Geriatric HIV Medicine: Lessons from the Golden Compass Program

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Disclosures

- Royalties from Wolters Kluwer UpToDate Chapter on HIV in older adults

- Grant funding from NIH and recent grant support from Gilead

Overview & Objectives

-Background: Aging of People with HIV, challenges and how geriatrics perspective can help

-Golden Compass Program:

-Development

-Activities and evaluation (& COVID-19 impact)

-Recent policy initiatives & future planning

Case: 74 y/o diagnosed with HIV 1984

- CD4 count 440, viral load UD
- Hypertension, CKD, osteoporosis,

depression, treated anal SCC

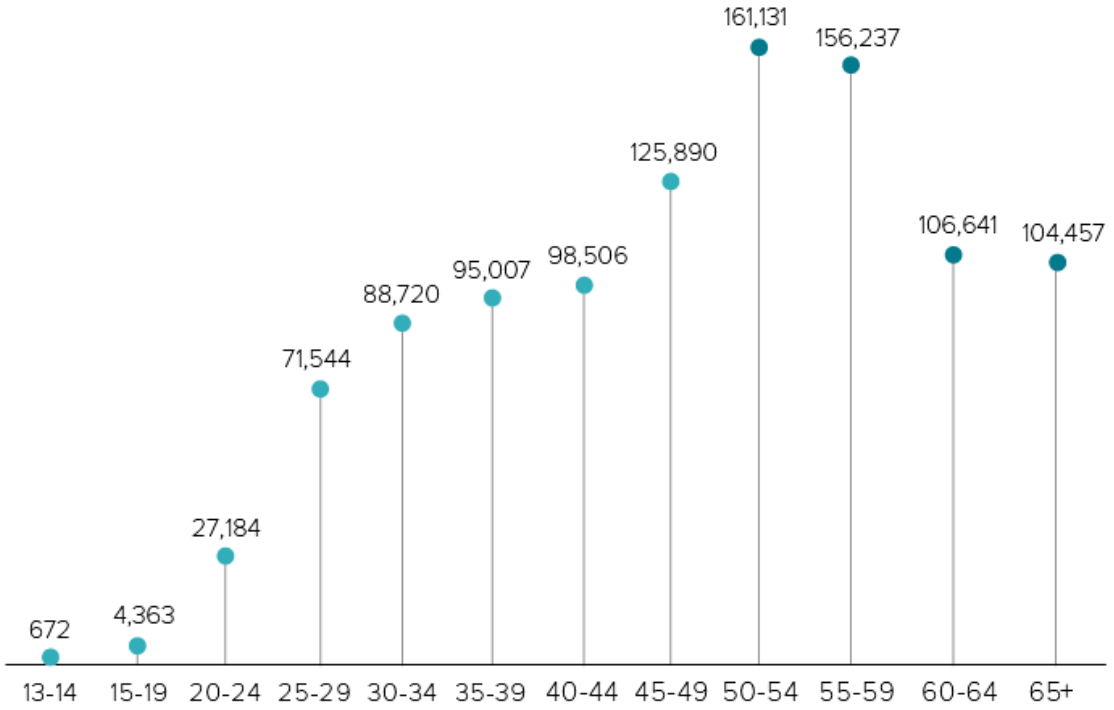
- 9+ medications daily
- Quit his job when diagnosed
- lost many friends in 80s/90s

"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…"

Greene M. *JAMA* 2013

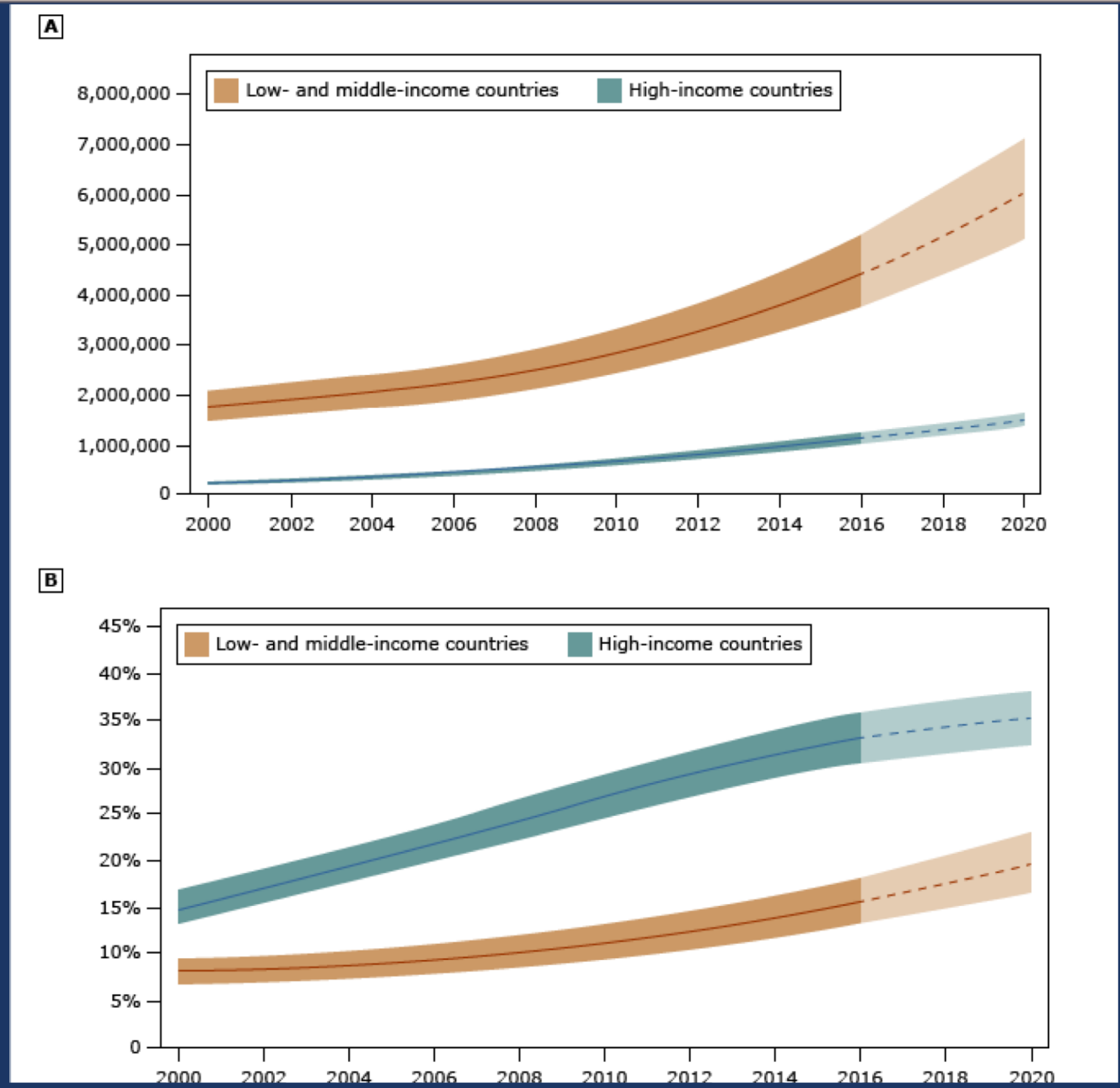
Adults and Adolescents with Diagnosed HIV in the US and Dependent Areas by Age, 2018

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



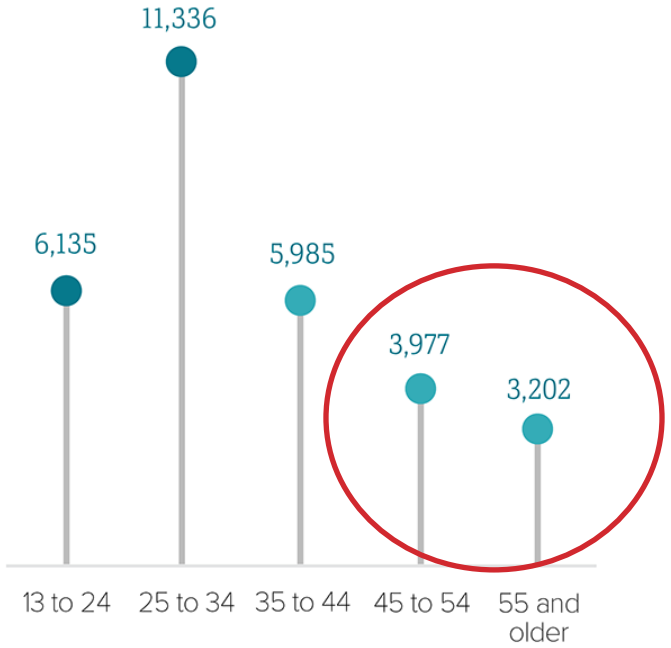
Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2018 (updated). *HIV Surveillance Report* 2020;31.

Globally



New HIV Diagnoses in the US and Dependent Areas by Age, 2020

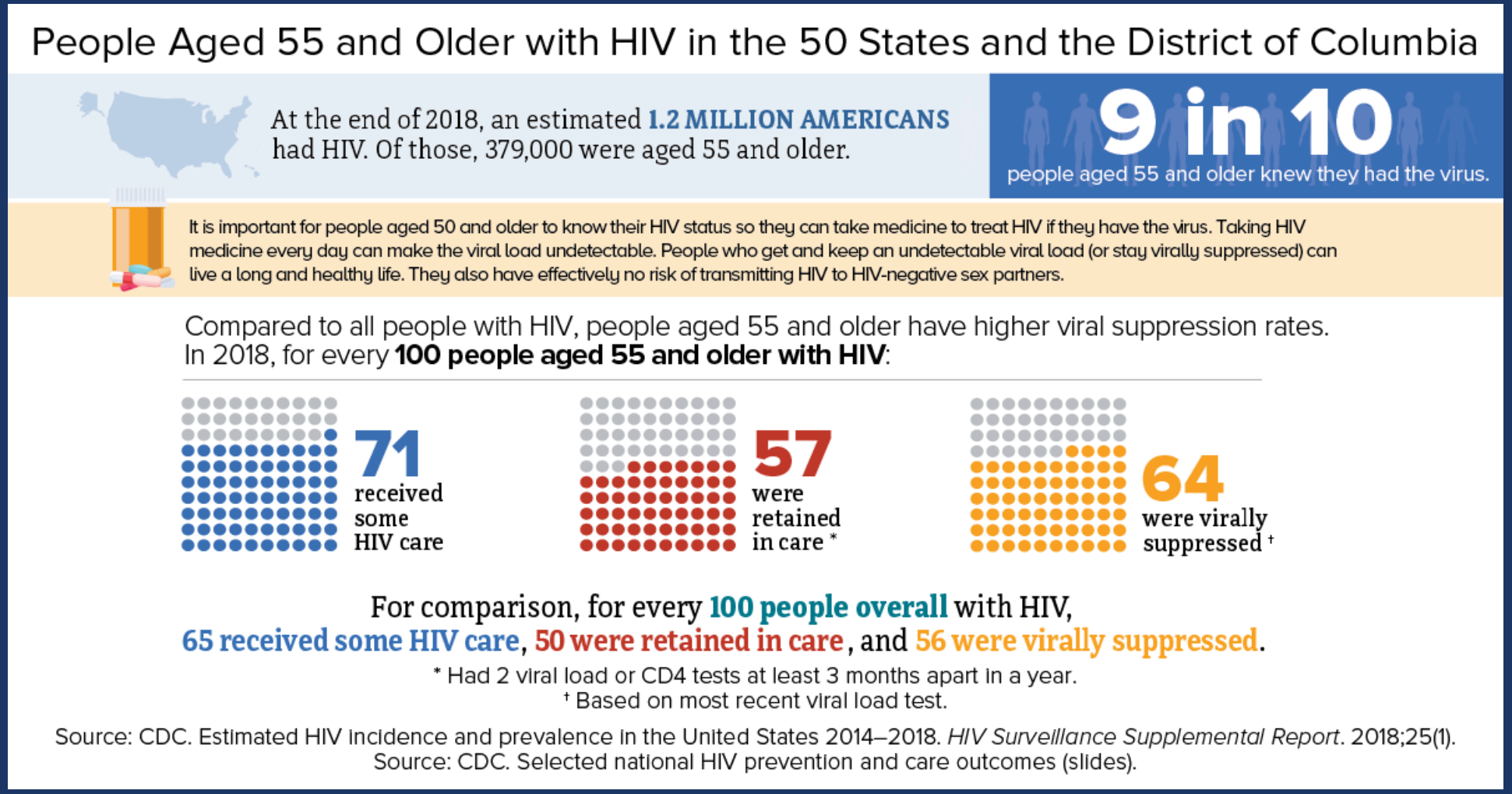
People aged 13 to 34 accounted for more than half (57%) of new HIV diagnoses in 2020.



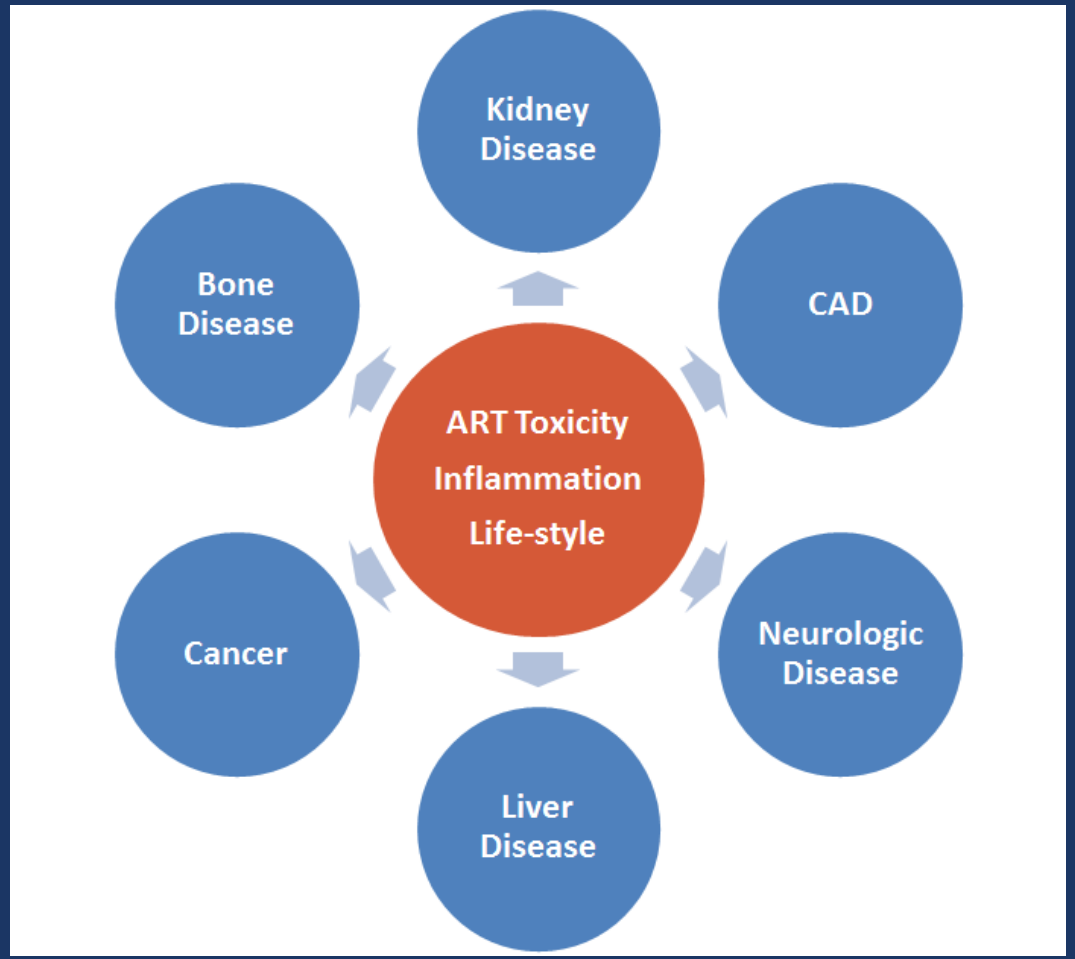
Data for 2020 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, care-related services, and case surveillance activities in state and local jurisdictions.

Source: CDC. Diagnoses of HIV infection in the United States and dependent areas, 2020. *HIV Surveillance Report* 2022;33

Care Cascade Needs to Go Beyond Viral Suppression



HIV = multimorbidity



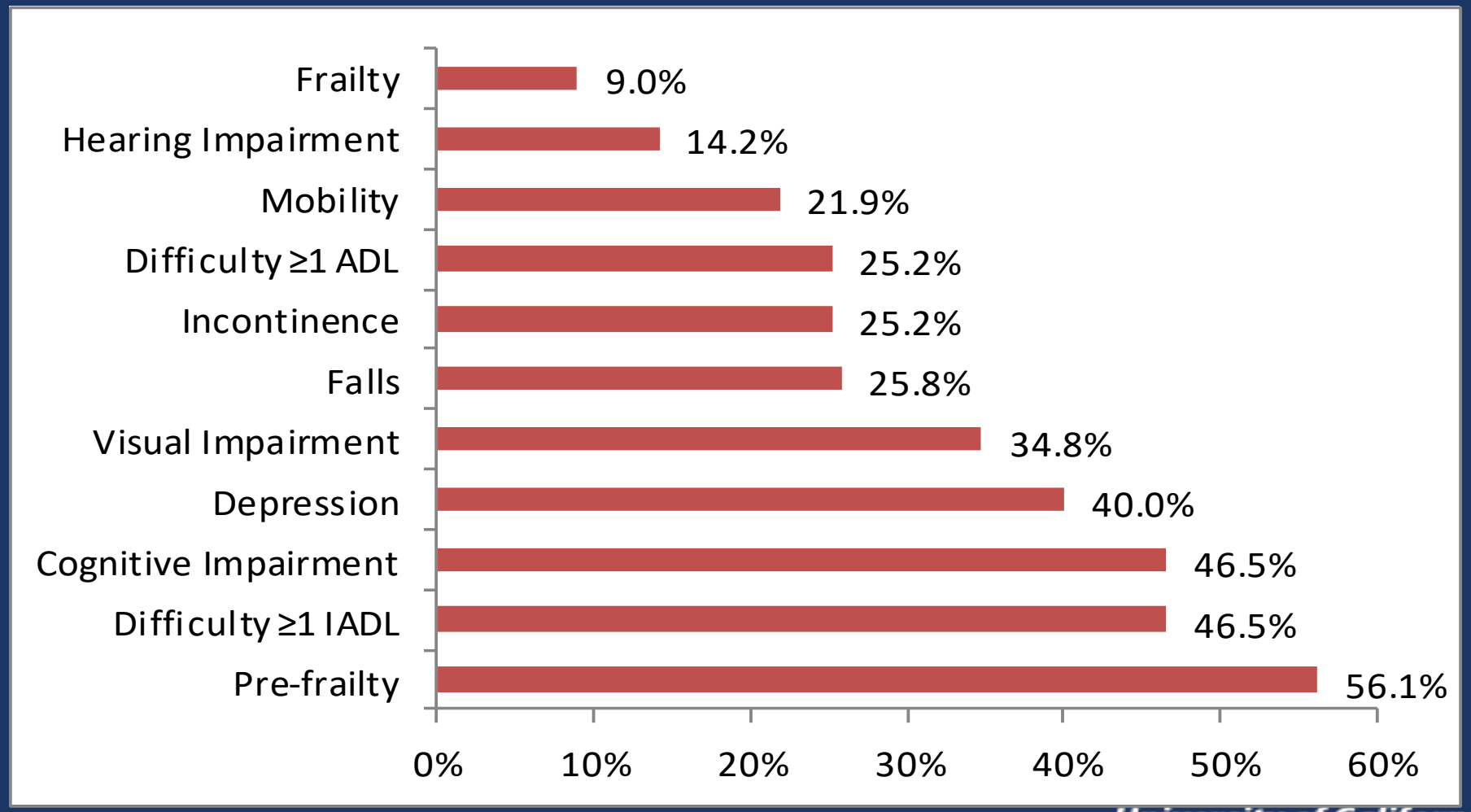
Slide courtesy Steve Deeks

Multimorbidity often leads Polypharmacy

- Polypharmacy higher in PLWH, especially age >50
- May affect adherence to ART & non-ART meds
- Drug-drug interactions with ART
- Associations with falls, symptoms in PLWH

(Halloren, 2019), (Siefried, 2018), (Ware, 2018), (Kim, 2018)

Geriatric Syndromes in Older HIV+ Adults

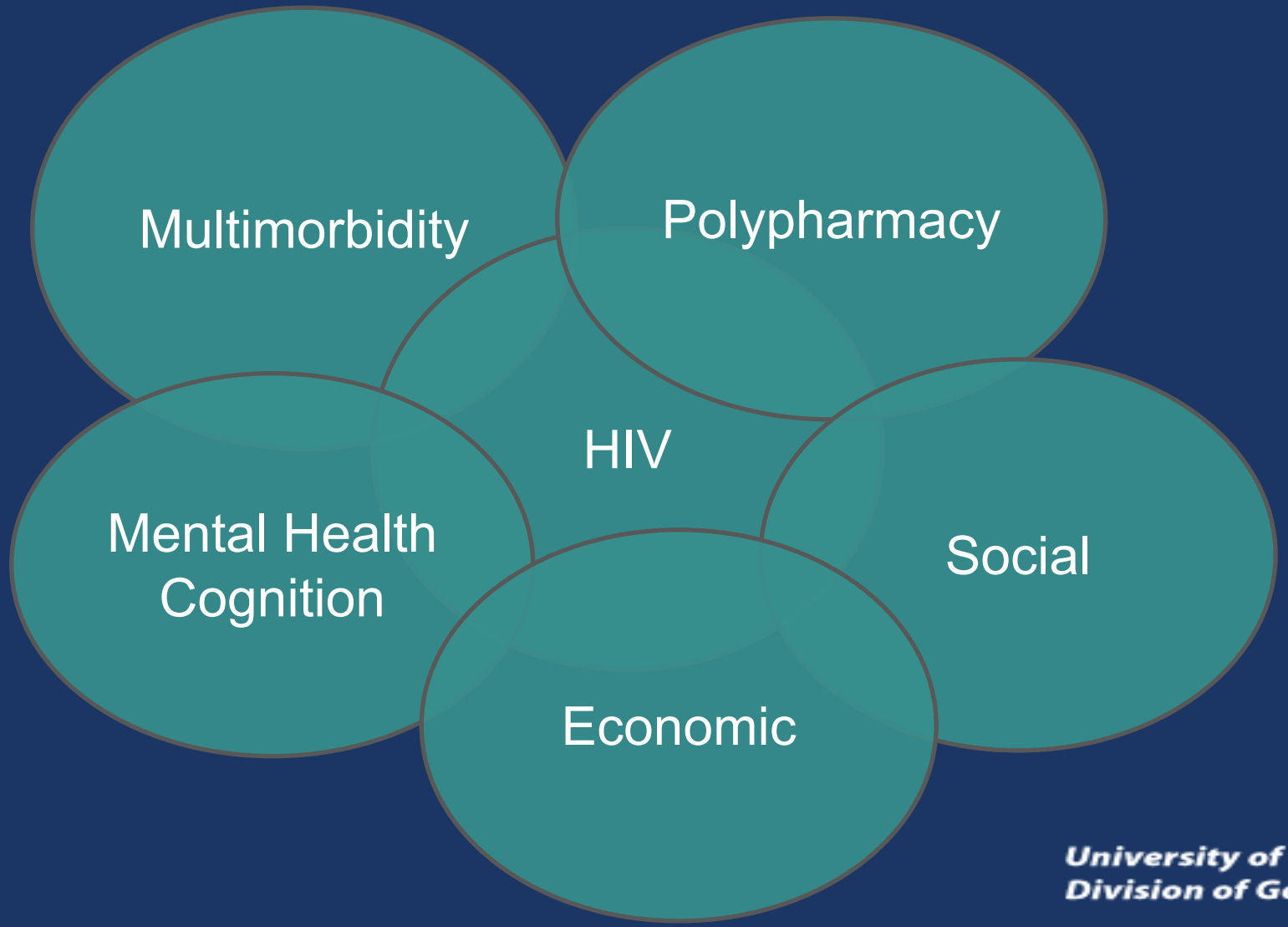


Greene M, *JAIDS*, 2015

Not just Loneliness

- Traumatic Loss and Complicated Grief
- Stigma -- & often multiple stigmas
- Depression & Other Mood Disorders
- History of trauma
- Substance use disorders

Increasing complexity: Geriatrics Approach can Help



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

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Geriatrics Perspective: similarities with HIV care

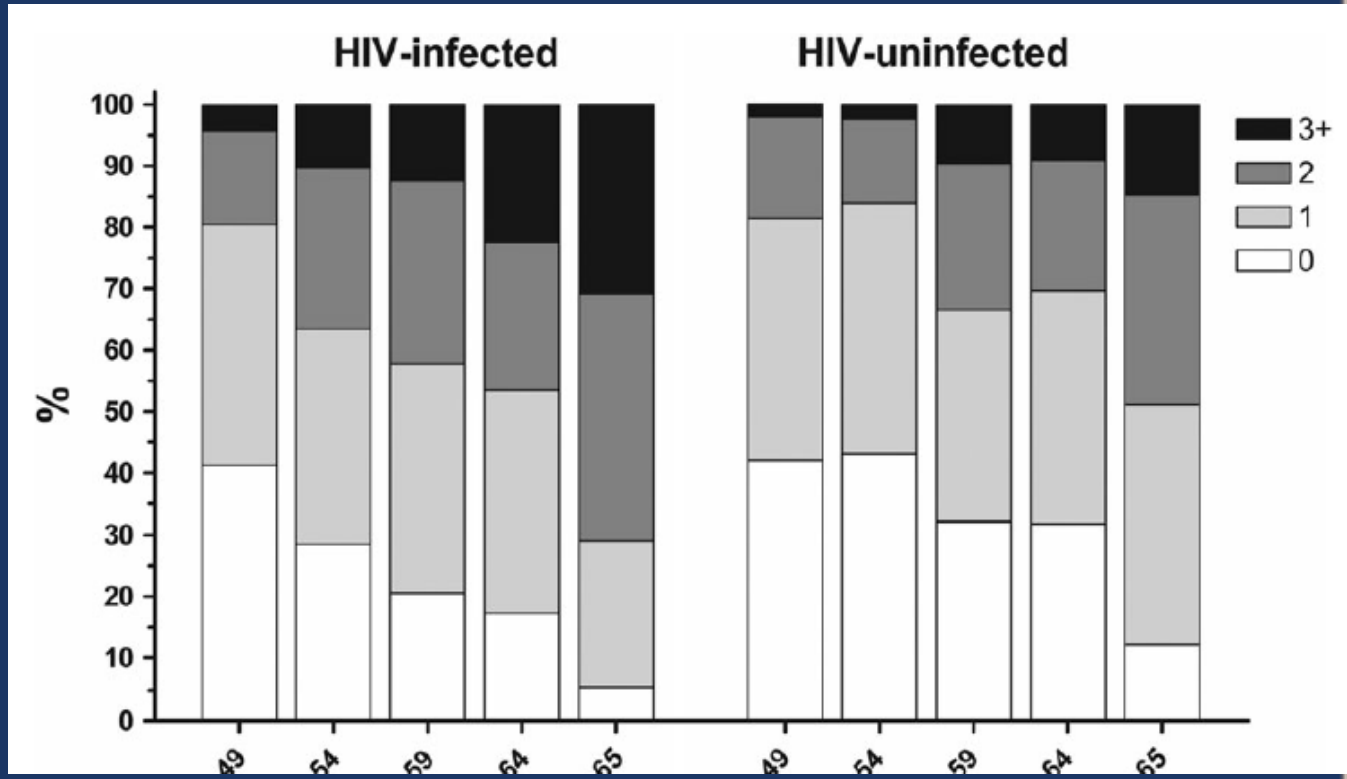
- Dealing with Complexity
- Focusing on social context of care/social determinants of health
- Working in multidisciplinary teams
  - Relevant to RWHAP clinics

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

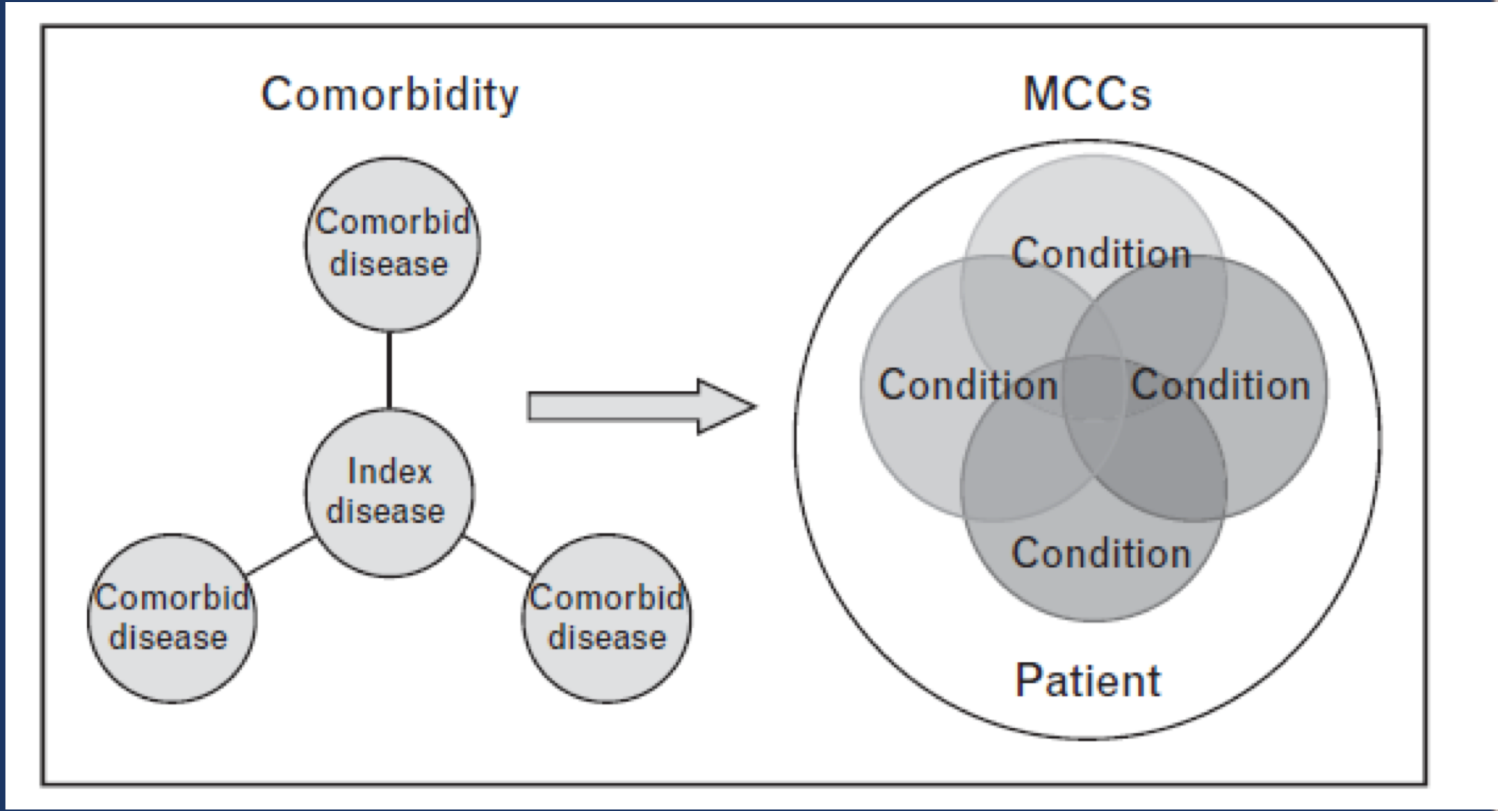
Schouten *CID 2014*

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*

Multimorbidity Requires a Different Approach

5 Domains for a Patient Centered Approach Multimorbidity:

1. Patient Preferences (M: What Matters Most)
2. Interpret the Evidence
3. Consider Prognosis (M: Mobility & Function)
4. Treatment Complexity & Feasibility (M: Medication)
5. Optimizing Therapies and Care Plan (M: Medication)

J Am Geriatr Soc 2012; Boyd *J Am Geriatr Soc* 2019

Alzheimer's Disease vs. HIV Associated Dementia

Alzheimer's

- Cortical : Memory & Language first
- Progressive
- Mild cognitive impairment (MCI), dementia
- Mini-cog, MMSE, MOCA
- Rx: Anticholinesterase Inhibitors

HIV

- Subcortical: Executive & Motor first
- May Fluctuate
- HAND: Asymptomatic (ANI), Mild (MND), HIV Dementia (HAD)
- MOCA +?
- Rx: ARVs, +/- CNS penetration

Rubin *J. Neurovirol* 2019, Miliani *Curr HIV/AIDS* rep 2017, Valcour CROI 2019

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

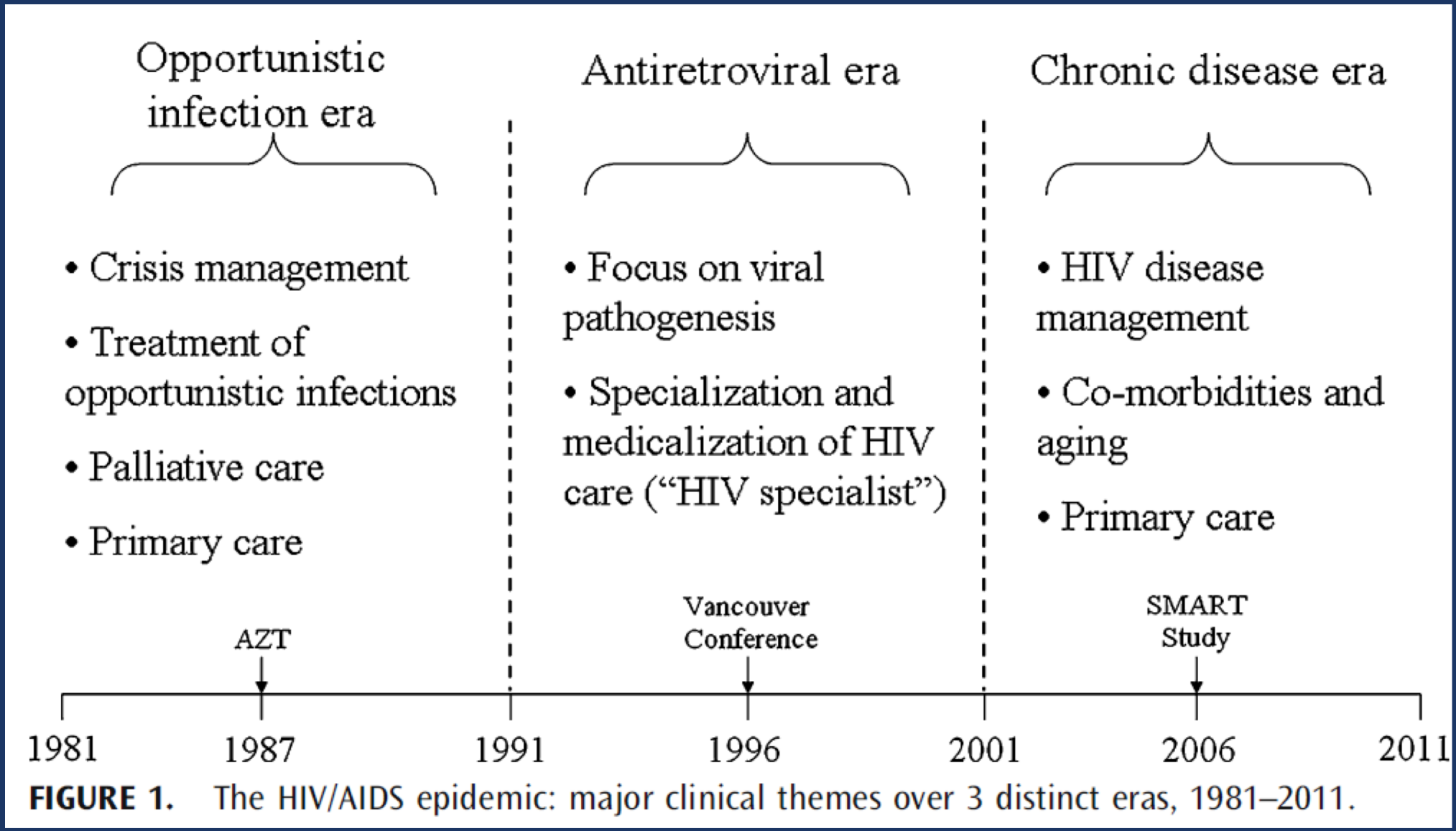


FIGURE 1. The HIV/AIDS epidemic: major clinical themes over 3 distinct eras, 1981–2011.

Chu & Selwyn *J Urban health* 2011

2021- The current era

Geriatric-HIV Medicine Is Born

Giovanni Guaraldi[1] and Kenneth Rockwood[2]

[1]University of Modena and Reggio Emilia, Italy and [2]Dalhousie University, Halifax, Nova Scotia, Canada

Example Geriatric HIV Programs

Location	Clinic/name	Resource	Venue	Comment
Boston (US)	Mass General Hospital/**Aging Positively**	Fitch	Biweekly in ID clinic	Providers may refer anyone over 50 NP sees patients; develops plan with rest of team
Brighton (UK)	Brighton and Sussex U Hosp **Silver Clinic**	Vera	Monthly clinic sessions	Referral criteria: >50, difficulty coping at home, multimorbidity, polypharmacy; HIV MD, geriatrician, HIV Clin NS, Pharm
Denver (US)	University of Colorado	Erlandson	Outside consultation	Geriatrician, pharmacist see complicated patients 1-3 times – refer back to 1^{o} care
London (UK)	Chelsea/ Westminster	Waters	Separate multidisciplinary clinic	Referral criterion: age Consultant, HIV NP, trainee; supported by specialist pharm and dietician
Montreal (CA)	McGill	Falutz	In HIV Clinic	Geriatrician sees referrals as needed as needed; planning pharm, CGA for >60
New York (US)	CSS at WCM/NYPH	Siegler	Geriatrician weekly visit w/in HIV clinic	No fixed referral criteria Geriatrician follows longitudinally Sponsors arts, support groups, inservices
Salem, VA (US)	**SAVI**	Oursler	VA clinic	Assess multimorb, sarcopenia, frailty, cognition; Staff: Pharm, neuroψ, RD, endo
San Francisco (US)	Ward 86/ **Golden Compass**	Greene	Geriatric HIV clinic: pharm, screen, geri consult	Referral >70, falls; “navigation”: heart/ mind; strength/bones; screening/link to dental, vision, etc; SW, CBSS, support groups J Int AIDS Soc. 2018 Oct;21(10):e25188. doi: 10.1002/jia2.25188

Siegler *JIAS* 2018

Strengths and Challenges of Various Models of Geriatric Consultation for Older Adults Living With Human Immunodeficiency Virus

Amelia J. Davis,[1] Meredith Greene,[2] Eugenia Siegler,[3] Kathleen V. Fitch,[4] Sarah A. Schmalzle,[5] Alysa Krain,[6] Jaime H. Vera,[7] Marta Boffito,[8] Julian Falutz,[9] and Kristine M. Erlandson[10]

Model Type	Overall Description	Institution Name	Location
Model 1: Outpatient referral/ consultation	Referral to a geriatrician for recommendations to enhance a patient's care plan; HIV provider remains as primary provider	Positive Aging Consultation, University of Colorado	Aurora, Colorado
Model 2: Combined HIV/geriatric multidisciplinary clinic	A multidisciplinary team is incorporated into existing HIV/infectious disease clinics to provide a comprehensive assessment and evaluation of each patient; primary care providers are provided with full evaluation and recommendations from the multidisciplinary team	The THRIVE Program	Baltimore, Maryland
		Comprehensive HIV and Aging Initiative of the Chronic Viral Illness Service, McGill University Hospital Center	Montreal, Quebec, Canada
		Chelsea and Westminster Hospital [11]	London, United Kingdom
		Silver Clinic [12]	Brighton, United Kingdom
		Golden Compass Program, University of California; San Francisco/Zuckerberg San Francisco General Hospital [14, 16]	San Francisco, California
		Center for Special Studies, New York Presbyterian/Weill Cornell Medical Center [13, 15]	New York City, New York
Model 3: Dually trained providers	An HIV provider with an invested interest in geriatric care performs assessments and provides recommendations	Age Positively Program, Massachusetts General Hospital	Boston, Massachusetts
	Dually boarded provider: a single provider with both geriatric and HIV expertise in 1 clinical home	Penn Community Practice and Penn Geriatrics, University of Pennsylvania Medical Center	Philadelphia, Pennsylvania

Development of a designated HIV & Aging care program in San Francisco

1) Literature review

2) Demonstration/pilot program (Silver Project)

3) Surveys and focus groups with patients and providers --- stakeholder engagement

Context: San Francisco & Ward 86

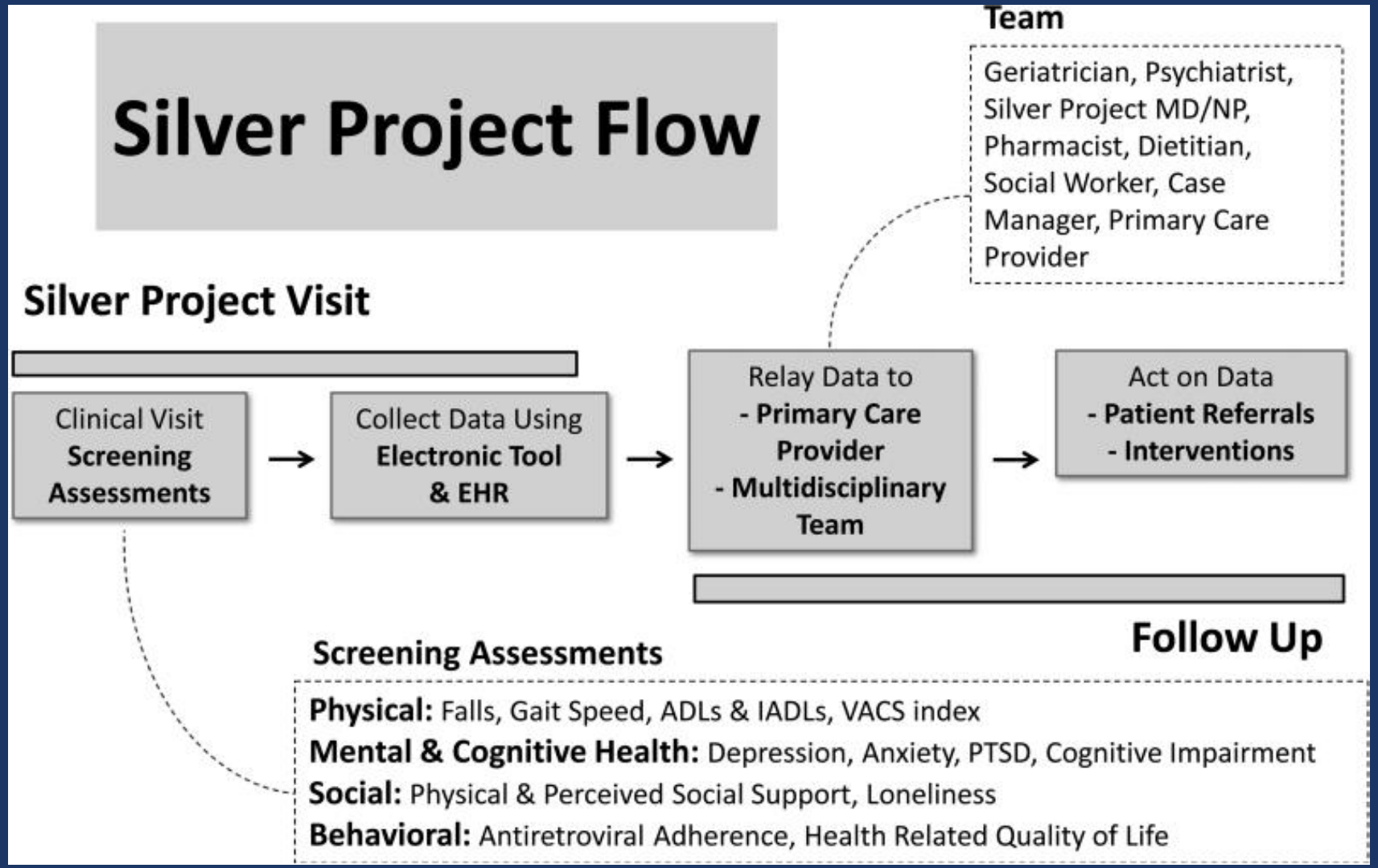
		Age ≥ 50 years
		Number (%)
	Total	11,295
Gender[1]	Cis Men	10,493 (93)
	Cis Women	596 (5)
	Trans Women	204 (2)
Race/Ethnicity	White	7,199 (64)
	Black/African American	1,277 (11)
	Latinx	1,884 (17)
	Asian/Pacific Islander	540 (5)
	Native American	37 (<1)
	Other/Unknown	358 (3)
Transmission Category	MSM	8,463 (75)
	TWSM	98 (1)
	PWID	633 (6)
	MSM-PWID	1,479 (13)
	TWSM-PWID	103 (1)
	Heterosexual	361 (3)
	Other/Unidentified	158 (1)
ge in Years	50-54	2,233 (20)
	55-59	3,017 (27)
	60-64	2,482 (22)
		3,563 (32)

- Part of San Francisco Health Network Clinics (safety net system)
- Ryan White funding recipient
- 2400 publically insured and uninsured PLWH

  >1200 are age 50 or older

Photo: Steve Ringman

Silver Project: 2012-2014



Greene M & John M. *JAIDS* 2016

Patient and Provider Perspectives on Geriatric Assessments

Patients	Providers
• Depression	• Falls
• HIV Med Adherence	• Memory
• Social Support	• Depression
• Falls	• Function
• Memory	• Loneliness
• Function	• HIV Med Adherence

Greene M, PLOS One 2018

Themes from Focus Groups

- Four overarching themes:
  1) Knowledge of HIV and aging topics
  2) Health/aging needs for Older HIV+ adults
  3) Importance of Social Networks
  4) Need for integrated services
     -consultative services

- Program name: theme of navigation healthcare systems; "golden years" acceptable term for aging

Greene M, PLoS One 2018

Golden Compass: Helping PLWH Navigate their Golden Years

NORTHERN POINT:
Heart and Mind
Components: Cardiology clinic on-site, brain health and memory classes, cognitive assessment testing

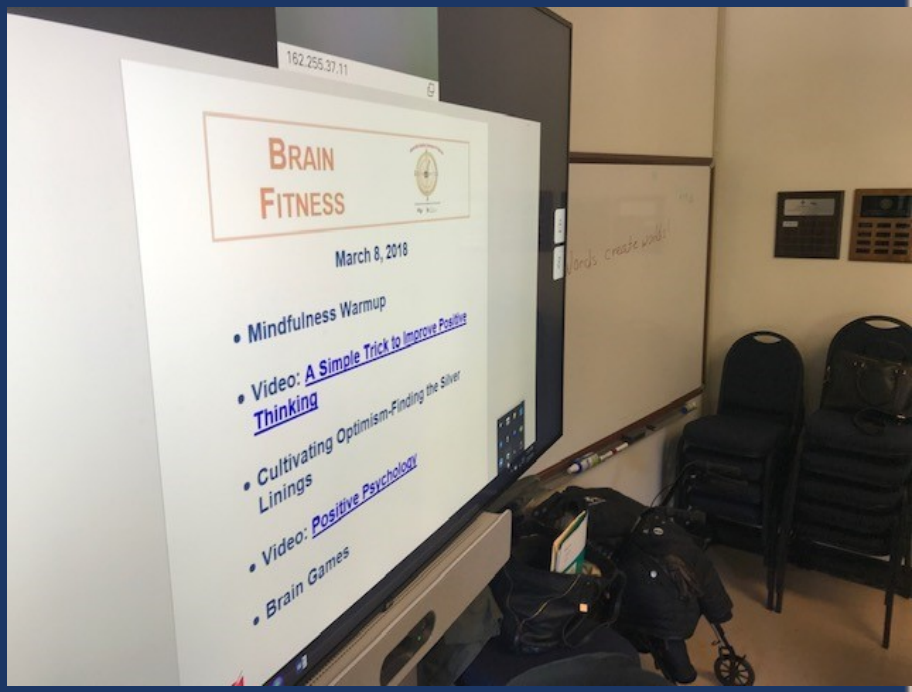
WESTERN POINT:
Dental, Hearing and Vision
Components: Medical assistant navigation to these three services

EASTERN POINT:
Bones and Strength
Components: Frailty and fall assessments, chair exercise classes, DEXA machine on-site (coming)

SOUTHERN POINT:
Network and Navigation
Components: Social support groups, link with community programs, peer navigators and helpers

Greene M, PLOS One 2018

Pre-covid Operations



- **Northern Point (Heart & Mind)**
  - Monthly cardiology clinic by HIV-cardiologist Dr. Hsue
  - Recurrent offerings Brain Health Classes
  - Cognitive screenings and assessments in geriatrics clinic

- **Western Point (Dental, Hearing, & Vision)**
  - Screenings & linkage to services to address sensory impairment

Pre-covid Operations, continued

- **Eastern Point (Bones & Strength)**

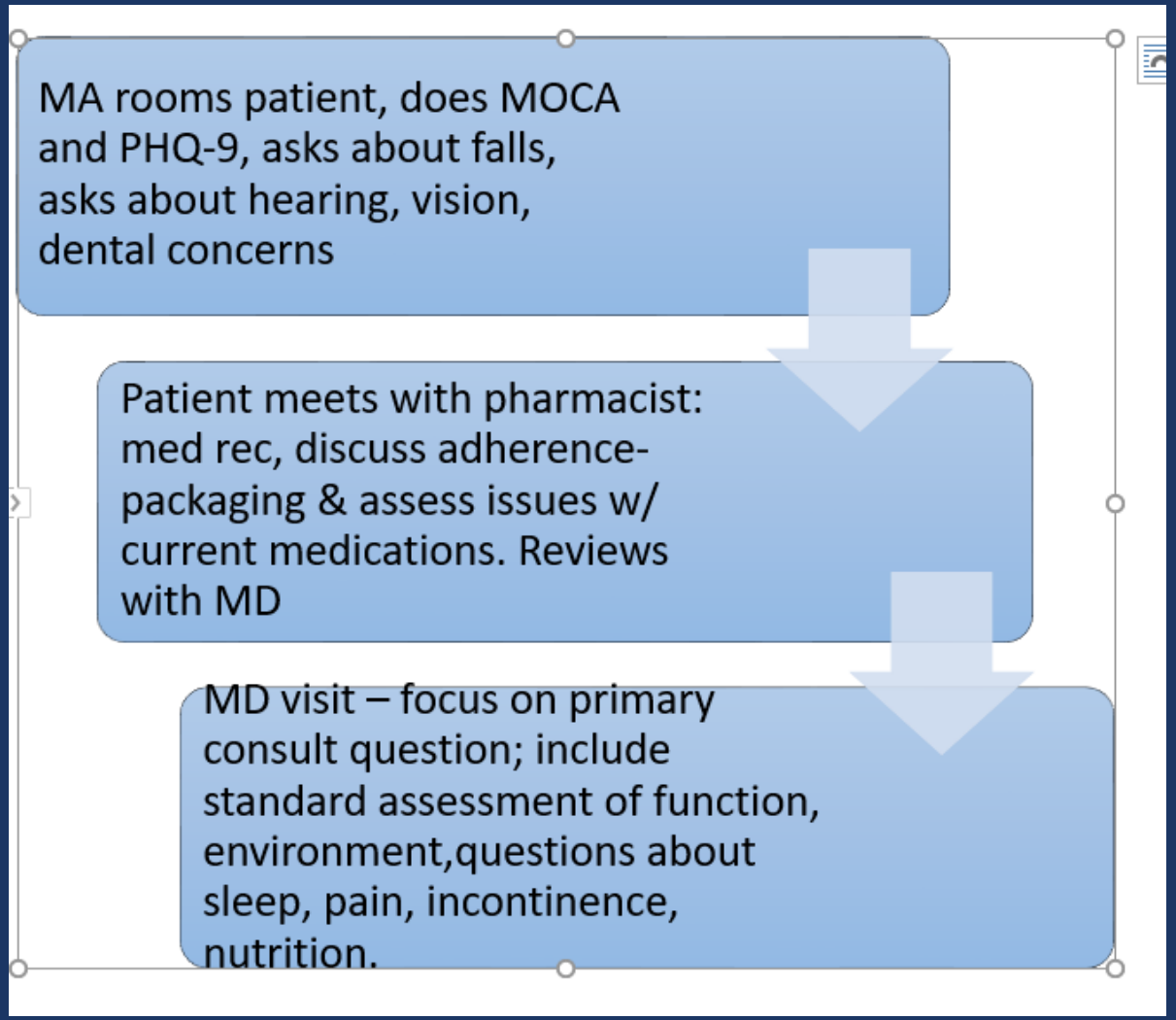
-Assess functional status geriatrics clinic

-Weekly chair based exercise class “Wellness Club”

- **Southern Point (Networking & Navigation)**

- Coordinate with community partners/services
- Networking in classes

Geriatrics Clinic in Golden Compass



Common reasons for referral:

- General evaluation
- Cognition
- Falls

Initial Evaluation of Golden Compass

RE-AIM framework:

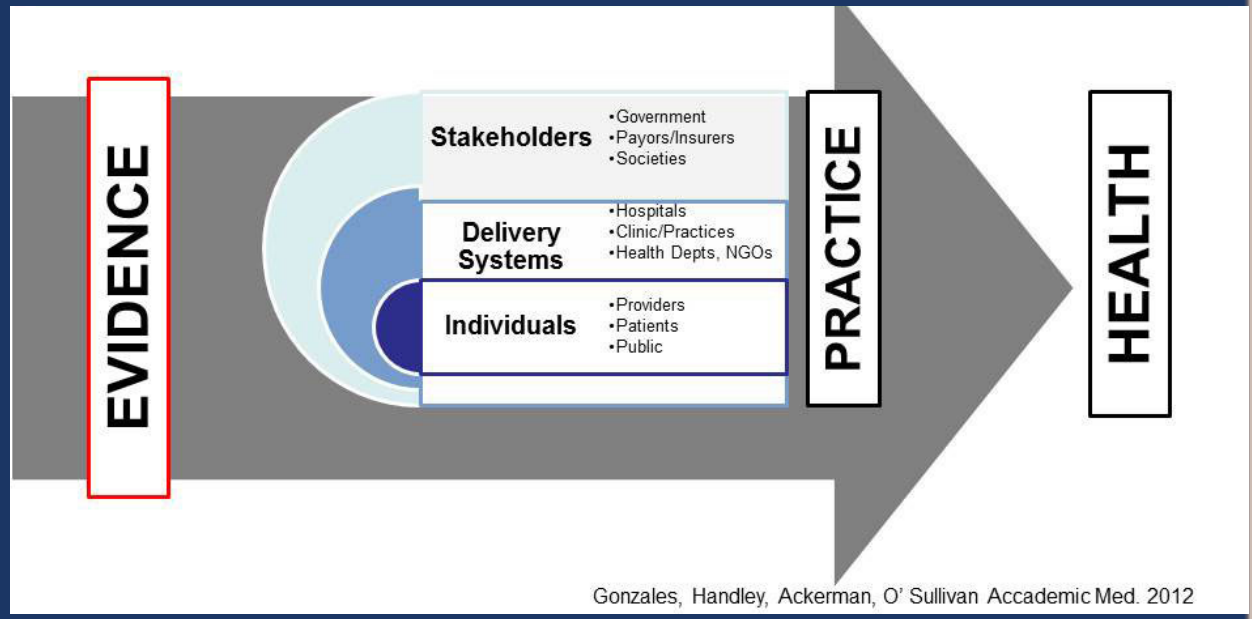
Reach: number/demographics participants

Effectiveness: satisfaction, acceptability

Adoption: referrals by providers

Implementation: fidelity to what proposed

Maintenance



Gonzales, Handley, Ackerman, O' Sullivan Accademic Med. 2012

Greene M, JIAPAC 2020

Initial Evaluation of Golden Compass

January 2017- June 2018; using RE-AIM framework

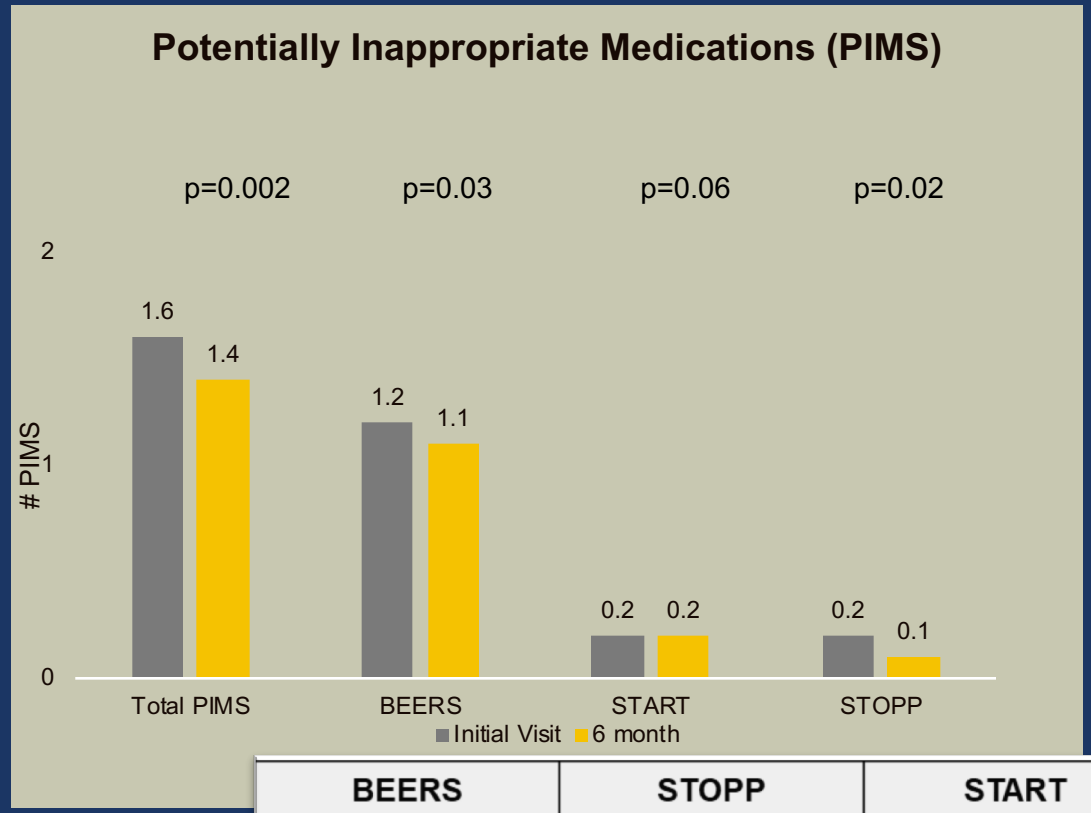
	How Measured	Results
Reach (patient level)	Number & demographics patients who participated	200 adults -Difficulty discussing "aging specialist"
Effectiveness	Satisfaction with services Acceptability of services	>90% patients & providers satisfied -Medications, mobility, cognitive evals important
Adoption (provider level)	Referrals by providers to specialty clinics	85% providers referred ≥1 patient to geriatrics clinic
Implementation	Fidelity to what proposed	-Co-location services important

Greene M, JIAPAC 2020

Reduction in Potentially Inappropriate Medications

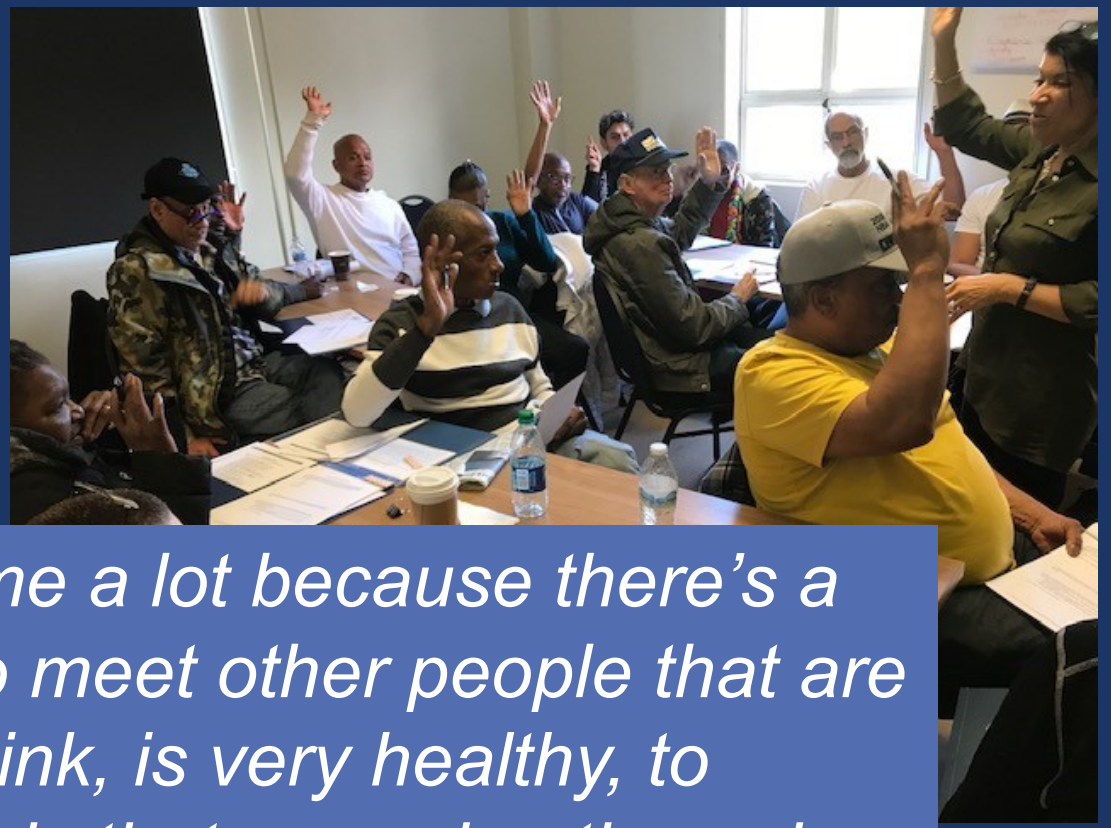
Patient meets with pharmacist: med rec, discuss adherence-packaging & assess issues w/ current medications. Reviews with MD

- Potentially Inappropriate Medications
- Drug-Drug Interactions
- Assess for side effects
- Other Medication Concerns



BEERS	STOPP	START
NSAIDS PPIs Benzodiazepines Opioids with a history of falls or fractures	Duplicate drug class prescription Regular opioids without a concomitant laxative	Lack of laxatives in patients receiving opioids regularly 5-alpha reductase inhibitor with symptomatic prostatism

Southern Point- Fostering New Connections



On classes: *"….helped me a lot because there's a social aspect to it, I get to meet other people that are just like me, and that, I think, is very healthy, to connect to other individuals that are going through the same things that I'm going through."*

Lessons Learned

- Framing still a challenge– addressing ageism & stigmas
- Takes time to develop and implement
- Outcome evaluation –especially for consultative models
- Funding mechanisms (sustainable, long term funding)
- Challenges for the field
  - Should everyone over 50 be seen/who benefits most
  - Role of consultant

One story

- 62 y/o Latino male, long term survivor
  - Geriatrics clinic: dizzy; bp/prostate meds adjusted & dizziness resolved
  - Grieving loss family member; isolated : connected to volunteer who still meets with him weekly
  - Highly engaged in all classes

Reflecting on improvements in both physical and mental health: *"I'm in a good place compared to how I was before I started in the program."*

Looking forward

Expand program reach

- E-consult/chart review
- Expanded screenings done by RNs

Increasing geriatrics knowledge providers & patients

- Partnering with HRSA Bureau of Health Workforce: Geriatric Workforce Enhancement Program (GWEP)

Age-Friendly Health Systems
Committed to Care Excellence for Older Adults

The **Optimizing Aging Collaborative at UCSF** is empowering San Francisco to meet the needs facing older adults.

Then COVID-19 happened

- Telehealth visits
- Classes moved to virtual platform
- Outreach calls to older adults

Highlighted issues of digital divide

– For some telehealth platforms can improve access

Even more important since Covid-19 pandemic

- Increased isolation
- Increase in mental health con
- Decreased physical activity (fear leaving home)
- Difficulty keeping caregivers

Decline in cognitive and physical function, increase in falls

Geriatric Assessment During COVID

- Telehealth is here to stay –hopefully (& as supplement)
- 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

Digital Divide Among Older Adults at Ward 86

Phone surveys 65+

(147 called, 80 answered) *almost 30 no working phone number

- 1/3 did not have internet access (a few had but did not know how to access)
- 1/3 did not have an email address or know how to use email
- 50% had a device (smartphone etc.) but 13% did not know how to use device

Focus groups

-Among those who could access zoom via phone or video

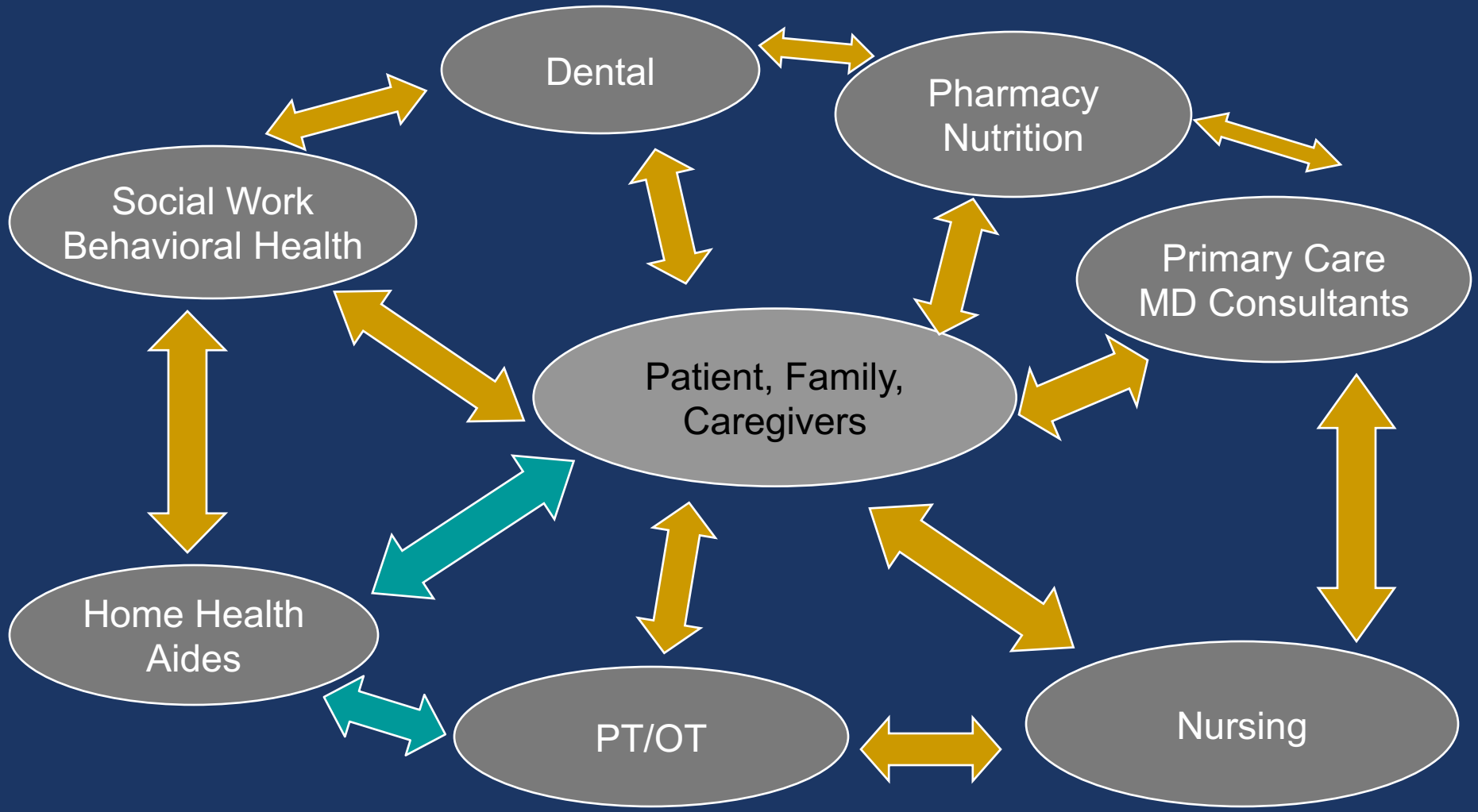
-In person preferred over zoom but zoom did help address isolation and loneliness

-video /telehealth option improved access for those with limited mobility and transportation difficulties

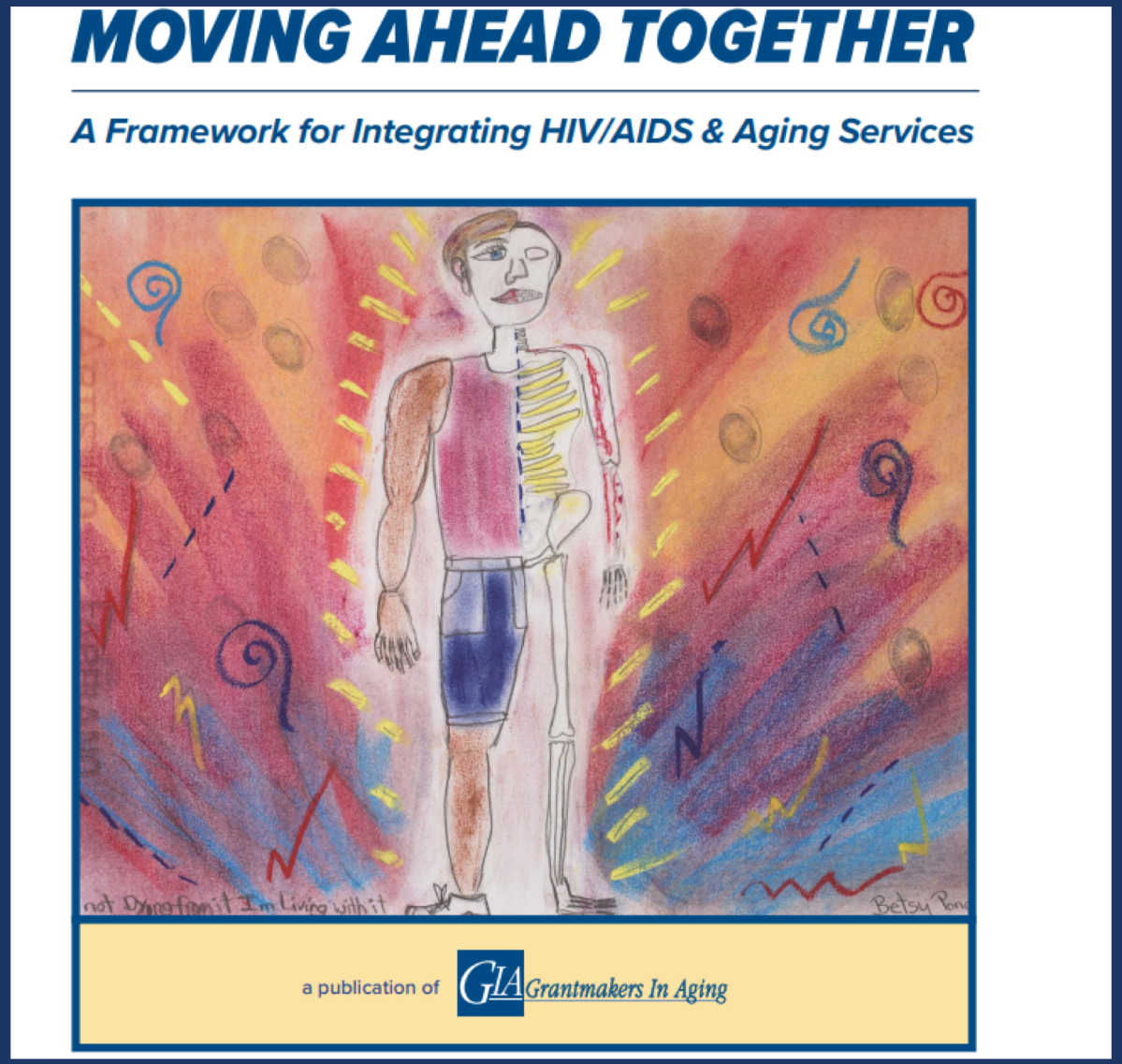
What if you don't have a geriatrician in clinic?

- What are your local resources?
  -Telehealth options with geriatrics?
- 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

It Takes a Village….



It also takes policy….



Ryan White TargetHIV:
https://targethiv.org/library/topics/aging

SPNS Aging with HIV

https://targethiv.org/aging-initiative

Quality of Life in National HIV/AIDS Strategy

- Multi-dimensional:
  - Self rated health
  - Mental health
  - Nutrition/Food insecurity
  - Employment
  - Housing

State Initiatives

California

- 2021: SB 258 passed includes older people with HIV “greatest social need”
- $5 million for 5 demonstration projects across the state

New York

- 2022: NYSDOH $4 million People Aging with HIV Pilot– up to 10 entities
- LTS pilot screening tool project

https://www.sfaf.org/collections/beta/california-activists-celebrate-historic-victories-for-older-people-living-with-hiv/

Good Planning Requires Addressing All of these Factors ***Before*** Incapacity (Medical-Legal Approach)

Establish fiduciary, plan for cost of LTC, appeal unlawful benefits denial or reduction

Pre-eviction, foreclosure, home modifications, habitability

ADA accommodations, anti-discrimination, leave protection

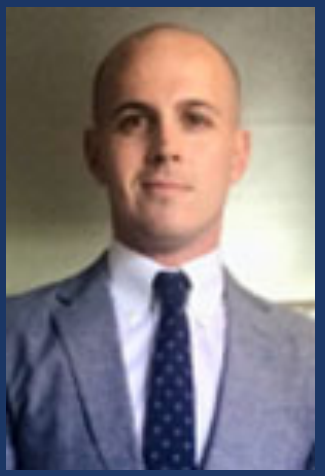
Incapacity, LGBT estate planning, veteran or immigrant benefits advocacy

ACP, fiduciaries, guardianship, caregiver stress; elder abuse/DV

I-HELP: National Center for Medical-Legal Partnership

Policy planning: Medicare & Long-Term Care

- More costs care shifting to Medicare
  - ART remains protected class
- Older adults with HIV may rely more on formal long term care supports
  - Less known about quality of HIV care in LTC settings
  - Limited knowledge by staff, care providers HIV



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BAY AREA // HEALTH

Long term HIV survivors find familial support in unique S.F. group home

Jeremiah O. Rhodes

Feb. 21, 2023

From left, residents Brian Bourassa, Paul Aguilar and Michael Rouppet during a monthly members meeting at Marty's Place on Feb. 16, 2023.

Stephen Lam/The Chronicle

San Francisco

LOCAL

They survived one plague. Now HIV/AIDS survivors face down the coronavirus

Ryan Kost

April 10, 2020 | Updated: April 11, 2020 12:35 a.m.

The San Francisco Principles

The Glasgow Manifesto

International Coalition of Older People with HIV (iCOPe HIV)

Working Together to Address Challenges

Summary

- Older PWH are experiencing increasing complexity including multimorbidity, polypharmacy & geriatric conditions
  - ➢ This requires a shift in focus to geriatrics principles or the 5Ms (Mind, Mobility, Medications, Matters Most, Multicomplexity)

- Several emerging geriatric HIV are developed– many include consultation with geriatrician
  - – In depth look at implementation & initial evaluation of our program in SF

- COVID-19 has impacted delivery of care (which can create opportunities) and further highlighted need for policy approaches

Additional Resources

- AETC resources
- Geriatric Workforce Enhancement Program (GWEP)
- HIV-age.org

Acknowledgments

Patients, providers & staff at Ward 86

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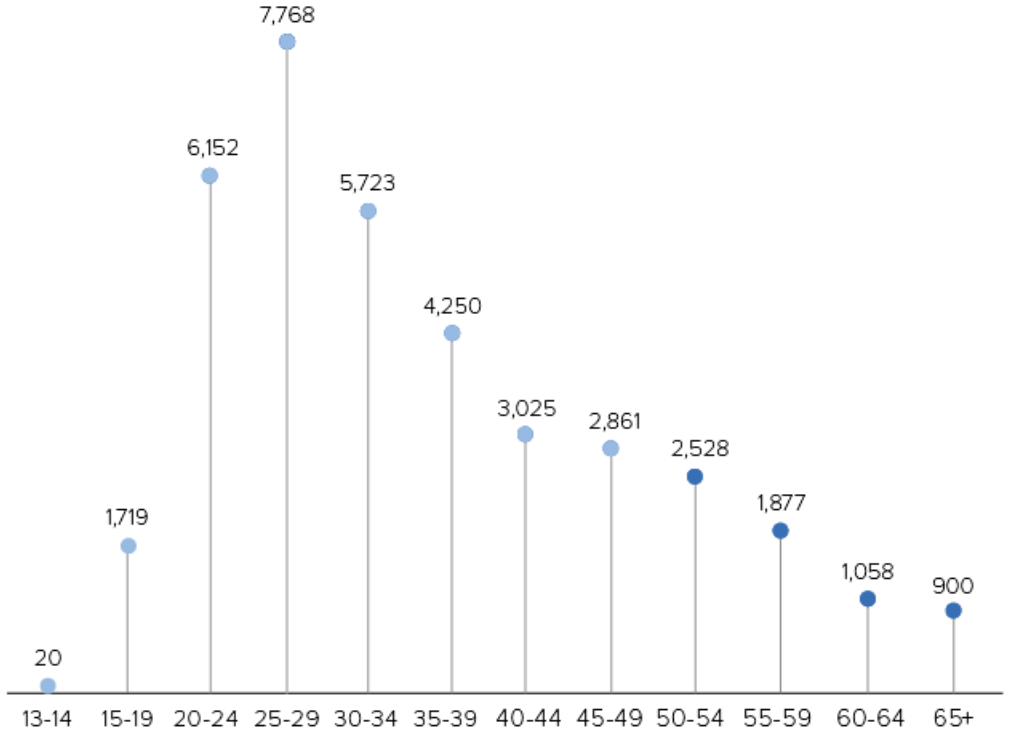
Thank you!

Questions?

New HIV Diagnoses Among Adults and Adolescents in the US and Dependent Areas by Age, 2018

1 in 6 new HIV diagnoses were among people aged 50 and older.



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

Medical-Legal Advance Care Planning

Medical Planning:

Goals of Care (living will, advance directive, POLST)

Appoint Healthcare Agent (advance directive or durable POAH)

Financial/Legal Planning:

Appoint Fiduciaries (durable POAF, rep payee, VA fiduciary, trustee)

Plan to pay for long term care supports & services

Living Trust or Will

Income/benefit advocacy (e.g. Medi-Cal, pensions)

Housing (accommodations, habitability, reverse mortgages)

Employment (caregiving agreements, job protection)

Legal Status (immigration, LGBT, veteran)

Personal stability (elder abuse, conservatorship)