, J. T., Brennan, M., & Karpiak, S. E. (2010). Loneliness and HIV-related stigma explain depression among older HIV-positive adults. *AIDS Care, 22*(5), 630-639.

Substance Use Complicates HIV Care

- Substance and alcohol use among persons living with HIV is associated with:
  - Behavioral health issues (Pence *et al.,* 2006)
  - ART non-adherence (Chesney, 2000; Ware *et al.,* 2005)
  - Risk for HIV transmission (Leigh & Stall, 1993; Semaan *et al.,* 2002)
- Alcohol and substance use can **DECREASE** the efficacy of ART (Michel, Carrieri, Fugon *et al.,* 2010)

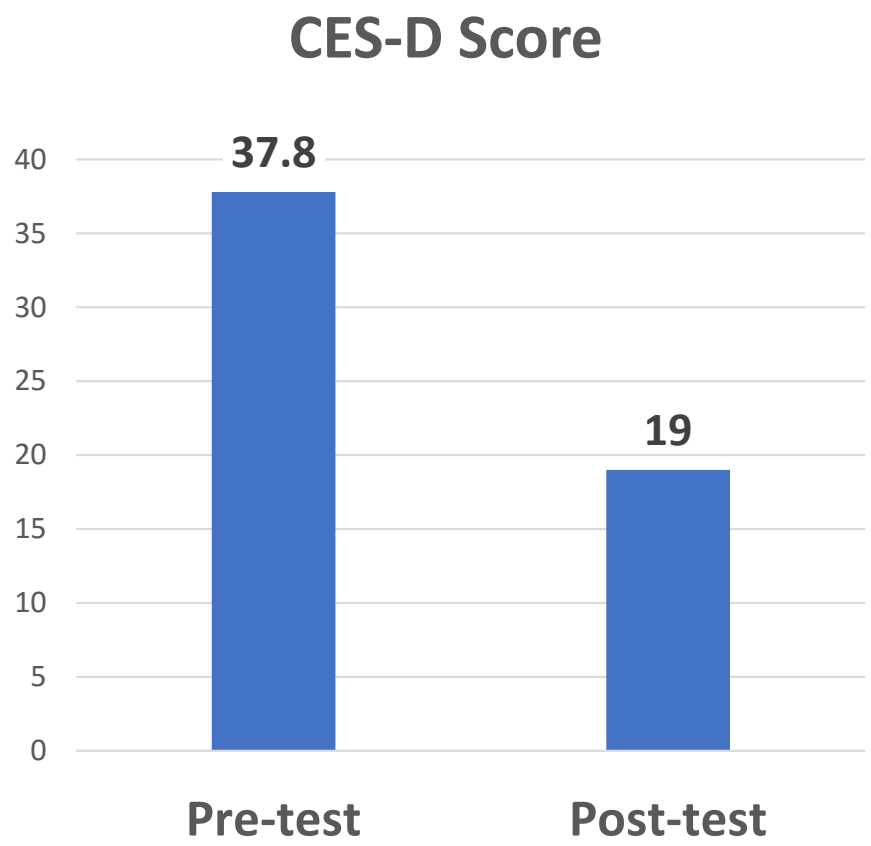
Alcohol and Substance Use



Applebaum, A., & Brennan, M. (2009). Substance and alcohol use. In M. Brennan, S. E. Karpiak, A. R., Shippy, & M. H. Cantor, (Eds). *Older Adults with HIV: An in-depth examination of an emerging population, pp.35-42.* New York: Nova Science Publishers.

Non-medical Approaches

- Behavioral health problems may be mitigated by addressing underlying issues such as poor social support.
- We adapted an intervention (MacArther Project RESPECT) for 26 older PLWH:
  - Intervention consisted of weekly 5 to 10 minute support call from a Care Manger.
  - **NOT** Telehealth
- After 6 months, significant decrease in depressive symptoms and self-reported reduced substance/alcohol use.



Brennan-Ing, M., Seidel, L, Geddes, L, Freeman, R., Figueroa, E., Havlik, R., & Karpiak, S. E. (2017). Adapting a telephone support intervention to address depression in older adults with HIV. *Journal of HIV/AIDS & Social Services, 16*(4), 335-350. DOI: 10.1080/15381501.2017.1318103.

Behavioral Health Summary

- The high prevalence of depression and substance use among older PLWH suggests that these conditions are poorly managed in clinical settings.
  - Older PLWH average depressive symptom scores are nearly double those of older people who are visually impaired (a population characterized by high rates of depression).
- Both depression and substance use interfere with adherence to ART.
  - Failure to address these issues will interfere with *Ending the HIV Epidemic (EHE) in the US* goals of increasing rates of viral suppression.
  - Substance and alcohol use decrease the effectiveness of ART.
- Non-medical approaches, like addressing poor social support, are effective in reducing behavioral health problems in older PLWH.

Social Support and Isolation

Social Supports in Later Life

- Social networks are crucial to both physical and mental well-being for people of all ages, especially as one grows older and encounters the challenges of managing multiple chronic illnesses (Cantor & Brennan, 2000)
- If the informal caregiving provided by family, friends, and neighbors were replaced by formal caregivers (i.e., paid), the cost would exceed $470 billion annually (AARP, 2020)
- Thus, social networks are a **critical** health-care resource

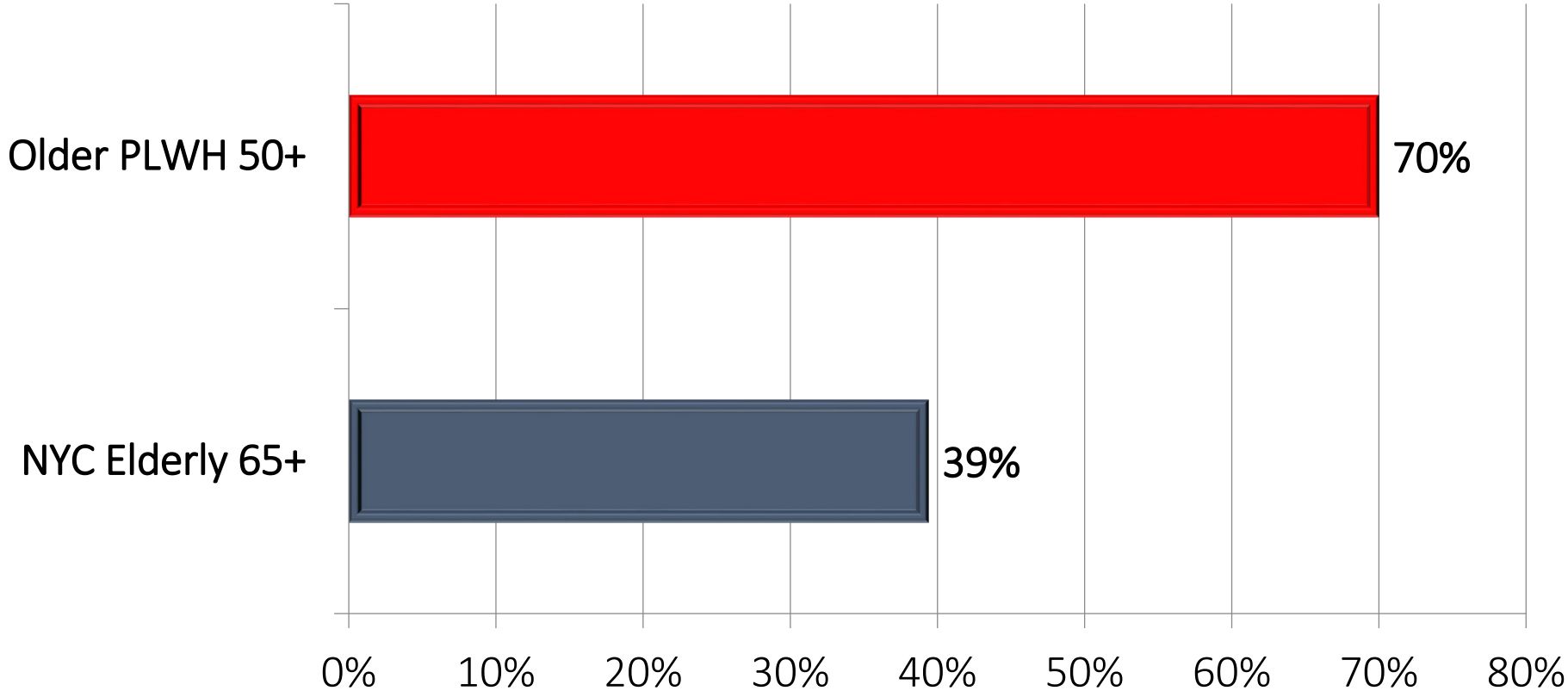
Social Support among Older PLWH

- Older PLWH have fragile social networks characterized by a reliance on friends, rather than family. (Shippy & Karpiak 2005a; 2005b)
- Many older PLWH do not receive adequate support from their social networks (Nichols et al., 2002):
  - report feelings of isolation, stigmatization
  - have trouble coping with the demands of illness management (i.e., keeping medical appointments, adhering to treatment)
- When social supports are available for older PLWH, they report **lower levels of psychological distress** and **higher levels of well-being** (Chesney et al., 2003)

Why Social Support for Older PLWH is Important

- Older PLWH have high levels of comorbid physical and mental health conditions that require care and assistance now and in the future.
- Government and community-based services are being stretched due to:
  - The aging of the population in general
  - Decreased funding and program cutbacks due to budget shortfalls
  - Recalibrating health and social services due to the COVID-19 pandemic (remote vs. in-person)
- AIDS Service Organizations (ASOs) lack experience in serving an older population whose needs may differ from those of younger PLWH.

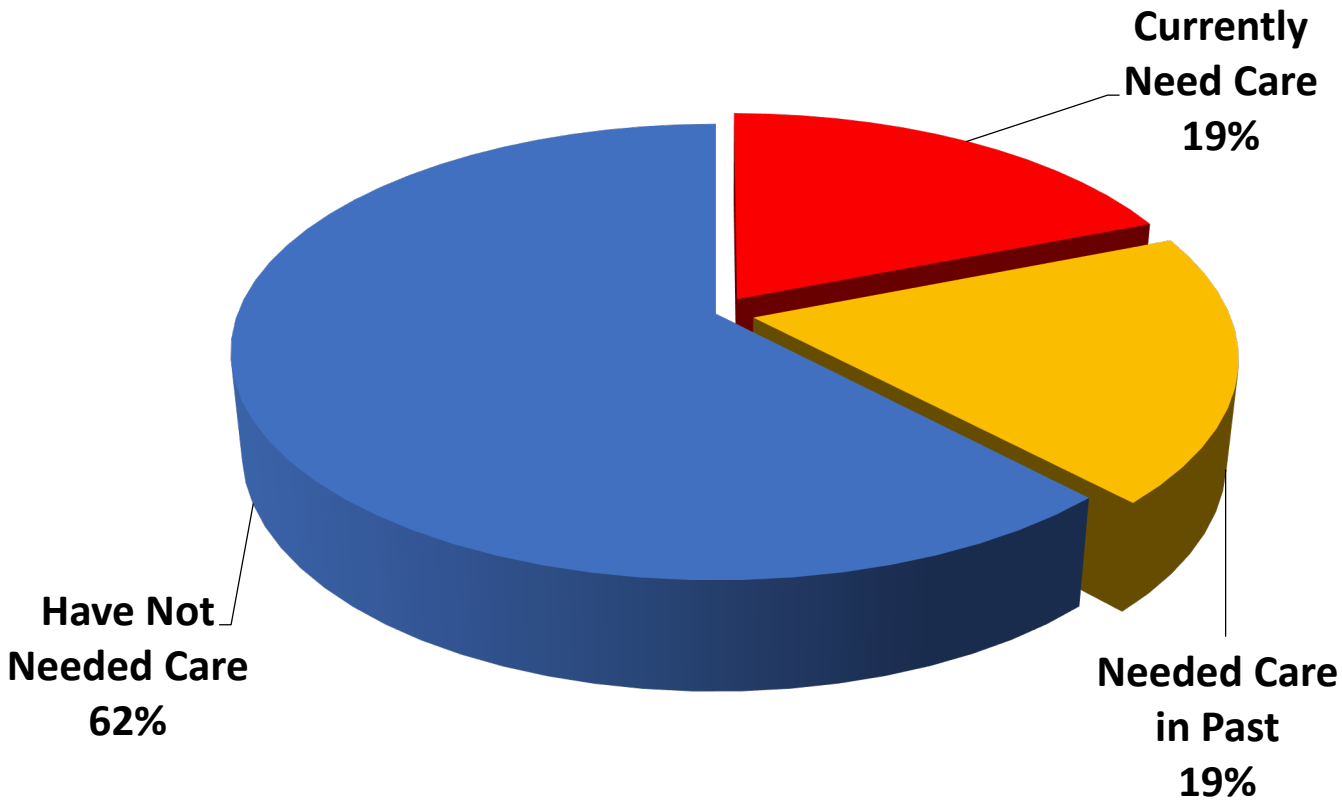
Living Alone: Older PLWH in NYC vs. NYC Adults 65+



Karpiak, S. E., & Brennan, M. (2009). The emerging older population of older adults with HIV and introduction to the ROAH study. In M. Brennan, S. E. Karpiak, A. R., Shippy, & M. H. Cantor, (Eds). *Older Adults with HIV: An in-depth examination of an emerging population, pp.1-12.* New York: Nova Science Publishers.

Need for Caregiving in Older PLWH

- Average Age = 55.5 Years
- Average Number Comorbid Conditions = 3.4
- 46% reported difficulty with at least one Instrumental ADL
- 22% reported difficulty with at least one Personal ADL



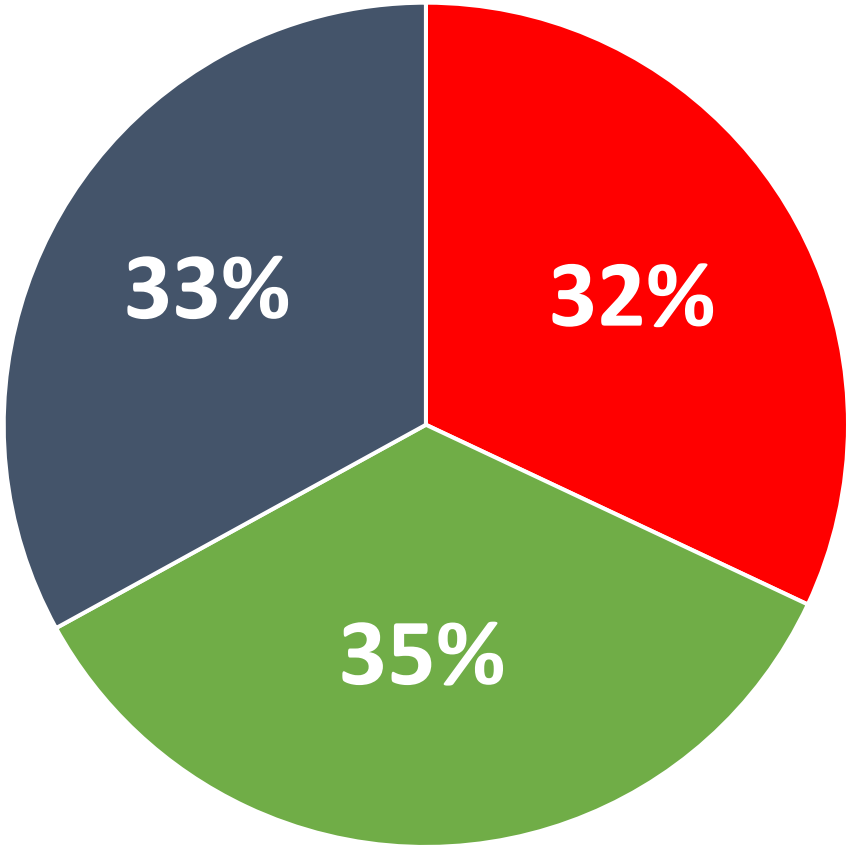
Brennan, M., Karpiak, S. E., London, A. S., & Seidel, L., (2010). *A Needs Assessment of Older GMHC Clients Living with HIV.* http://www.acria.org/files/GMHCFinal.pdf

Social Network Typology of Older PLWH

- To better understand the social networks of older PLWH, we conducted a cluster analysis on a variety of social network and demographic characteristics:
  - face-to-face and telephone contact with social network members
  - living arrangements
  - religious participation
- The final analysis identified three groups that were significantly different (Chi-square tests with Bonferroni adjustment for multiple comparisons)

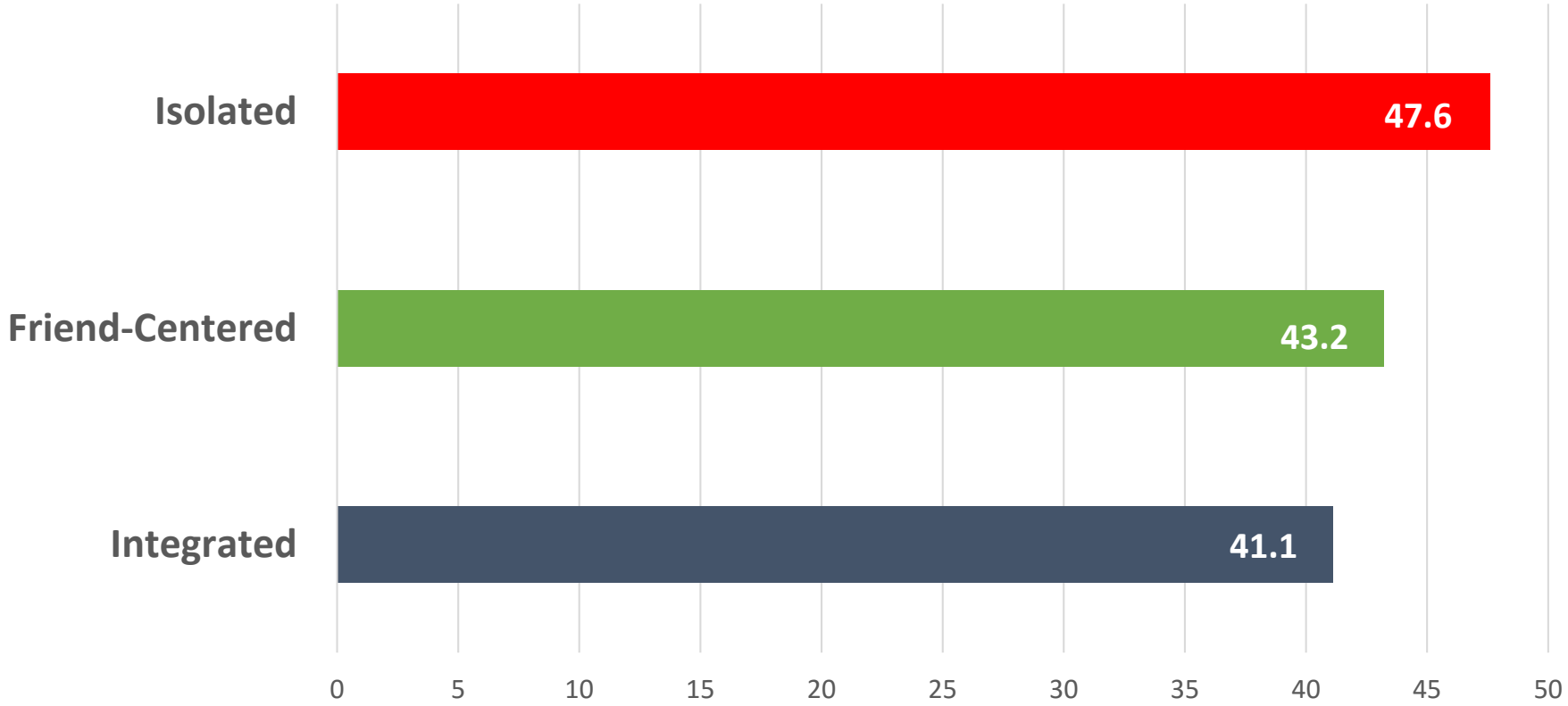
Brennan-Ing, M., Seidel, L., & Karpiak, S. E. (2017). Social networks and social support systems of older adults with HIV. In M. Brennan-Ing and R. F. DeMarco (Eds.), *HIV and Aging. Interdisciplinary Topics in Gerontology* (Vol. 42, pp. 159-172). Basel, Switzerland: Karger.

Social Network Types



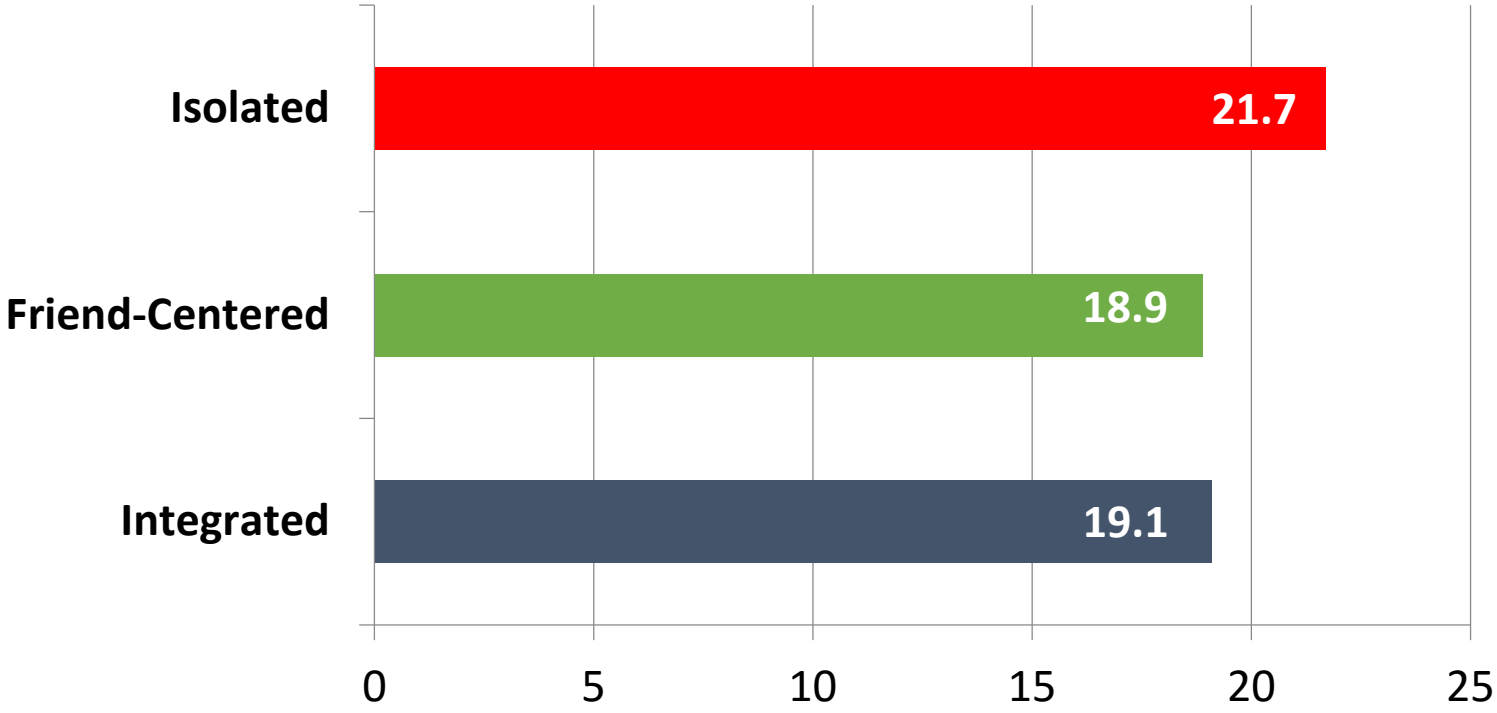
- **Isolated** (32%), the most socially isolated, had intermediate contact with their children, little contact with other family members or friends, and little interaction with religious groups.
- **Friend-Centered** (35%) had contact with friends but not with children, family, or religious groups.
- **Integrated** (33%) had the broadest spectrum of relationships, including children, family, friends, and the highest levels of religious participation.

UCLA Loneliness Scale by Network Type



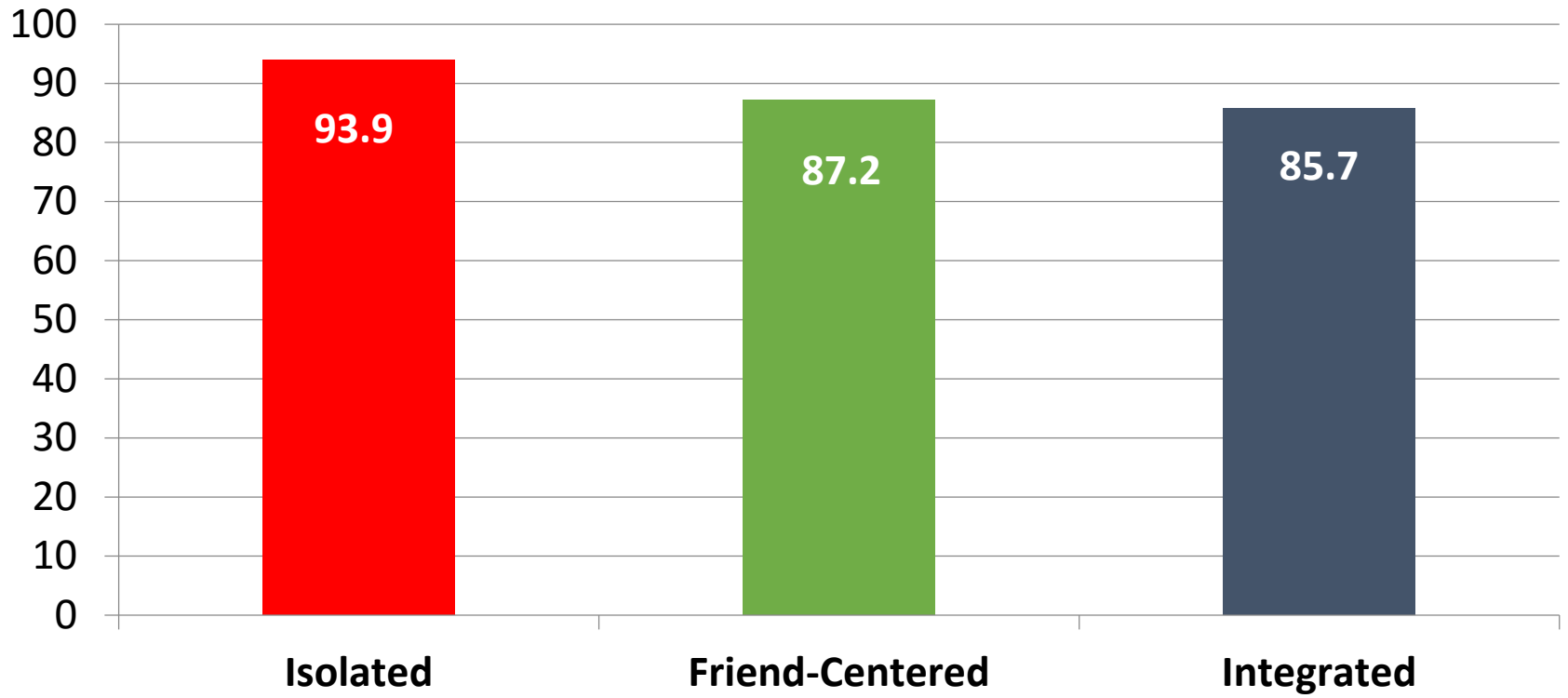
UCLA Loneliness Scale; Russel, 1996

Depression by Network Type



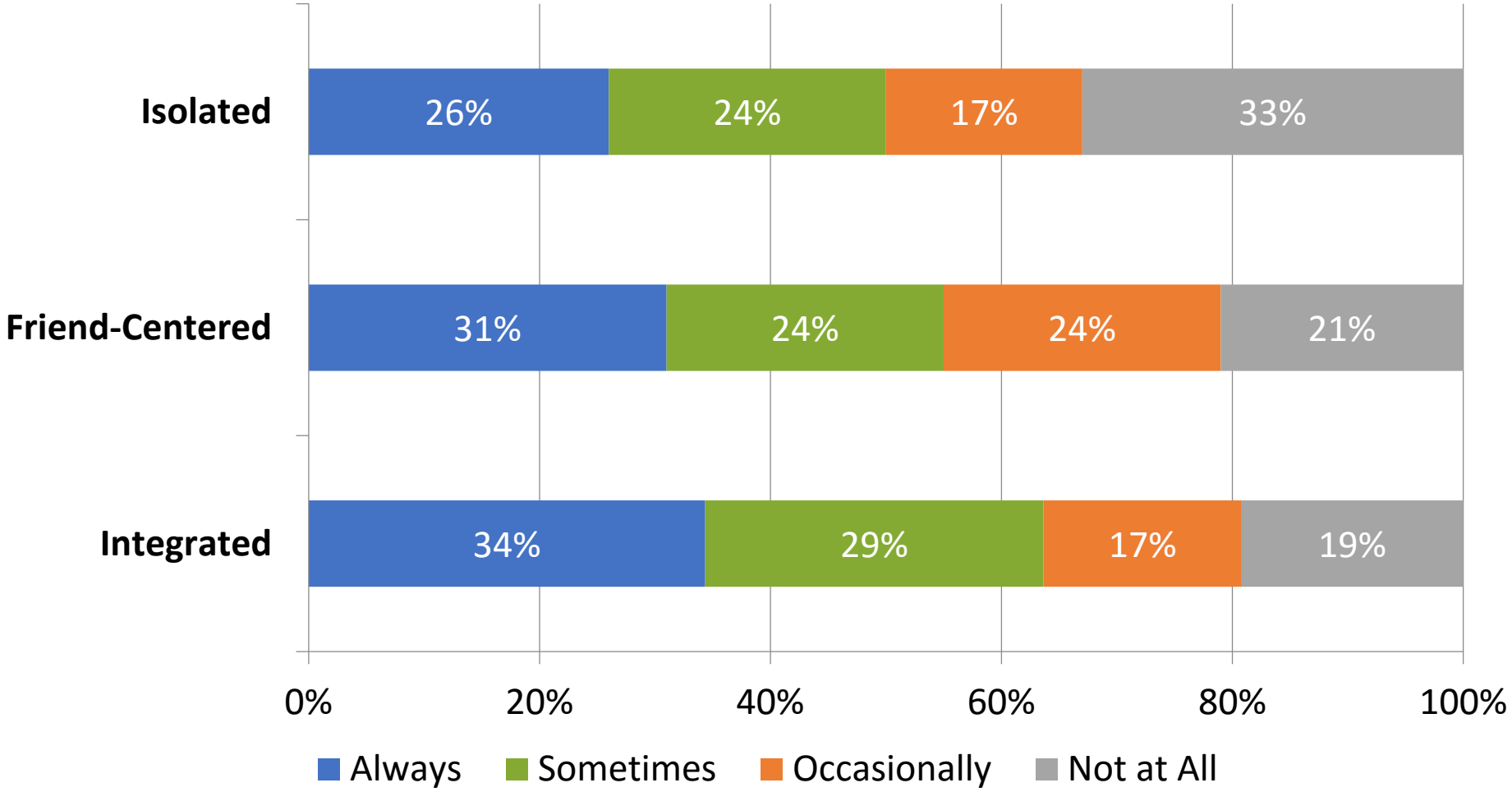
Center for Epidemiological Studies Depression Scale [CES-D]; Radloff, 1977

HIV Stigma by Network Type

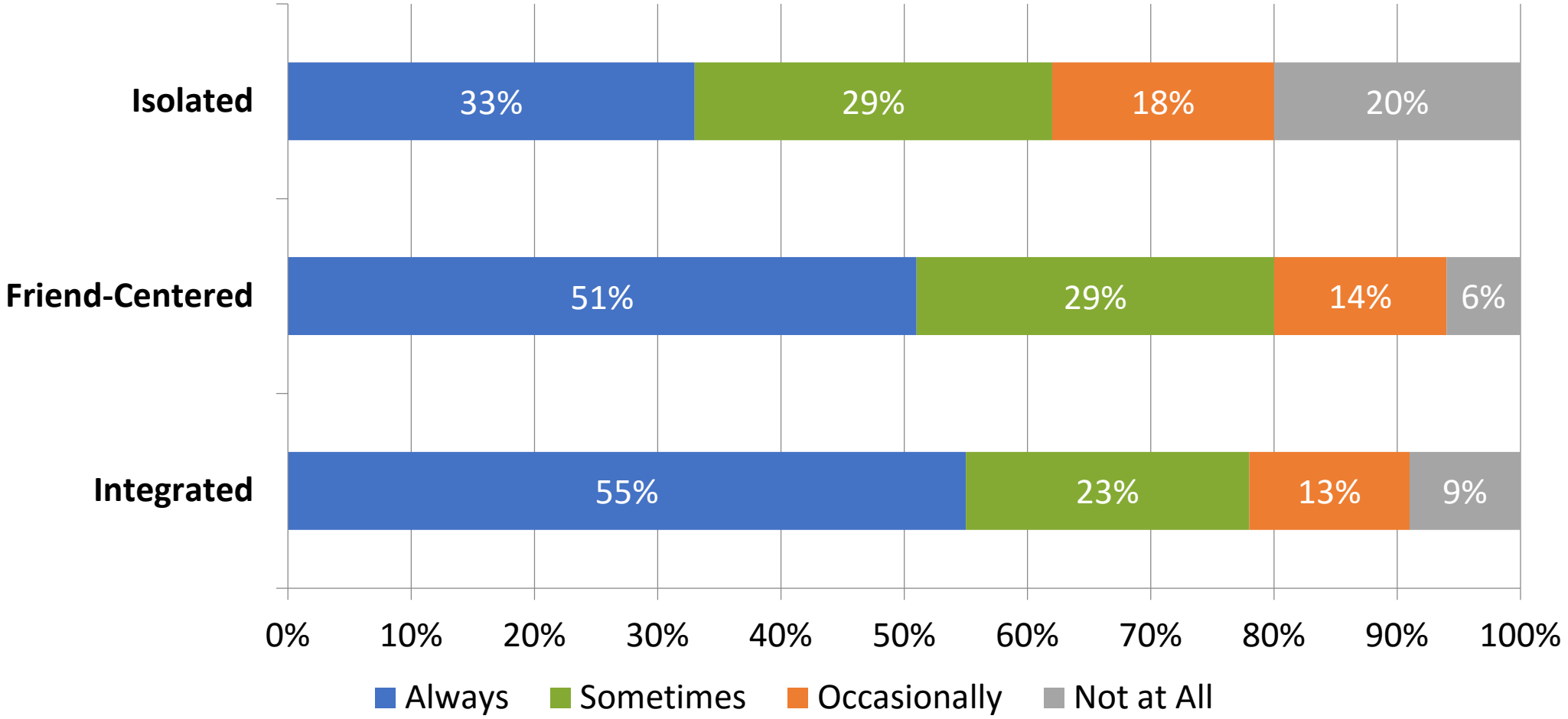


HIV Stigma Scale; Berger, Ferrans, & Lashley, 2001

Instrumental Help Availability



Emotional Support Availability



Support from Family

Type of Support	Isolated %	Friend-Centered %	Integrated %
Shop/Run Errands***	31.9	20.8	51.6
Keep House/Prepare Meals***	27.0	17.3	44.1
Take/Drive Places***	21.8	15.7	44.1
Mail/Correspondence***	24.2	16.6	32.0
Manage Money/Pay Bills***	22.8	13.7	28.8
Give Advice***	35.4	38.0	57.5
Talk When Feeling Down/Low***	48.4	51.1	71.9
Talk About Personal/Family Problem***	42.1	48.2	71.6

* $p < .05$, ** $p < .01$, *** $p < .001$

Support from Friends

Type of Support	Isolated %	Friend-Centered %	Integrated %
Shop/Run Errands***	17.9	30.4	48.7
Keep House/Prepare Meals***	11.6	23.0	25.8
Take/Drive Places***	11.9	23.0	46.4
Mail/Correspondence**	10.2	16.9	19.9
Manage Money/Pay Bills*	10.2	15.3	17.0
Give Advice***	16.5	61.7	59.5
Talk When Feeling Down/Low***	26.3	73.8	75.8
Talk About Personal/Family Problem***	17.9	76.0	74.2

* $p < .05$, ** $p < .01$, *** $p < .001$

Social Support Summary

Those with *Friend-Centered* network types received most of their assistance from friends, but still less than the *Integrated* group who had reported a greater variety of social network members.

However, for those with *Friend-Centered* networks, the amount of assistance received from friends did not compensate for the lack of family support.

The *Isolated* reported significantly lower levels of assistance, lower perceptions of support availability and adequacy, greater stigma and psychological distress, and lower well-being compared to their peers.

Conclusions

While friends dominate many social networks in among older PLWH, a more nuanced interpretation is needed; many have no friends and a substantial proportion receive significant family support.

Older PLWH with *Isolated* network types will likely need to access a high volume of community-based services as they age, as they lack informal support resources.

Thank You!

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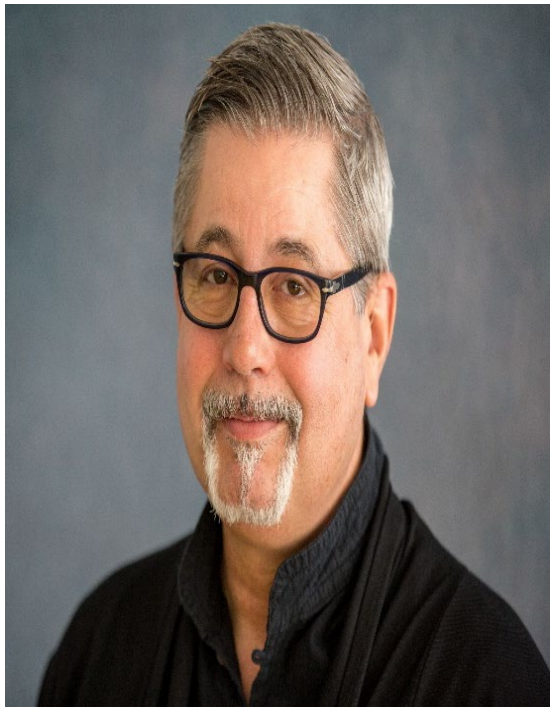

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HRSA Ryan White HIV/AIDS Program

What's Next: HIV and Aging Institute Sessions

Session 201: Integrating Geriatric Services into the RWHAP Clinic

Session 301: Accessing Community Resources for People Aging with HIV

How To Claim CE Credit

If you would like to receive continuing education credit for this activity, please visit:

ryanwhite.cds.pesgce.com

Q&A

Any Questions?

Connect with the Ryan White HIV/AIDS Program

Learn more about our program at our new website:

ryanwhite.hrsa.gov

Sign up for the Ryan White HIV/AIDS Program Listserv:

https://public.govdelivery.com/accounts/USHHSHRSA/signup/29907

Connect with HRSA

Learn more about our agency at:

www.HRSA.gov

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