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AGING TASK FORCE Virtual Meeting

Tuesday, April 6, 2021

01:00PM -03:00PM (PST)

*Meeting Agenda + Packet will be available on our website at: http://hiv.lacounty.gov/Meetings

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PUBLIC COMMENTS

Public Comments will open at the time referenced on the meeting agenda. For those who wish to provide <u>live</u> public comment, you may do so by joining the WebEx meeting through your computer or smartphone and typing PUBLIC COMMENT in the Chat box. For those calling into the meeting via telephone, you will not be able to provide live public comment. However, you may provide written public comments or materials by email to hivcomm@lachiv.org. Please include the agenda item and meeting date in your correspondence. All correspondence and materials received shall become part of the official record.



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AGING TASK FORCE VIRTUAL MEETING AGENDA

Tuesday, April 6, 2021 | 1:00pm-3:00pm

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1) Welcome, Introductions, March Meeting Recap 1:00pm-1:10pm

2) Executive Director Report 1:10pm-1:30pm

• Commission Updates

3) 2021 Work Plan/Priorities 1:30pm-1:55pm

4) Discussion: 1:55pm-2:45pm

DHSP feedback / analysis

- ATF recommendations
- CPT codes
- Dr. Tony Mills | Comprehensive care for PLWH age 50 and older
- Master Plan on Aging | Revisit
- Review HEDIS measures used by LA CARE Health Plan | Caring for older adults
- Review CPT codes for health screenings/risk assessments for older adults and discuss how they may be integrated in Ryan White services

5) Next Steps/Agenda development for next meeting 2:45pm-2:50pm

6) Announcements 2:50pm-3:00pm

7) Adjournment 3:00pm



AGING TASK FORCE March 2, 2021 Virtual Meeting Summary

In attendance:

Al Ballesteros (Co-Chair)	Alasdair Burton	Derek Murray
Jeff Bailey	Jose Ortiz	Joseph Green
Kevin Donnelly	Katja Nelson	Laurie Arnoff
Lee Kochems	Mark McGrath	Mercedes Perezchica
Paul Nash	Thomas Green	Yelba Carrillo
	Cheryl Barrit (COH Staff)	Sonja Wright (COH Staff)

1. Welcome & Introductions

• Al Ballesteros, Co-Chair and Cheryl Barrit, Executive Director, welcomed attendees and led introductions.

2. February Meeting Recap

- The Aging Task Force (ATF) is waiting for the Division of HIV and STD Programs (DHSP) feedback on recommendations submitted by the group. Wendy Garland has put in a data request and is hoping the ATF accepts some of the suggestions she made at the February meeting related to looking at how we would do a better job at serving individuals 50 and over who are also living with HIV. More specifically, (1) the ATF should be considering the big picture and thinking through a continuum for the aging population (ex: what would the goal of keeping people healthy and with a high quality of life as long as possible consist of) and (2) looking at the quality of care for older Ryan White patients by putting together a list of CPT codes.
- Co-Chair Al Ballesteros is to connect with his colleagues at LA Care for CPT codes of Healthcare Effectiveness Data and Information Sets (HEDIS) measures. He is aiming to get data that is feasible (i.e., primary ones versus sub-sets) as there are so many.

3. Executive Director's Report

- Cheryl Barrit provided updates on Commission activities as follows:
 - Ms. Barrit requested that individuals carve out time to complete the HealthHIV survey as only half of the commissioners have completed it and 100% participation is needed for the assessment outcomes to be relevant and truly reflective of the Commission on HIV's (COH) effectiveness as a planning body.
 - O Ms. Barrit reminded everyone that time would be dedicated for the Human Relations Commission(HR Commission) to integrate 30-minute skills building workshops on productive conversations and conflict resolution skills at all full body meetings. At the March 11th COH meeting, Co-Chairs Bridget Gordon and David Lee will introduce and read from the book So You Wanna Talk About Race? and follow up with subsequent readings at each full body meeting.

- Standards and Best Practices (SBP) will incorporate opportunities for the ATF to put forward suggestions as they develop the updated standards on Home-Based Case Management, Benefits Specialty, and Substance Use and Residential Treatments. These are services important to the ATF, especially Home-Based Case Management, and as such being the driving force for the ATF to integrate previous discussions regarding comprehensive care for older adults. Note: at the February ATF meeting, a suggestion was made that as an educational opportunity, ATF should host an Implicit Bias training with the focus on ageism. Dr. Paul Nash provided Ms. Barrit with a series of trainings totaling four hours, from AARP. Ms. Barrit also reached out to SCAN Healthcare who has a 1½ hour virtual training called Trading Ages. Overall, Ms. Barrit wanted to point out that the ATF has options regarding the ageism training and the ATF will be responsible for its planning, while staff can help secure dates; planning can take place around April or May.
- The Consumer Caucus expressed interest in working with the ATF on the training around June for Long-term Survivors month.
- The Women's Caucus is interested in working with the ATF regarding issues specific to gerontology care for women living with HIV.
 - Mercedes Perezchica from SCAN provided a synopsis of their Trading Ages training. It has the characteristics of being an age sensitivity training which aims to understand the aging process, the misconceptions that some have regarding older adults, and issues that may come up (ex: disability and/or hearing loss). She stressed it is important to be mindful when working with 50+ populations, which is a large age-group demographic when considering people are living until their 80s.
 - Kevin Donnelly asked how do we "trade ages", referring to the name of the training. Ms. Perezchica provided the example that before COVID, SCAN used to have virtual headsets allowing the participants to step into spaces of older adults and to interact with someone who is perhaps helping you to fill out information. In essence, you are "seeing" through the lens of an older person. There are interactive exercises that simulate a stroke victim, for example, and as a result the participant experiences situations where they are unable to use their right hand, while having them go through multiple scenarios.
 - o It should be noted that SCAN is trying to translate their trainings *virtually* by planning different scenarios which enables participants to "look through the lens of an older adult" as they try to navigate the world; this should inspire individuals to become more aware of the challenges experienced by the aging population. Some operations, especially clinical operations, may not be particularly friendly or inviting for an older adult. For example, now that we are a masked population because of COVID, reading someone's lips is more difficult so now there is the need to annunciate and speak more slowly. The objective is being mindful of working with someone who has a hearing impediment, as another example, which occurs often in this population.

4. 2021 Work Plan/Priorities

- Ms. Barrit will add: (1) the training list to the work plan, (2) CPT codes and other data sets, and (3) any reviews that need to be done from the Master Plan for Aging data dashboard. <u>Note</u>: Ms. Barrit would like to have the first step (i.e., DHSP input and analysis on ATF recommendations) completed first.
- Mr. Donnelly inquired if the APLA Master Plan for Aging has been published. Jeff Bailey informed everyone that it has not yet been completed. The northern California conference will take place in June, while the southern California conference was held in the Fall of 2020. APLA has been working with numerous community partners in the northern California area and will be hosting the event in the first week of June. Once this is done, they should have their policy report completed; the anticipated date for completion is December 31st, 2021.
- In reference to standards and best practices, Mr. Bailey also mentioned that APLA is conducting an extensive evidence-based literature review regarding programs for older adults. This literature review is not specific to PLWH but geared towards the world of senior services as a way to inform and/or guide ideas for best practices.

5. Discussion:

- Dr. Mills had a conflict and was unable to present. He will present at the April 6th ATF meeting.
- Mark McGrath expressed concerns about getting "lost in the weeds" with respect to all of the data and CPT codes the group is focusing on. He recommended that the ATF should look at successful models in addressing the care needs of this community, especially in the provider of last resort type scenarios. Mr. McGrath mentioned the Golden Compass Program and GMAC (New York) as successful models. Rather than coming up with specific medical recommendations, ATF can come up with successful programs that have been implemented and have the feature of quality control feedback incorporated (i.e., customer satisfaction). Instead of data sets and CPT codes, the ATF can emulate good program models that are already in place. He also recommended having doctors Gandhi and Green (Ward 86) speak to the ATF about the details of their program. Ward 86 is part of the UCSF program and a provider of last resort. They started this program with the Golden Compass Program because of the co-morbidities and aging within their population. What is unique about the program is constant customer feedback from the patient population involved. They asked the population what was needed and from there they built a clinic around those needs (ex: gerontology assessments and frailty assessments), all of which are managed at the clinic level. Note: slides from doctors Gandhi and Green were presented in the packet for feedback.
- Ms. Barrit will contact Dr. Gandhi as her presentation could be beneficial to the full body. The feedback and responses indicated the presentation should be made to the ATF first and the ATF will determine if it is useful to the full body.
- Owens Clinic in San Diego was also referenced as a potential model; they are doing successful aging work in a clinical setting, not as a wrap-around service.
- Mr. Bailey mentioned a program at the University of Alabama at Birmingham, which addresses rural options for people who have less access to urban health centers.

- Feedback from the slides: The Emergent Themes (Golden Compass Focus Groups) is what the ATF is looking for with respect to model programs:
 - Knowledge of HIV and Aging Topics
 - Providers need a deeper knowledge base to care for older PWH
 - Patients desire to understand more about HIV and aging issues
 - Social isolation and loneliness
 - Need for regularly held social gatherings and events
 - Need for improved social support networks
 - Health-related needs for older PWH
 - Neurocognitive screening
 - Falls and frailty assessments
 - Care navigation and case management
 - Addressing impacts of mental illness and marginal housing
- In reference to the Golden Compass slides, Mr. McGrath mentioned all the services are through payer of last resort, not by private insurance, and the patients receive yearly screenings by the gerontologist. In the screening, the gerontologist performs the falls and frailty assessments as well as the neurocognitive screening.
- Mr. Bailey suggested to have HRSA's HIV and Aging group to speak to the ATF as they are interested in becoming a part of this conversation. Mr. Bailey will provide HRSA's contact information to Ms. Barrit.
- Lee Kochems pointed out that a worthwhile focus would be to have the ATF find a broad range of services and where they fit into Ryan White, in order to advocate these services being covered as the ATF expands the notion of what services actually consists of for an aging population.
- Mr. Ballesteros inquired if gym membership is covered under Ryan White. Ms. Barrit
 informed everyone that gym membership is not, however she is unaware if other
 forms of recreation outside of gym membership might be covered. A request will be
 sent to DHSP to find out what can be covered.
- Ms. Barrit will check with the HRSA project officer regarding resources and start the
 conversation on the range of flexibilities that the ATF might be able to explore with
 respect to Ryan White service categories.

6. Determine Next Meeting Dates and Times

• The Aging Task Force will meet on the first Tuesday of the month from 1pm – 3pm. The next meeting will be held on April 6, 2021, 1pm-3pm.

7. Additional Suggestions/Recommendations

- Mr. Ballesteros likes the idea of "prescreening" the models within the ATF prior to presenting to the full body.
- Mr. Ballesteros recommended as an educational experience, having a panel of older PLWH at the full body.
- The ATF should look at the AltaMed program model as they are reimbursable through Medicaid.
- Mr. Kochems suggested that the ATF include the BAAC Task Force and Consumer Caucus regarding their needs into this conversation.

8. Next Steps/Agenda Development

- 1) Contact Dr. Gandhi regarding presenting to the full body
- 2) Contact Golden Compass to inquire about how they are covering services (ex: the combination of Ryan White and other payor of last resort funding they are using)
- 3) Compile a summary of recommended models
- 4) Send a request to DHSP inquiring what can be covered and how the following can be incorporated into coverage: vision, exercise, and bone density scans
- 5) Contact Jeff Bailey regarding (1) the HRSA HIV and Aging Group and (2) the literature review
- 6) Update ATF workplan to include the priorities identified
- 7) Review HEDIS measures for caring for older adults from LA Care
- 8) Review health screenings/risk assessments for older adults that should be incorporated into Ryan White services.
- 9) Hear from Dr. Tony Mills on how he is providing comprehensive care for PLWH age 50 and older
- 10) Hear from DHSP on their feedback and analysis of the Aging Task Force recommendations
- **9.** Announcements: None.
- **10. Adjournment:** meeting adjourned at 1:58 pm.



LOS ANGELES COUNTY COMMISSION ON HIV 2021 AGING TASK FORCE WORKPLAN (Updated 3.16.21)

Task Force Name: Aging Task Force Co-Chairs: Al Ballesteros

Task Force Adoption Date: 3/2/21

Purpose of Work Plan: To focus and prioritize key activities for COH Committees and subgroups for 2021.

Prioritization Criteria: Select activities that 1) represent the core functions of the COH and Committee; 2) advance the goals of the Comprehensive HIV Plan and Los Angeles County HIV/AIDS Strategy; and 3) align with COH staff and member capacities and time commitment.

#	TASK/ACTIVITY	DESCRIPTION	TARGET COMPLETION DATE	STATUS/NOTES/OTHERCOMMITTEES INVOLVED
1	Determine and continue to refine next steps for recommendations.	Final recommendations completed 12.20.10.	Ongoing	Recommendations presented at November & December 2020 Executive Committee and December 2020 & January 2021 full Commission meetings. COH approved 1 year extension of the ATF until March 2022.
3	Review and refine 2021 workplan Secure DHSP feedback / analysis on Aging Task Force recommendations.		Ongoing April	Workplan revised/updated on 3/16/21
	Study models of HIV care for older adults then determine speakers / programs to highlight at a full COH meeting. Include a panel of speakers, especially consumers who are not connected to care.	Invite Dr. Tony Mills to ATF meeting; Golden Compass, Owen's Clinic, University of Colorado, University of Alabama, AltaMed PACE Program, etc.	April-May	ATF will review models of care first to determine which presenters/program to feature at a full COH meeting
4	Review CPT codes of geriatric care. Review health screenings/risk assessments for older adults and discuss how they may be integrated in Ryan White services		April	
5	Review HEDIS measures used by LA CARE Health Plan Caring for older adults		April	Al to contact LA CARE
6	Review, track and revisit Master Plan on Aging		Ongoing	



LOS ANGELES COUNTY COMMISSION ON HIV 2021 AGING TASK FORCE WORKPLAN (Updated 3.16.21)

7	Conduct ageism training for the community.	nity. Raise awareness about implicit bias with N		Partner with SCAN to co-host Trading Ages	
		specific focus on ageism.	to 1 pm	training.	

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Trading Ages™, our trademarked senior sensitivity training, is designed to help professionals who work with older adults.

The training:

- Helps participants recognize some of the challenges people experience as they age.
- Utilizes practical examples and activities to increase understanding around age-related changes that can affect behavior and attitudes.
- Incorporates strategies to improve communication and interactions with professional contacts, friends, and loved ones.

May 6, 2021: 11 a.m. to 1 p.m. Click on the link to join via Zoom:

https://scanhealthplan.zoom.us/j/95115168945?p wd=QnMxRzZrNTM3NjNZOEppKzRkdTcrdz09





Nearly 40 million people in the United States are 65 or older.

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AGING TASK FORCE RECOMMENDATIONS (Final 12/10/20)

Background: The Aging Task Force (ATF) was formed in February 2019 to address the broad health needs of those over 50 years living with HIV and long-term survivors. According the Health Resources and Service Administration (HRSA), the RWHAP client population is aging. Of the more than half a million clients served by RWHAP, 46.1 percent are aged 50 years and older and this continues to grow. While Ryan White clients in Los Angeles County show higher engagement and retention in care, and viral suppression rates, within the 50+ population there exists disparities by racial/ethnic, socioeconomic, geographic, and age groups stratification.

The ATF developed the following recommendations to the Commission on HIV, Division of HIV and STD Programs (DHSP) and other County and City partners to address the unique needs of this population. The term older adults refer to individuals who are age 50 and older.

*This is a living document and the recommendations will be refined as key papers such the State of California Master Plan on Aging and APLA's HIV and Aging Townhall Forums are finalized. *

Ongoing Research and Needs Assessment:

- Encourage the Division of HIV and STD Programs (DHSP) to collaborate with universities, municipalities, and other agencies that may have existing studies on PLWH over 50 to establish a better understanding of the following issues:
 - Conduct additional analysis to understand why approximately 27% of new diagnoses among persons aged 50-59 and 36% of new diagnoses among person aged 60 and older were late diagnoses (Stage 3 AIDS) suggesting long-time infection. This may reflect a missed opportunity for earlier testing as it seems likely that persons aged 50 and older may engage in more regular health care than younger persons. (Data Source:
 - http://www.publichealth.lacounty.gov/dhsp/Reports/HIV/2019Annual HIV Surveillance Report 08202020 Final revised Sept2020.pdf)
 - Gather data on PLWH over 50 who are out of care or those who have dropped out of care to further understand barriers and service needs.
 - Conduct studies on the prevention and care needs of older adults.
 - Understand disparities in health outcomes within the 50+ population by key demographic data points such as race/ethnicity, gender, geographic area, sexual orientation, and socioeconomic status.

- Gather data on the impact of the aging process as PLWH over 50 reach older age brackets. Articulate distinct differences in older age groups.
- Conduct deeper analysis on mental health, depression, isolation, polypharmacy and other co-morbidities that impact the quality of life of older adults living with HIV.
- Conduct analysis of best practices on serving older adults in non-HIV settings and adapt key strategies for a comprehensive and integrated model of care the population. Examples of best practices to explore are National Association of Area Offices on Aging (https://www.n4a.org/bestpractices) and Substance Abuse and Mental Health Services Administration and Health Resources and Services Administration, Growing Older: Providing Integrated Care for an Aging Population. HHS Publication No. (SMA) 16-4982. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2016.
- Request DHSP to develop a data collection and reporting plan with a timeline on an annual report to the community.

Workforce and Community Education and Awareness:

- Educate the Commission on HIV, Department of Public Health, HIV workforce and community at large on ageism, stigma, and build a common understanding of definitions of older adults, elders, aging process and long-term survivors.
- Address ageism on the Commission on HIV and the community at large through trainings and by convening panels composed of Ryan White and prevention services clients and subject experts.
- Openly discuss and examine as part and parcel of HIV planning and implementation, the impediments to HIV prevention and care among aging populations posed by the historically embedded discrimination and bigotry institutionalized in mainstream US culture and society, as well as embedded in subcultural (ethnic, racial, social, religious, etc.) cultures and institutions that often goes unacknowledged: that is the interconnected/overlapping linkages between ageism (or what is expressed in ageism) and societal heteronormativity/homophobia (internalized and cultural), sexism, misogyny, racism, xenophobia, ableism, and all forms of discrimination and bigotry targeting "The Other."
- Educate the HIV workforce on HIV and aging, including but not limited to how to work with the non-profit sector to link seniors to health, social services, and HIV prevention and treatment services.
- Train the HIV workforce on diseases of aging, such as cardiovascular disease and osteoporosis and dementia, and equip staff with the knowledge and skills to properly assess and treat conditions that impact older adults.
- Train older adults on how to adapt to the new realities of seeking care as they progress in the age spectrum. Train the HIV workforce on how to develop and deliver classes to older adults with respect, compassion, and patience.
- Expand opportunities for employment among those over 50 who are able and willing to work.
- Provide training on the use of technology in managing and navigating their care among older adults.

- Collaborate with the AIDS Education Centers to train HIV service providers on becoming experts and specialists on caring for older adults with HIV.
- Collaborate with local resources and experts in providing implicit bias training to HIV service providers.

Expand HIV/STD Prevention and Care Services for Older Adults:

- Expand and develop service models that are tailored for the unique needs of PLWH over 50. Specifically, community members representing older adults living with HIV have identified ambulatory/outpatient medical, medical care coordination, and mental health as key services they need. Unify and coordinate care within a medical home and reduce referrals to specialty care, if appropriate.
- Integrate an annual patient medical records review by gerontologist for PLWH over 50 in the Medical Care Coordination and Ambulatory/Outpatient Medical programs. The annual medical records review should review care needs for mental health, polypharmacy, social support, mobility, and other markers of overall health and quality of life. Ensure that MCC teams monitor and assist patients affected by cognitive decline in navigating their care.
- Customize food/nutrition and physical activity and mobility services for the aging population. Remedial exercise and rehabilitation to maintain or regain muscle mass may be needed for some older adults to help them remain in care and virally suppressed.
- Enhance the payment structure for services rendered to older adults living with HIV as
 they may require more frequent, longer, and more intensive and individualized medical
 visits and routine care to maintain their overall health as they progress in the age
 continuum.
- Expand supportive services, such as financial assistance, as incomes become more fixed in older age. As frailty increases with age, services should be customized by specific age groups.
- Address social isolation by supporting psychosocial and peer support groups designed for older adults. Leverage the work of agencies that already provide support groups for older adults and encourage the community to join or start a support group.
- Address technological support for older adults living with HIV as medical service modalities rely more and more electronic, virtual, and telehealth formats.
- Dedicate at least 15% of prevention funds to programming specifically tailored for individuals over 50. According to the California HIV Surveillance Report, persons over 50 accounted for 15% of all new infections. A similar trend is observed for Los Angeles County with about 13-14% of new HIV diagnoses occurring among persons aged 50 and older
- Address the lack of sexual health programs and social marketing efforts geared for older adults. Social marketing and educational campaigns on PrEP and Undetectable=Untransmittable (U=U) should include messages and images with older adults.

 Integrate programming for older adults in the use of Ending the HIV Epidemic funds in Los Angeles County. Schedule annual reports from the Division of HIV and STD Programs (DHSP) on how they are addressing HIV and aging.

General Recommendations:

- Collaborate with traditional senior services or physicians, or other providers who specialize in geriatrics and leverage their skills and expertise of those outside the HIV provider world.
- Ensure access to transportation and customize transportation services to the unique needs of older adults.
- Benefits specialists should be well versed in Medicare eligibility and services to assist those individuals who are aging with HIV
- Direct DHSP to start working with agencies that serve older adults such as the Los Angeles County Workforce Development, Aging and Community Services, City of Los Angeles Department of Aging, and DPH Office of Senior Health to coordinate and leverage services.
- Ensure robust and meaningful input from older adults living with HIV in Commission deliberations on HIV, STD and other health services.

Los Angeles County Department of Public Health Division of HIV and STD Programs

Commission on HIV – **Aging Task Force Recommendations** to COH, DHSP, and other County and City Partners, FINAL 12/10/2020 DHSP Response: 4/05/2021

	Recommendations	Who	Status/Notes
	Ger	neral Recomme	ndations
1.	Collaborate with traditional senior services or physicians, or other providers who specialize in geriatrics and leverage their skills and expertise of those outside the HIV provider world.		 Not clear who this is directed to and where this expertise should be directed Request that COH engage geriatric physicians/specialists in COH work and potentially present at upcoming COH meeting? Collaborate with APLA Aging efforts?
2.	Ensure access to transportation and customize transportation services to the unique needs of older adults.		 Beyond DHSP CHHS Master Plan on Aging Review Transportation contracts to ensure alignment with community need (this also came up during YCAB EHE Events as a priority)
3.	Benefits specialists should be well versed in Medicare eligibility and services to assist those individuals who are aging with HIV	ccs	Benefits Specialists are expected to be versed in all services, programs and referrals for all of their clients. We can ensure this is happening during program reviews.
4.	Direct DHSP to start working with agencies that serve older adults such as the Los Angeles County Workforce Development, Aging and Community Services, City of Los Angeles Department of Aging, and DPH Office of Senior Health to coordinate and leverage services.		Need more information on the goals and expectations of these collaborations and how the commission is already working with these agencies.
5.	Ensure robust and meaningful input from older adults living with HIV in Commission deliberations on HIV, STD and other health services.		COH purview

Commission on HIV – Aging Task Force Recommendations, FINAL 12/10/21

Recommendation	Who	Status/Notes			
Ongoing Research and Needs Assessment					
 Encourage the Division of HIV and STD Programs (DHSP) to collaborate with universities, municipalities, and other agencies that may have existing studies on PLWH over 50 to establish a better understanding of the following issues: 					
a. Conduct additional analysis to understand why approximately 27% of new diagnoses among persons aged 50-59 and 36% of new diagnoses among person aged 60 and older were late diagnoses (Stage 3 – AIDS) suggesting long-time infection. This may reflect a missed opportunity for earlier testing as it seems likely that persons aged 50 and older may engage in more regular health care than younger persons. (Data Source: 2019 Annual HIV Surveillance Report))		 This may be able to be addressed through a literature review and report back of key findings by DHSP. Compare LAC with other jurisdictions, CA and US to see if unique to LAC Could this be addressed through efforts to increase routine testing as older people are probably more likely to be in care for non-HIV related health conditions? 			
b. Gather data on PLWH over 50 who are out of care or those who have dropped out of care to further understand barriers and service needs.		Locating and identifying the out of care population has been a challenge in the past. DHSP can review data from the Linkage and Re-Engagement Program (LRP) to identify barriers to care and service needs of PLWH over 50 who are out of care.			
c. Conduct studies on the prevention and care needs of older adults.		 A literature review would probably be able to inform this Perhaps the commission should partner with academic institutions for this 			
d. Understand disparities in health outcomes within the 50+ population by key demographic data points such as race/ethnicity, gender, geographic area, sexual orientation, and socioeconomic status.		 First step is to determine whether there are disparities and where they are A literature review would help to inform as relates to those living with HIV CHHS Master Plan on Aging 			

e. Gather data on the impact of the aging process as PLWH over 50 reach older age brackets. Articulate distinct differences in older age groups.		Recommend to start with a literature review -not sure we have adequate data to address.
f. Conduct deeper analysis on mental health, depression, isolation, polypharmacy and other comorbidities that impact the quality of life of older adults living with HIV.		Recommend starting with a literature review
g. Conduct analysis of best practices on serving older adults in non-HIV settings and adapt key strategies for a comprehensive and integrated model of care for the population. Examples of best practices to explore are National Association of Area Offices on Aging (https://www.n4a.org/bestpractices) and Substance Abuse and Mental Health Services Administration and Health Resources and Services Administration, Growing Older: Providing Integrated Care for an Aging Population. HHS Publication No. (SMA) 16-4982. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2016.		 This seems beyond scope of what we can do and has likely already been done and may be included in one of the listed docs. Perhaps SBP can create or adopt standards for this population. This may overlap with broader recommendations in and the scope of the CHHS Master Plan on Aging as it may extend to all aging populations. Recommend SBP work with Aging Task Force to develop best practices for working with PLWH aged 50 and older
h. Request DHSP to develop a data collection and reporting plan with a timeline on an annual report to the community.		 Could we include additional age groups – as appropriate to reports already generated?
Recommendation	Who	Status/Notes
	e and Communit	ty Awareness
 Educate the Commission on HIV, Department of Public Health, HIV workforce and community at large on ageism, stigma, and build a common understanding of definitions of older adults, elders, aging process and long-term survivors of HIV. 		 Beyond DHSP Within COH's purview? Would CBA providers be able to provide these trainings?

3.	Address ageism on the Commission on HIV and the community at large through trainings and by convening panels composed of Ryan White and prevention services clients and subject experts.	• COH
4.	Openly discuss and examine as part and parcel of HIV planning and implementation, the impediments to HIV prevention and care among aging populations posed by the historically embedded discrimination and bigotry institutionalized in mainstream US culture and society, as well as embedded in subcultural (ethnic, racial, social, religious, etc.) cultures and institutions that often goes unacknowledged: that is the interconnected/overlapping linkages between ageism (or what is expressed in ageism) and societal heteronormativity/homophobia (internalized and cultural), sexism, misogyny, racism, xenophobia, ableism, and all forms of discrimination and bigotry targeting "The Other."	Beyond DHSP
5.	Educate the HIV workforce on HIV and aging, including but not limited to how to work with the non-profit sector to link seniors to health, social services, and HIV prevention and treatment services.	Need more information/clarification
6.	Train the HIV workforce on diseases of aging, such as cardiovascular disease and osteoporosis and dementia, and equip staff with the knowledge and skills to properly assess and treat conditions that impact older adults.	 Not sure this is DHSP? Could COH work with RWP/HRSA on workforce development or the AETCs? Collaborate with DPH Office of Aging and invite representative to present at COH meeting?
7.	Train older adults on how to adapt to the new realities of seeking care as they progress in the age spectrum. Train the HIV workforce on how to develop and deliver classes to older adults with respect, compassion, and patience.	Mixing directives; first item seems beyond scope of DHSP. Second item maybe fits with item 6 above?

8. Expand opportunities for employment among those over 50 who are able and willing to work.	Beyond DHSPCHHS Master Plan on Aging
Provide training on the use of technology in managing and navigating their care among older adults.	Could this be part of the \$ we provide to agencies to strengthen telehealth services?
10. Collaborate with the AIDS Education Centers to train HIV service providers on becoming experts and specialists on caring for older adults with HIV.	Related to items #6 and #7?
11. Collaborate with local resources and experts in providing implicit bias training to HIV service providers.	 I believe this is probably already a resource we provide in our trainings to contracted providers Share implicit bias/medical mistrust training being developed with Black/AA Task Force.
Expand HIV/STD Prevention and	d Care Services for Older Adults
12. Expand and develop service models that are tailored for the unique needs of PLWH over 50. Specifically, community members representing older adults living with HIV have identified ambulatory/outpatient medical, medical care coordination, and mental health as key services they need. Unify and coordinate care within a medical home and reduce referrals to specialty care, if appropriate.	 MCC provides this already - maybe add a component to the training/service guidelines for working with specific pops that includes aging population? Major recommendations for an aging population include addressing the 4 Ms: medication, mentation, mobility, and what matters to the patient. There are many screer tools available. Maybe add to discussions around MCC and AOM service standards. For some of the items in this section it seems like a landscape analysis of services for 50 plus clients is needed – just within the RWP.
13. Integrate an annual patient medical records review by gerontologist for PLWH over 50 in the Medical Care Coordination and Ambulatory/Outpatient Medical programs. The annual medical records review should review care needs for mental health, polypharmacy, social support, mobility, and other markers of overall health and quality of life. Ensure that MCC teams monitor and assist	 Not sure this is feasible with probably about 4,000 AOM clients a more than that in MCC receiving services. Could any of this be added to chart abstractions during contract monitoring? MCC teams already are directed to conduct cognitive assessment for client aged 50 and older and assess IADLs and ADLs with each assessment.

patients affected by cognitive decline in navigating their care.	
14. Customize food/nutrition and physical activity and mobility services for the aging population. Remedial exercise and rehabilitation to maintain or regain muscle mass may be needed for some older adults to help them remain in care and virally suppressed.	This is really geriatric medicine
15. Enhance the payment structure for services rendered to older adults living with HIV as they may require more frequent, longer, and more intensive and individualized medical visits and routine care to maintain their overall health as they progress in the age continuum.	Wouldn't this be covered through current FFS model?
16. Expand supportive services, such as financial assistance, as incomes become more fixed in older age. As frailty increases with age, services should be customized by specific age groups.	CHHS Master Plan on Aging
17. Address social isolation by supporting psychosocial and peer support groups designed for older adults. Leverage the work of agencies that already provide support groups for older adults and encourage the community to join or start a support group.	 Could this be part of psychosocial services RFP whenever that happens? CHHS Master Plan on Aging
18. Address technological support for older adults living with HIV as medical service modalities rely more and more on electronic, virtual, and telehealth formats.	Overlap with #9? Not sure what they are asking for here; this kind of training would be a great project for the commission to undertake
19. Dedicate at least 15% of prevention funds to programming specifically tailored for individuals over 50. According to the California HIV Surveillance Report, persons over 50	Need to verify in our data but not sure how to respond

accounted for 15% of all new infections. A similar trend is observed for Los Angeles County with about 13-14% of new HIV diagnoses occurring among persons aged 50 and older	
20. Address the lack of sexual health programs and social marketing efforts geared for older adults. Social marketing and educational campaigns on PrEP and Undetectable=Untransmittable (U=U) should include messages and images with older adults.	This may be a more effective strategy than #19 to reach older population
21. Integrate programming for older adults in the use of Ending the HIV Epidemic funds in Los Angeles County. Schedule annual reports from the Division of HIV and STD Programs (DHSP) on how they are addressing HIV and aging.	We have tried to shift away from a population focused approach to an outcomes approach where we are targeting services to those populations who are not in care and not virally suppressed and that generally does not represent the aging population.

		Under 50	50 and Older
Medical Outpatient records, YR29		# Procedures	# Procedures
Service_Description	Service_		
	Code		
ACUTE HEPATITIS PANEL	80074	34	16
AG DETECT NOS, EIA, MULT	87449	5	2
AGENT NOS ASSAY W/OPTIC	87899	25	8
ALANINE AMINO (ALT) (SGPT)	84460	13	2
ALLERGEN SPECIFIC IGE	86003	2	1
ALPHA-1-ANTITRYPSIN, PHENO	82104	1	
ALPHA-FETOPROTEIN, SERUM	82105	30	30
ANGIOTENSIN I ENZYME TEST	82164		1
ANTIBODY TREPONEMA PALLIDUM	86780	1891	558
ANTINUCLEAR ANTIBODIES	86038	28	13
ANTINUCLEAR ANTIBODIES (ANA)	86039	3	3
ASPERGILLUS ANTIBODY	86606	1	
ASSAY ALKALINE PHOSPHATASE	84075	24	4
ASSAY OF ACTH	82024	1	
ASSAY OF ALDOSTERONE	82088	1	1
ASSAY OF AMMONIA	82140	1	2
ASSAY OF AMYLASE	82150	29	8
ASSAY OF APOLIPOPROTEIN	82172	2	
ASSAY OF ARSENIC	82175		1
ASSAY OF BETA-2 PROTEIN	82232	2	1
ASSAY OF BLOOD CHLORIDE	82435	28	7
ASSAY OF BLOOD LIPOPROTEIN	83721	1128	401
ASSAY OF BLOOD/URIC ACID	84550	132	25
ASSAY OF C-PEPTIDE	84681		1
ASSAY OF CALCIUM	82310	28	8
	82330	1	5
ASSAY OF CERULOPLASMIN	82390	3	1
ASSAY OF CK (CPK)	82550	34	25
ASSAY OF CPK IN BLOOD	82552		1
ASSAY OF CREATINE	82540	29	56
ASSAY OF CREATININE	82565	41	16
ASSAY OF CRYOGLOBULIN	82595		1
ASSAY OF DIHYDROXYVITAMIN D	82652	8	2
ASSAY OF ERYTHROPOIETIN	82668	 	1
ASSAY OF ESTRADIOL	82670	61	7
ASSAY OF ESTROGEN	82672	29	7
ASSAY OF FERRITIN	82728	59	33
ASSAY OF FREE THYROXINE	84439	269	192
ASSAY OF FREE TITTROXINE ASSAY OF G6PD ENZYME	82955	96	192
ASSAY OF GAMMAGLOBULIN IGE	82785		
ASSAT OF GAMINIAGLOBULIN IGE	02/85	6	2

ASSAY OF GAMMAGLOBULIN IGM	82784	7	3
ASSAY OF GGT	82977	987	371
ASSAY OF HAPTOGLOBIN, QUANT	83010	4	
ASSAY OF HOMOCYSTINE	83090	1	
ASSAY OF IRON	83540	78	44
ASSAY OF LACTIC ACID	83605	3	
ASSAY OF LDH ENZYMES	83625		1
ASSAY OF LEAD	83655		1
ASSAY OF LIPASE	83690	53	10
ASSAY OF LIPOPROTEIN	83718	270	138
ASSAY OF LRH HORMONE	83727	2	
ASSAY OF MAGNESIUM	83735	66	34
ASSAY OF MERCURY	83825		1
ASSAY OF PARATHORMONE	83970	6	11
ASSAY OF PHOSPHORUS	84100	128	33
ASSAY OF PREALBUMIN	84134		1
ASSAY OF PROGESTERONE	84144	2	
ASSAY OF PROLACTIN	84146	33	6
ASSAY OF PROTEIN	84155	31	16
ASSAY OF PSA, COMPLEXED	84152		2
ASSAY OF PSA, FREE	84154	1	4
ASSAY OF PSA, TOTAL	84153	98	394
ASSAY OF RENIN	84244	1	
ASSAY OF SERUM ALBUMIN	82040	25	6
ASSAY OF SERUM POTASSIUM	84132	6	3
ASSAY OF SERUM PROTEINS	84165	6	7
ASSAY OF SERUM SODIUM	84295	27	7
ASSAY OF SEX HORMONE GLOBUL	84270	18	6
ASSAY OF TESTOSTERONE	84402	393	235
ASSAY OF THYROID (T3 OR T4)	84479	38	31
ASSAY OF TOTAL TESTOSTERONE	84403	461	270
ASSAY OF TOTAL THYROXINE	84436	39	33
ASSAY OF TRANSFERRIN	84466	1	
ASSAY OF TRIGLYCERIDES	84478	269	139
ASSAY OF TROPONIN, QUANT	84484	1	1
ASSAY OF TSI	84445	1	1
ASSAY OF UREA NITROGEN	84520	33	10
ASSAY OF URINE CREATININE	82570	193	203
ASSAY OF URINE OSMOLALITY	83935		1
ASSAY OF URINE SODIUM	84300	1	
ASSAY OF URINE/URIC ACID	84560		1
ASSAY OF VITAMIN B-1	84425	3	4
ASSAY OF VITAMIN B-6	84207	2	2
ASSAY OF VITAMIN D	82306	1463	631

ASSAY OF VITAMIN E	84446		1
ASSAY OF VITAMIN K	84597	. 1	ı
ASSAY OF ZINC	84630	1	. 1
ASSAY THYROID STIM HORMONE	84443	514	309
		_	
ASSAY, BLD/SERUM CHOLESTEROL	82465	287	144
ASSAY, BLOOD CARBON DIOXIDE	82374	28	/
ASSAY, DIPROPYLACETIC ACID	80164	2	2
ASSAY, GLUCOSE, BLOOD QUANT	82947	7	9
ASSAY, GROWTH HORMONE (HGH)	83003	1	
ASSAY, NEPHELOMETRY NOT SPEC	83883	3	
ASSAY, TOXIN OR ANTITOXIN	87230		1
ASSAY, TRIIODOTHYRONINE (T3)	84480	22	25
AUTOMATED HEMOGRAM	85025	2194	1108
	85027	141	98
B CELLS TOT CNT	86355	10	9
BASIC METABOLIC PANEL	80048	41	52
BASIC METABOLIC PANEL CALCIUM IONIZED	80047	1	
BILIRUBIN, DIRECT	82248	267	101
BILIRUBIN, TOTAL	82247	29	6
BLD OCLT PROXIDASE ACTV QUAL FECES 1	82272	20	
SPEC	OZZIZ		3
BLOOD CLOT FACTOR XI TEST	85270	1	
BLOOD COUNT; AUTOMATED DIFFERENTIAL	85004		
WBC COUNT		1	
BLOOD COUNT; PLATELET, AUTOMATED	85049	46	20
BLOOD CULTURE FOR BACTERIA	87040	5	4
BLOOD FOLIC ACID SERUM	82746	180	106
BLOOD SEROLOGY, QUALITATIVE	86592	6529	2691
BLOOD SEROLOGY, QUANTITATIVE	86593	2389	755
BLOOD SMEAR INTERPRETATION	85060	8	2
BLOOD TYPING, ABO	86900	4	3
BLOOD TYPING, RH (D)	86901	4	3
BLOOD, OCCULT, FECAL HEMOGLOBIN	82274		
DETERMIN, IMMUNOAS		18	281
BODY FLUID CELL COUNT	89050	1	2
BORDETELLA ANTIBODY	86615		1
C-REACTIVE PROTEIN	86140	31	15
C-REACTIVE PROTEIN; HIGH SENSITIVITY	86141	29	17
(HSCRP) CALCULUS (STONE) ASSAY	82360	25	17
CANDIDA, DNA, DIR PROBE	87480	1	'
CARCINOEMBRYONIC ANTIGEN	82378	1	. 2
CARDIOLIPIN ANTIBODY	_		
	86147	2	
CHLAMYDIA ANTIBODY	86631	4	
CHLAMYDIA IGM ANTIBODY	86632	5	

CHORIONIC GONADOTROPIN ASSAY	84703	15	1
CHORIONIC GONADOTROPIN TEST	84702	3	
CHYLMD TRACH, DNA, AMP PROBE	87491	6544	2500
CLOSTRIDIUM AG, EIA	87324	22	7
CMV ANTIBODY	86644	34	7
CMV ANTIBODY, IGM	86645	6	2
COCCIDIOIDES ANTIBODY	86635	11	5
COLOGUARD	81528		3
COMPLEMENT, ANTIGEN	86160	4	4
COMPREHEN METABOLIC PANEL	80053	6604	2945
CONTRAST X-RAY, ESOPHAGUS	74220		1
CORTISOL, FREE	82530	1	
CREATININE CLEARANCE TEST	82575		1
CULTURE AEROBIC IDENTIFY	87077	32	11
CULTURE BACTERIA ANAEROBIC	87075	4	1
CULTURE SCREEN ONLY	87081	2	2
CULTURE TYPE, IMMUNOLOGIC	87147	1	
CULTURE TYPE, NUCLEIC ACID	87149	2	
CULTURE, BACTERIA, OTHER	87070	101	26
CYCLIC CITRULLINATED PEPTIDE ANTB	86200	1	2
CYSTATIN C	82610		1
CYTOMEG, DNA, AMP PROBE	87496	1	2
CYTOMEG, DNA, QUANT	87497	4	1
CYTOMEGALOVIRUS AG, EIA	87332	2	
CYTOPATH SMEAR, OTHER SOURCE	88160	1	
CYTOPATH, C/V, INTERPRET	88141	26	12
CYTOPATH, C/V, MANUAL	88150	6	3
CYTOPATH, C/V, THIN LAYER	88142	108	52
CYTOPATHOLOGY, CERVICAL/VAGINAL, AUTO	88175		
THIN LAYER P		23	12
CYTOPATHOLOGY, FLUIDS	88104	1	
CYTOPATHOLOGY, SELECTIVE CELLULAR	88112	527	186
ENHANCEMENT, W/ DETECT AGENT NOS, DNA, AMP	87798	5	100
DETECT AGENT NOS, DNA, AMPLI	87801	1	4
DIFFERENTIAL WBC COUNT	85007	34	23
DNA ANTIBODY	86225	7	23
DRUG SCREEN ANALGESICS NON-OPIOID 1 OR		<u>'</u>	
2	00329		1
DRUG SCREEN LIST A SINGLE DRUG CLASS	80301		
METHOD		2	
DRUG SCREEN QUANTITATIVE ALCOHOLS	80320	2	
DRUG SCREEN QUANTITATIVE LAMOTRIGINE	80175		1
DRUG SCREEN QUANTITATIVE LEVETIRACETAM	80177	1	

80345		1
80307		
	126	38
	1	
	2	
77080	1	2
76770	1	
76700	9	5
76705	4	3
76536	4	
86658	4	
87329		
	34	12
86663	1	-
86664	1	
86665	1	
82705	1	
85378	1	1
88184		
100105	1	•
88185	1	
88189	1	•
		200
		2
		2
		1
		13
		1
		10
		1508
	2000	1
	2	<u> </u>
		6
		6
		2
		<u> </u>
		<u> </u>
		4
		64
		239
		34
		118
86706	953	272
	80307 80305 80306 77080 76770 76705 76536 86658 87329 86663 86664 86665 82705 85378 88184 88185 88189 88187 86255 84481 87102 82962 82945 82950 83036 82985 86146 83001 83002 86677 86682 85014 85018 83021 86708 86705 86704	80307 126 80305 1 80306 2 77080 1 76770 1 76700 9 76705 4 76536 4 86658 4 87329 34 86663 1 86664 1 86665 1 82705 1 85378 1 88184 1 88185 1 88187 356 86255 4 84481 6 87102 2 82962 8 82945 2 82950 6 83036 2069 82985 . 86146 2 83001 25 83002 17 86677 2 86682 3 85014 1 85018 2 85019 390 86708 921 86705<

HEP BE ANTIBODY	86707	233	32
HEP C AB TEST, CONFIRM	86804	6	6
HEPATIC FUNCTION PANEL	80076	49	23
HEPATITIS B , DNA, QUANT	87517	66	56
HEPATITIS B SURFACE AG, EIA	87340	745	144
HEPATITIS BE AG, EIA	87350	243	34
HEPATITIS C , RNA, AMP PROBE	87521	3	7
HEPATITIS C , RNA, DIR PROBE	87520		1
HEPATITIS C AB TEST	86803	2842	1008
HEPATITIS C, RNA, QUANT	87522	364	223
HERPES SIMPLEX TEST	86694	1	2
	86695	33	7
HERPES SIMPLEX TYPE 2	86696	33	7
HETEROPHILE ANTIBODIES	86308	1	
HHV-6, DNA, DIR PROBE	87531	1	
HISTOPLASMA	86698	1	1
HISTOPLASMA CAPSUL AG, EIA	87385	12	2
HISTOPLASMOSIS SKIN TEST	86510	1	
HIV-1	86701	309	22
HIV-1/HIV-2, SINGLE ASSAY	86703	15	2
HIV-2	86702	306	22
HLA I TYPING HIGH RESOLUTION 1	81381	000	
ALLELE/ALLELE GRP	07007	338	40
HLA TYPING, A, B, OR C	86812		1
	86813	10	5
HPYLORI, STOOL, EIA	87338	47	29
HSV, DNA, AMP PROBE	87529	13	4
HSV, DNA, QUANT	87530	1	
IAAD EIA HIV-1 AG W/HIV-1 & HIV-2 ANTBDY	87389		
SINGLE		326	32
IADNA HUMAN PAPILLOMAVIRUS HIGH-RISK	87624	400	0.4
TYPES	07605	180	81
IADNA HUMAN PAPILLOMAVIRUS TYPES 16 & 18 ONLY	87625	10	7
IADNA TRICHOMONAS VAGINALIS AMPLIFIED	87661		
PROBE TECH		16	12
IMHISTOCHEM/CYTCHM EA ADDL ANTIBODY	88341		
SLIDE		13	4
IMMUNOASSAY, NONANTIBODY	83516	12	1
	83519		1
IMMUNOASSAY, RIA	83520	7	2
IMMUNOASSAY, TUMOR CA 125	86304		1
IMMUNOASSAY,INFECTIOUS AGENT	86317	33	8
IMMUNOCYTOCHEMISTRY	88342	15	7
IMMUNOFIXATION PROCEDURE	86334		3
IMMUNOFIXJ ELECTROPHORESIS OTH FLU	86335		1

INF AGENT DET NUCLEIC ACID CLOSTRIDIUM AMP PROBE	87493	5	2
INFECTIOUS AGENT ANTIGEN DETECTION BY	87271		1
IMMUNOFLUORE INFECTIOUS AGENT DNA/RNA INFLUENZA 1ST	97502	•	<u>'</u>
2 TYPES	87502		1
INFECTIOUS AGENT GENOTYPE ANALYSIS,	87902	17	6
NUCLEIC ACID (07400	17	0
INFLUENZA A/B, AG, EIA INTRINSIC FACTOR ANTIBODY	87400 86340	l l	
			1
IRON BINDING TEST	83550	63	36
JAK2 GENE ANALYSIS P.VAL617PHE VARIANT	81270		1
LACTATE (LD) (LDH) ENZYME	83615	1105	385
LEGION PNEUMO, DNA, AMP PROB	87541	1	
LEUKOCYTE COUNT, FECAL	89055	10	2
LIPID PANEL	80061	3475	1697
LIVER FIBROSIS, FIBRO TEST-ACTITEST PANEL	81596		
		15	6
LYME DISEASE ANTIBODY	86617	1	
MACACROSCOPIC EXAM PARASITE	87169	1	
MICROALBUMIN, QUANTITATIVE	82043	191	258
MICROBE SUSCEPTIBLE, MIC	87186	60	36
MICROSCOPIC EXAM OF URINE	81015	86	22
MICROSOMAL ANTIBODY	86376	13	5
MONONUCLEAR CELL ANTIGEN QUANTITATIVE	86356		
NOS EA		11	
MORPHOMETRIC ANALYSIS; TUMOR	88361		
IMMUNOCYTOCHEMISTRY,	00705	040	
MUMPS ANTIBODY	86735	319	75
MYCOBACTERIA CULTURE	87116	15	3
MYCOPLASMA ANTIBODY	86738	2	
N.GONORRHOEAE, DNA, AMP PROB	87591	6223	2354
N.GONORRHOEAE, DNA, QUANT	87592	48	15
NATRIURETIC PEPTIDE	83880	6	9
NFCT AGENT GENOTYPE HEPATITIS B VIRUS	87912	1	1
NFCT AGT DRUG SC PHEXYP PREDICT	87900	271	79
NFCT GEXYP DNA/RNA HIV 1 OTHER REGION	87906		
		203	59
NONDIFFERENTIAL WBC COUNT	85008	24	9
NUCLEAR ANTIGEN ANTIBODY	86235	4	4
OFFICE CONSULTATION	99243	3	3
	99244		1
OFFICE/OUTPATIENT VISIT, EST	99212	934	724
	99213	5640	2938
	99215	289	113
	1		

EXAM 99201	OFFICE/OUTPATIENT VISIT, EST (EXTENDED	99214		
99202	,		4811	2390
99203	OFFICE/OUTPATIENT VISIT, NEW	99201	19	6
99205		99202	21	7
OFFICE/OUTPATIENT VISIT, NEW (COMPLEX EXAM) 99204 ORGANIC ACID, SINGLE, QUANT 83921 1 OVA AND PARASITES SMEARS 87177 51 19 PARTICLE AGGLUTINATION TEST 86403 19 5 66406 1 1 1 PNEUMOCYSTIS CARINII, AG, IF 87281 7 1 PREV WISIT, EST, 65 & OVER 99397 . 1 PREV VISIT, EST, AGE 18-39 99395 3 9 PREV VISIT, EST, AGE 40-64 99396 4 3 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 84157 1 1 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; URINE 84156 65 23 PROTHROMBIN TIME 85610 70 46 PROTOZOA ANTIBODY NOS 86753 1 1 QUANTITATIVE ASSAY, DRUG 80299 . 1 RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 5 3 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 56 44 RADIOLOGIC EXAMINATION, CHEST; SINGLE		99203	115	20
EXAM 149 29 ORGANIC ACID, SINGLE, QUANT 83921 1 2 OVA AND PARASITES SMEARS 87177 51 119 PARTICLE AGGLUTINATION TEST 86403 19 5 PARTICLE AGGLUTINATION TEST 86406 1 1 PNEUMOCYSTIS CARINII, AG, IF 87281 7 1 PREV VISIT, EST, 65 & OVER 99397 .		99205	119	25
ORGÂNIC ACID, SINGLE, QUANT 83921 1 22 OVA AND PARASITES SMEARS 87177 51 19 PARTICLE AGGLUTINATION TEST 86403 19 5 86406 1 1 1 PNEUMOCYSTIS CARINII, AG, IF 87281 7 1 PREV VISIT, EST, 65 & OVER 99397 1 1 PREV VISIT, EST, 665 & OVER 99395 3 3 PREV VISIT, EST, AGE 18-39 99395 3 3 PROCALCITONIN (PCT) 84155 4 4 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; 84157 1 1 OTHER 1 65 23 PROTHROMBIN TIME 85610 70 46 PROTOZOA ANTIBODY NOS 86753 1 3 QUANTITATIVE ASSAY, DRUG 80299 1 1 RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 5 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 56 4RADIOLOGIC EXAMINATION, CHEST; 4 OR 71048 13 12 <td>•</td> <td>99204</td> <td>149</td> <td>29</td>	•	99204	149	29
PARTICLE AGGLUTINATION TEST 86403 86406 1 PNEUMOCYSTIS CARINII, AG, IF 87281 7 1 PREV VISIT, EST, 65 & OVER 99397 99395 3 PREV VISIT, EST, AGE 18-39 PROCALCITONIN (PCT) 84145 4 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; URINE 85610 PROTHROMBIN TIME 85610 70 46 PROTOZOA ANTIBODY NOS RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS RADIOLOGIC EXAMINATION, CHEST; 4 OR RADIOLOGIC EXAMINATION, CHEST; 4 OR RADIOLOGIC EXAMINATION, CHEST; 5 INGLE VIEW REC SED RATE, AUTOMATED REC SED RATE, NONAUTOMATED RED SOVAL RED SO	ORGÁNIC ACID, SINGLE, QUANT	83921	1	2
B6406	OVA AND PARASITES SMEARS	87177	51	19
PNEUMOCYSTIS CARINII, AG, IF	PARTICLE AGGLUTINATION TEST	86403	19	5
PREV VISIT, EST, 65 & OVER 99397 . 1 PREV VISIT, EST, AGE 18-39 99395 3 PREV VISIT, EST, AGE 40-64 99396 4 3 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY: 84145 4		86406	1	1
PREV VISIT, EST, AGE 18-39 99395 3 PREV VISIT, EST, AGE 40-64 99396 4 3 PROCALCITONIN (PCT) 84145 4 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY: 84157 1 OTHER 1 1 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY: 84156 1 URINE 65 23 PROTHROMBIN TIME 85610 70 46 PROTOZOA ANTIBODY NOS 86753 1 1 QUANTITATIVE ASSAY, DRUG 80299 . 1 RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 5 RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 1 1 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 56 44 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 56 44 RADIOLOGIC EXAMINATION, CHEST; 4 OR 71048 13 12 REC SICKE EXAMINATION, CHEST; SINGLE 71045 24 20 RBC ANTIBODY SCREEN 86850 4 2 RBC SED RATE, AUTOMATED <td>PNEUMOCYSTIS CARINII, AG, IF</td> <td>87281</td> <td>7</td> <td>1</td>	PNEUMOCYSTIS CARINII, AG, IF	87281	7	1
PREV VISIT, EST, AGE 40-64 99396 4 3 PROCALCITONIN (PCT) 84145 4 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 1 1 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 84157 1 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 84156 65 23 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 84156 65 23 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; OTHER 84156 65 23 PROTHORING 65 23 65 23 PROTHORING 65 23 65 23 PROTHORING 65 23 1 65 23 PROTHORING 70 46 65 23 1 <	PREV VISIT, EST, 65 & OVER	99397		1
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OTHER 1 PROTEIN, TOTAL, EXCEPT REFRACTOMETRY; 84156 URINE 85610 PROTHROMBIN TIME 85610 PROTOZOA ANTIBODY NOS 86753 QUANTITATIVE ASSAY, DRUG 80299 RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 FRADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 RADIOLOGIC EXAMINATION, ABDOMEN; 3 VIEW 74021 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 FADIOLOGIC EXAMINATION, CHEST; 4 OR 71048 MORE VIEWS 13 RADIOLOGIC EXAMINATION, CHEST; SINGLE 71045 VIEW 24 REC ANTIBODY SCREEN 86850 RBC SED RATE, AUTOMATED 85652 RBC SED RATE, NONAUTOMATED 85651 RBC SICKLE CELL TEST 85660 REAGENT STRIP/BLOOD GLUCOSE 82948 RED BLOOD CELL (RBC) COUNT 85041 RETICULOCYTE COUNT 85044 RETICULOCYTE COUNT 85045 RETICULOCYTE COUNT 85045 RETICULOCYTE COUNT 85045 RETICULOCYTE COUNT	PROCALCITONIN (PCT)	84145	4	
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PROTHROMBIN TIME 85610 70 46 PROTOZOA ANTIBODY NOS 86753 1 QUANTITATIVE ASSAY, DRUG 80299 . 1 RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 5 3 RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 1 1 1 RADIOLOGIC EXAMINATION, ABDOMEN; 3 VIEW 74021 2 .	PROTEIN, TOTAL, EXCEPT REFRACTOMETRY;	84156	65	23
QUANTITATIVE ASSAY, DRUG 80299 . . . RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 . . . RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 .		85610	70	46
RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW 74018 S 3 RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 1 1 RADIOLOGIC EXAMINATION, ABDOMEN; 3 VIEW 74021 RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 RADIOLOGIC EXAMINATION, CHEST; 4 OR 71048 MORE VIEWS 13 RADIOLOGIC EXAMINATION, CHEST; SINGLE 71045 VIEW 24 RBC ANTIBODY SCREEN 86850 RBC SED RATE, AUTOMATED 85652 RBC SED RATE, NONAUTOMATED 85651 RBC SICKLE CELL TEST 85660 REAGENT STRIP/BLOOD GLUCOSE 82948 RED BLOOD CELL (RBC) COUNT 85041 RETICULOCYTE COUNT 85044 2 RETICULOCYTE COUNT 85045 27 RHEUMATOID FACTOR, QUANT 86431 15 RICKETTSIA ANTIBODY 86757 2	PROTOZOA ANTIBODY NOS	86753	1	
S 33 RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW 74019 1 1 1 1 1 1 1 1 1	QUANTITATIVE ASSAY, DRUG	80299		1
1	RADIOLOGIC EXAMINATION, ABDOMEN; 1 VIEW	74018	5	3
RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS 71046 56	RADIOLOGIC EXAMINATION, ABDOMEN; 2 VIEW	74019	1	1
RADIOLOGIC EXAMINATION, CHEST; 4 OR 71048 MORE VIEWS 13 RADIOLOGIC EXAMINATION, CHEST; SINGLE 71045 VIEW 24 RBC ANTIBODY SCREEN 86850 4 RBC SED RATE, AUTOMATED 85652 45 RBC SED RATE, NONAUTOMATED 85651 2 RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 2	RADIOLOGIC EXAMINATION, ABDOMEN; 3 VIEW	74021	2	
MORE VIEWS 13 12 RADIOLOGIC EXAMINATION, CHEST; SINGLE VIEW 71045 24 20 RBC ANTIBODY SCREEN 86850 4 2 RBC SED RATE, AUTOMATED 85652 45 28 RBC SED RATE, NONAUTOMATED 85651 2 RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 2	RADIOLOGIC EXAMINATION, CHEST; 2 VIEWS	71046	56	44
VIEW 24 20 RBC ANTIBODY SCREEN 86850 4 2 RBC SED RATE, AUTOMATED 85652 45 28 RBC SED RATE, NONAUTOMATED 85651 2 2 RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	· · · · · · · · · · · · · · · · · · ·	71048	13	12
RBC SED RATE, AUTOMATED 85652 45 28 RBC SED RATE, NONAUTOMATED 85651 2 RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2		71045	24	20
RBC SED RATE, NONAUTOMATED 85651 2 RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 2	RBC ANTIBODY SCREEN	86850	4	2
RBC SICKLE CELL TEST 85660 3 4 REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85044 2 3 85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	RBC SED RATE, AUTOMATED	85652	45	28
REAGENT STRIP/BLOOD GLUCOSE 82948 24 28 RED BLOOD CELL (RBC) COUNT 85041 2 3 RETICULOCYTE COUNT 85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	RBC SED RATE, NONAUTOMATED	85651	2	
RED BLOOD CELL (RBC) COUNT 85041 2 RETICULOCYTE COUNT 85044 2 3 85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	RBC SICKLE CELL TEST	85660	3	4
RETICULOCYTE COUNT 85044 2 3 85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	REAGENT STRIP/BLOOD GLUCOSE	82948	24	28
85045 27 16 RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	RED BLOOD CELL (RBC) COUNT	85041	2	
RHEUMATOID FACTOR, QUANT 86431 15 12 RICKETTSIA ANTIBODY 86757 . 2	RETICULOCYTE COUNT	85044	2	3
RICKETTSIA ANTIBODY 86757 . 2		85045	27	16
	RHEUMATOID FACTOR, QUANT	86431	15	12
RUBELLA ANTIBODY 86762 345 70	RICKETTSIA ANTIBODY	86757		2
100/02 315 /U	RUBELLA ANTIBODY	86762	315	70

RUBEOLA ANTIBODY	86765	405	111
SHIGA-LIKE TOXIN AG, EIA	87427	37	13
SKIN FUNGI CULTURE	87101	2	10
SMEAR, FLUORESCENT/ACID STAI	87206	32	9
SMEAR, GRAM STAIN	87205	8	4
SMEAR, SPECIAL STAIN	87207	16	7
SMEAR, WET MOUNT, SALINE/INK	87210	23	10
SMR PRIM SRC CPLX SPEC STAIN	87209	20	
OVA&PARASITS		52	19
SPECIAL STAINS	88312	2	2
	88313	2	4
SPECIMEN CONCENTRATION	87015	30	10
SPECTROPHOTOMETRY	84311	1	
STOOL CULTR, BACTERIA, EACH	87046	37	14
STOOL CULTURE, BACTERIA	87045	48	16
STREP A, DNA, DIR PROBE	87650	2	
T CELL, ABSOLUTE COUNT	86361	4724	1930
T CELL, ABSOLUTE COUNT/RATIO	86360	700	252
T CELLS, TOTAL COUNT	86359	707	391
TB INTRADERMAL TEST	86580	1	1
TEST FOR BLOOD, FECES	82270	1	8
THROMBOPLASTIN TIME, PARTIAL	85730	32	29
TISSUE EXAM BY PATHOLOGIST	88304	3	
	88305	39	32
TOTAL CORTISOL	82533	6	3
TOXOPLASMA ANTIBODY	86777	326	46
TOXOPLASMA ANTIBODY, IGM	86778	73	11
TRANSFERASE (AST) (SGOT)	84450	33	7
TRICHINELLA ANTIBODY	86784	1	
TUBERCULOSIS TST CELL MEDIATED	86480		
IMMUNITY		685	299
URINALYSIS NONAUTO W/O SCOPE	81002	10	8
URINALYSIS, AUTO W/SCOPE	81001	2388	1102
URINALYSIS, AUTO, W/O SCOPE	81003	47	11
URINALYSIS, NONAUTO W/SCOPE	81000	92	33
URINE BACTERIA CULTURE	87088	89	58
URINE CULTURE/COLONY COUNT	87086	186	109
URINE PREGNANCY TEST	81025	19	
VARICELLA-ZOSTER ANTIBODY	86787	29	5
VENIPUNCTURE LB DHHS LABCORP	998085	126	36
VIRUS ANTIBODY NOS	86790	1	
VIRUS INOCULATE TISSUE, ADDL	87253	2	
VIRUS INOCULATION, SHELL VIA	87254	1	
VIRUS INOCULATION, TISSUE	87252	11	2

VIRUS ISOLATION; ID, NON-IMMUNOLOGIC	87255		
METHOD, OTHER		20	3
VITAMIN B-12	82607	191	117
WHITE BLOOD CELL (WBC) COUNT	85048	1	
X-RAY EXAM OF ANKLE	73600	1	2
	73610	1	2
X-RAY EXAM OF ELBOW	73080		3
X-RAY EXAM OF FINGER(S)	73140	1	
X-RAY EXAM OF FOOT	73620	1	2
	73630	6	5
X-RAY EXAM OF HAND	73120	1	1
	73130	4	4
X-RAY EXAM OF HEEL	73650	1	1
X-RAY EXAM OF HUMERUS	73060	1	2
X-RAY EXAM OF KNEE, 1 OR 2	73560		1
X-RAY EXAM OF KNEE, 3	73562	2	5
X-RAY EXAM OF LOWER LEG	73590		1
X-RAY EXAM OF LOWER SPINE	72100	4	6
	72110		1
	72114	3	
X-RAY EXAM OF NASAL BONES	70160		1
X-RAY EXAM OF NECK SPINE	72040	3	5
	72050	1	1
X-RAY EXAM OF RIBS	71100	2	
X-RAY EXAM OF SHOULDER	73030	6	6
X-RAY EXAM OF SINUSES	70220	1	
X-RAY EXAM OF TAILBONE	72220		1
X-RAY EXAM OF THORACIC SPINE	72070	1	
X-RAY EXAM OF TOE(S)	73660		1
X-RAY EXAM OF TRUNK SPINE	72080	1	
X-RAY EXAM OF WRIST	73100	3	
	73110		1
X-RAY EXAM, KNEE, 4 OR MORE			

84075

Los Angeles County Commission on HIV Aging Task Force CPT Codes for Geriatric Care (FOR INFORMATION ONLY)

Complex Chronic Care Management - 99487- Multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient. Chronic conditions place the patient at significant risk of death, acute exacerbation/ decompensation, or functional decline.

CPT- 99489- Each additional 30 minutes of clinical staff time directed by a physician or other qualified healthcare professional, per calendar month.

Chronic Care Management - 99490- Chronic care management services require at least 20 minutes of clinical staff time directed by a physician or other qualified healthcare professional, per calendar month, with multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient. Chronic conditions put the patient at significant risk of death along with functional decline in quality of life.

Chronic care management services, provided by a physician- 99491- Multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient. Chronic conditions place the patient at significant risk of death, acute exacerbation/ decompensation, or functional decline. Comprehensive care plan established, implemented, revised, or monitored

Information acquired from MLN Booklet: Chronic Care Management Services (https://www.cms.gov/Outreach-and-Education/Medicare-learning-Network-MLN/MLNProducts/Downloads/ChronicCareManagement.pdf) & CPT Codes to Improve Geriatric Care

(https://www.acoi.org/sites/default/files/uploads/YoungCPTCodesImproveGeriatricCare.pdf)



The Master Plan for Aging presents a comprehensive approach for every Californian to help build a California for All Ages by 2030.

The Plan identifies five bold goals and twenty-three innovative and flexible strategies for state and local leaders in government, business, philanthropic, and community-based organizations to collaborate. Each of these goals is in alignment with Governor Gavin Newsom's California for ALL vision.

The Master Plan for Aging for 2030 is to be considered a living document for the long-term. Just as California pivoted to ensure the safety and well-being of older adults in new and different ways during COVID-19 pandemic, the Master Plan will be nimble and responsive to shifting social and economic realities.

Beginning in 2021, the five bold goals will be powered by over 100 action-ready initiatives in the short-term that have already been adopted by state agencies for implementation, in partnership with stakeholders and the Legislature. (See page 22 for a detailed list of these proposals.) These initiatives will be continually informed by the publicly accessible, user-friendly, and routinely updated Data Dashboard for Aging, which will track the Master Plan's targets over ten years. Progress, updates, and new initiatives will be addressed in an annual report produced by the Administration.

The Master Plan for Aging's Five Bold Goals for 2030



GOAL 1: Housing for All Ages and Stages

We will live where we choose as we age in communities that are age-, disability-, and dementia-friendly and climate- and disaster-readv.

TARGET: Millions of New Housing Options to Age Well



GOAL 2: Health Reimagined

We will have access to the services we need to live at home in our communities and to optimize our health and quality of life.

TARGET: Close the Equity Gap in and Increase Life Expectancy



GOAL 3: Inclusion & Equity, Not Isolation

We will have lifelong opportunities for work, volunteering, engagement, and leadership and will be protected from isolation, discrimination, abuse, neglect, and exploitation.

TARGET: Keep Increasing Life Satisfaction as We Age



GOAL 4: Caregiving That Works

We will be prepared for and supported through the rewards and challenges of caring for aging loved ones.

TARGET: One Million High-Quality Caregiving Jobs



GOAL 5: Affording Aging

We will have economic security for as long as we live.

TARGET: Close the Equity Gap in and Increase Elder Economic Sufficiency



GOAL ONE

HOUSING FOR ALL AGES & STAGES

We will live where we choose as we age, in communities that are age, disability-, and dementia-friendly and climate- and disaster-ready.

TARGET: Millions of New Housing Options to Age Well

Older adults, like people of all ages, need housing options that meet changing needs across the decades. Housing that allows for different household sizes, with accessible transportation options,

welcoming parks and public spaces, and strong climate and disaster readiness, are foundational to well-being and continued engagement in civic, economic, and social life.

A wider range of housing models are emerging for the second half of life -- such as duplexes and accessory dwelling units to support multi-generational families and caregivers, and new models of residential communities with a range of services -and these models can be scaled. California's most well-known housing policy for older homeowners, Proposition 13, has limited property taxes to support affordability as people age; Proposition 13 may also have discouraged moving. The recently enacted Proposition 19 may encourage more older adults to consider moving into different homes and communities for the different stages of aging. While most older Californians are homeowners, older adults who rent homes are facing rising affordability challenges. Sharp gaps in home ownership

rates by race and ethnicity, due to the legacy of housing discrimination, means Latino and Black elders are more likely to be renters than White older Californians. Housing policies grounded in equity – for owners and renters, for all races and

all ages, for living alone and all household sizes – can begin to remedy discrimination and advance more housing options for all.

Local Model:
Age Well San Diego

Housing is essential to our ability to

with dignity. We must ensure that

meet our needs at every stage of

- Lourdes Castro Ramirez

all Californians have access to safe

and affordable housing options that

CA Business, Consumer Services,

and Housing Agency Secretary

Transportation choices beyond cars both help slow climate change and help adults live in homes of choice, especially after experiencing a decline in the physical mobility or the ability to safely drive. The future of transportation includes more choices for people of all ages ("multi-modal"). Some older adults and people with disabilities need specialized transportation services, such as door-to-door paratransit and escorts to physician's offices. Accessible transportation networks of buses and additional options keep people of all ages and abilities connected to services, social opportunities, and community activities.

California's climate and natural landscape offer some of the country's most beautiful parks and public lands. These spaces are integral to both mental and physical health, playing a critical role in promoting

social inclusion. While adults aged 60 and over account for 20 percent of the population, older adults only represent approximately 4 percent of total park users (although, at same time, they are the majority of State Park volunteers).¹

California's increasing wildfires and the COVID-19 pandemic have highlighted the pressing need for community design that improves our ability to remain safe during climate and human-made disasters, while also taking measures to prevent and prepare for them. While all Californians are impacted by climate change, some populations, including older adults, are more vulnerable than others to its dangers and health consequences.²

California will pursue Housing for All Ages and Stages through five strategies:

More Housing Options

California communities are increasingly developing more affordable housing options to meet the needs of all stages of life for all people, regardless of age, race, income, ability, or household size. The production, protection, and preservation of affordable housing, including Accessory Dwelling Units and Residential Care Facilities of all sizes, will support older adults, caregivers, and their families.

Transportation Beyond Cars

Age- and disability-friendly transportation networks can be strengthened through improved community walkability and expansion of bus and transit stops, transit rider education and subsidies, seamless paratransit across transit district lines, and driver safety education.

Outdoor & Community Spaces for All Ages

All Californians can benefit from more convenient park access within a ten-minute walk or less, co-location of parks with community centers offering programming for all ages, and incorporation of smart park technologies.

Emergency Preparedness & Response

Preparation and planning with and for older adults and people with disabilities is especially important to prioritize, given the higher risk of death or harm due to emergencies and disasters. Improving technologies and communications that address the access and functional needs of residents during disasters can also improve preparedness and response to these growing populations.

Climate-Friendly Aging

Age-friendly communities are naturally in alignment with environmentally friendly initiatives, including low-emissions transportation systems; walkable and low vehicle-miles-traveled (VMT) neighborhoods and cities; and in-home energy-saving modifications. Community planning can factor in climate impact and safety, including disaster resiliency, in new, updated, and rebuilt housing and transportation.

For a full list of each strategies' 2021-2022 Initiatives, see the next section or visit the MPA website. To find out how we are tracking our progress, visit the Data Dashboard for Aging.

Master Plan for Aging 13



GOAL TWO

HEALTH REIMAGINED

We will have access to the care and services we need to optimize our health and quality of life and to continue to live where we choose.

TARGET: Close the Equity Gap and Increase Life Expectancy

Health is a lifelong journey. To age well, from birth to 100-plus years old, all Californians need access to both health care and healthy communities across the lifespan. Tragically, the COVID-19 pandemic

is laying bare the health impacts of systemic racism over a lifetime, with disproportionate deaths by Latino, Black, and Native Hawaiian and other Pacific Islander adults who are 60 and over. More than 7,700 people in these categories died of COVID-19 in 2020. Vaccine distribution centered on equity by age and by race, among other factors, is key to California's response to the pandemic.

As we age, many adults find that the need to focus on health increases. Nearly half of all Californians will acquire one or more chronic illnesses. Nearly nine in ten older adults take at least one prescription drug, with one in four finding their costs to be unaffordable, even with insurance coverage.3 Older adults are also at particular risk for mental health issues, like depression. Access to health care at all ages is the foundation for healthy living and aging, and California leads the nation in health care coverage for older adults – most recently through the expansions of Medi-Cal and Covered California, California's health insurance exchange. Those still most at risk for not having access to comprehensive health care coverage include people with lower incomes, those living in rural areas, and those without citizenship status.

At the same time, services beyond health care are increasingly understood as essential to maintaining health and to aging well at home and in the community. For example, over half of

older adults, especially women, will eventually need home care or adult day health care to assist with

daily activities such as meal preparation, physical activity, and bathing. California's In-Home Supportive Services is a national leader in this model of care.

Aging is a universal process throughout the lifespan and health shapes this experience, across physical, emotional, social, spiritual, and functional dimensions. Individuals age in the context of their multiple identities, influenced by our communities of belonging and the challenges

- Fernando Torres-Gil **UCLA Luskin School of Public** Affairs; MPA SAC Member

Local Models: Inland Empire Health Plan Partners in Care Foundation

As more Californians live longer lives, more people will seek home or community care to support optimal health and to continue to live well within homes and communities of choice. Critically, these services are often unaffordable for individuals, particularly for middle income older adults covered by Medicare only, which still largely does not cover these home and community services. To provide the care needed for optimal health and choice as we age, medical services and non-medical supports

can be integrated and made accessible to people living both in home and in community. Ultimately, coordinated care between health plans and community organizations serving older adults and people with disabilities can improve lifelong health outcomes and life satisfaction.

Another byproduct of more Californians living longer is the need for more health care informed by geriatric expertise – yet only about 5 percent of providers have this training.⁴ California will need a larger health care workforce that is trained in geriatrics, including Alzheimer's and all dementias, and is more representative of the diversity within California. Dementia's growing impact requires urgent focus. The Governor's Task Force on Alzheimer's Prevention, Preparedness & Path Forward, led by the state's former First Lady Maria Shriver, spotlighted the 690,000 Californians aged 65 and older living with Alzheimer's Disease, a devastating illness with physical, emotional, and financial tolls that impacts not just those individuals, but also friends, families, caregivers, communities, and health systems.

For those adults requiring full-time health care, the COVID-19 pandemic has been a stark reminder of the vulnerability of Californians living and working in skilled nursing facilities (SNFs). While only 2 percent of our state's population live in these facilities, they account for over a third of the pandemic death toll.⁵ Preliminary data suggest a significant minority of long-term care residents who died of COVID-19 in 2020 had dementia. California's nursing homes can be national leaders in applying lessons learned and innovating new models of care for this most vulnerable population.

California will pursue Health Reimagined through six strategies:

Bridging Health Care with Home

Through innovative partnerships with the federal government, health plans, health systems, and community-based organizations, California can innovate and test new models of health care delivery that maximize access to services – and, as a result, avoid unnecessary institutionalization.

Health Care as We Age

California can continue to lead the nation in pursuing strategies to increase access across the spectrum of health care services, including modernizing Medicare counseling services and developing new generic drug manufacturing partnerships, to improve access and care options.

Lifelong Healthy Aging

By fostering healthy environments beginning at birth, expanding access to prevention programs, and developing culturally competent public health educational tools and services, California communities can reduce some of the greatest and most inequitable health disparities.

Geriatric Care Expansion

California is home to some of the foremost geriatric experts in the country. Expanding Geriatric Emergency Department certification and increasing geriatric training opportunities will ensure our health care system is staffed by teams including geriatricians and gerontologists, as well as nurses and social workers with geriatric training.

Dementia in Focus

California can lead the nation in both preventing cognitive impairment and improving the lives of Californians living with dementia through comprehensive and coordinated strategies on research, brain health awareness, public information portals and hotlines, standards of care for dementia, and dementia-friendly communities, among other forward-leaning recommendations from the Governor's Task Force on Alzheimer's.

Nursing Home Innovation

California can emerge from the COVID-19 pandemic with renewed commitment to innovation in quality care, including such areas as value-based payment and architectural redesign to smaller, more home-like environments.



GOAL THREE

INCLUSION & EQUITY, NOT ISOLATION

We will have lifelong opportunities for work, volunteering, community engagement, and leadership and will be protected from isolation, discrimination, abuse, neglect, and exploitation.

TARGET: Keep Increasing Life Satisfaction as We Age

Older adults have many essential roles in California's communities: workers, business owners, volunteers, community leaders, mentors, lifelong learners, neighbors, friends, family members, and more. Each of

these roles can provide a vital sense of purpose at any age. A cornerstone of building a California for all ages is continuing, evolving, and creating new opportunities for meaningful engagement at 60, 70, 80, 90, and 100-plus years old.

Digital technologies are fostering new opportunities for connection and inclusion for work, play, community, culture, and commerce. However, over two million Californians do not have access to high-speed internet and approximately 34 percent of adults over 60 do not use the Internal at all.⁶ The COVID-19 pandemic has brought these issues into greater focus and heightened the need for improved access to broadband, digital devices, and technology support for older adults.

Employment and volunteer opportunities, particularly those offering intergenerational engagement, can provide a powerful sense of purpose and connection. Over the past five years, Californians over the age of 55 accounted for 29 percent of all new employment. Many older adults need or want to keep working – at least part time. However, two thirds of older adults seeking employment cite age discrimination as a challenge to finding work.

Older adults can also be a major source of volunteers. Many older adults, especially if paid work and caregiving responsibilities become lighter, choose to devote time and Equity should be at the center of the Master Plan for Aging's implementation. Systemic racism, ageism, able-ism, and sexism can only by eliminated through intentional systemic solutions. It's time to transform our systems so that they may positively impact the lives of those most affected by historical and institutionalized discrimination and who, therefore, have disproportionately suffered during

Kiran Savage-Sangwan, MPA
 California Pan-Ethnic Health Network

COVID-19.

Local Model:
Los Angeles' Purposeful Aging LA (PALA)

energy to their communities – for example serving at food banks, as tutors to young children, and as poll workers.

One of the greatest threats to full inclusion and equity for all ages is elder abuse, which is estimated to impact 10 percent of older adults living at home and to result in losses totaling in the billions of dollars annually. Elder abuse can take many forms, including physical, sexual, abandonment, isolation, financial, neglect, self-neglect, and mental suffering. Women are as much as 35 percent more likely than men to suffer from some form of it. Our growing aging population requires increased planning and coordination to prevent growing abuse.

To build a California for all ages, all stakeholders and partners agree: leadership is key. California has a long tradition of extraordinary aging leadership, stretching back decades. (see Listening to our Elders). The State now has a growing and diversifying community of leaders at all levels poised to build on this foundation for the future, bringing forward the best of proven practices and new innovations to meet the needs of people we serve. Throughout this network, older adults and people with disabilities are the true leaders and essential participants in all planning, policy, programs, and advocacy.

California will pursue inclusion and equity, and prevent isolation, through six strategies:

Inclusion and Equity in Aging

As the most racially, ethnically, and linguistically diverse state in the nation, California can lead in combatting ageism, ableism, racism, xenophobia, sexism, homophobia, and all prejudices and in expanding opportunities for all older adults and people with disabilities to be economically, civically, and socially engaged, without experiencing discrimination or bias. California's aging and disability leaders, providers, and partners are committed to becoming increasingly culturally responsive through strategies including trainings, data collection, public campaigns (including with partners in California's entertainment industry), and targeted equity and inclusion goals in workforce, service planning, and service delivery.

Opportunities to Work

Scaling flexible work and education models, including virtual options, and preventing age discrimination in the workplace, can increase the inclusion of older adults and people with disabilities and harness all of California's talent, professionalism, knowledge, and expertise.

Opportunities to Volunteer and Engage Across Generations

Volunteer programs for community priorities can intentionally and effectively recruit, support, and connect adults of all ages through volunteer centers, schools, community sites, libraries, and more.

Closing the Digital Divide

In August 2020, Governor Gavin Newson signed Executive Order N-73-20 to deploy affordable and reliable broadband throughout the state. Closing the digital divide by increasing access to the internet and digital devices will improve the ability of older adults and people with disabilities to connect to family and friends, health care providers, and to access additional support during the COVID-19 pandemic and beyond.

Protection from Abuse, Neglect & Exploitation

Through new statewide coordinated efforts focused on prevention and equity, California can strengthen prevention and responses to elder abuse, neglect, exploitation, and fraud with person-centered, datadriven, and culturally competent approaches.

California Leadership in Aging

Strategies to advance California's leadership include establishing public information, assistance, and resource connection portals and telephone networks that serve the entire state; facilitating a nation-leading aging research collaboration with California's leading universities; participating in AARP's Age-Friendly initiative; forging international agreements; and reviewing and strengthening state and local government leadership and partnership structures, including those related to the California Department of Aging and local Areas Agencies on Aging.

For a full list of each strategies' 2021-2022 Initiatives, see the next section or visit the MPA website. To find out how we are tracking our progress, visit the Data Dashboard for Aging.

Master Plan for Aging 17



GOAL FOUR

CAREGIVING THAT WORKS

We will be prepared for and supported through the rewards and challenges of caring for aging and disabled loved ones.

TARGET: One Million High-Quality Direct Care Jobs

At some point in our lives, most Californians will seek care from family, friends, or paid caregivers.

Likewise, most Californians will also have the privilege and responsibility of caring for an older loved one. The COVID-19 pandemic has meant even more of us are in one or both of those roles, in more challenging

circumstances. Supporting caregiving for adults, like caregiving for children, is essential for family life, the

economy, and a California for all ages.

Across California, almost five million family caregivers help their parents, spouses, and friends who need assistance with everyday tasks to live well in their homes and communities. Of these, almost 1.7 million are caring for someone with Alzheimer's Disease or dementia, usually with little support or training. This constitutes about 4 billion hours of unpaid time, valued at \$63 billion, each year. Women, particularly Black, Indigenous, Latino, and Asian-American women, are providing a disproportionately large share of this care – often while simultaneously caring for children. Households of color are more likely than white households to be multi-generational, which may indicate these families are more likely to be providing unpaid caregiving across the generations.8 As rewarding as this work may be, the time needed to care for a loved one can result in financial hardship and a decrease in lifelona Social Security earnings, which can continue the cycle of poverty and debt for low-income households. The emotional and physical stress of caregiving can also lead to poor health outcomes for the family caregiver.

Paid caregiving is essential to older adults' ability to choose where to live. Caregivers provide direct care in many settings – in private homes, through community-

homes, such as assisted living facilities or nursing homes.

based services like adult day centers, or in residential care



Caregivers of family and friends too often have to choose between their own health and financial needs and caring for a loved one. Caregivers need culturally competent options that not only improve their own health and person for whom they are caring. Accessible and affordable long term services and supports, paid family leave, resources and training, and assistance navigating services caregiving families in California.

– Donna Benton USC Leonard Davis School of

Local Model:

Healthcare Career Pathways - Ombudsman of Contra Costa, Solano, and Alameda

In the coming years, California will face a labor shortage up to 3.2 million paid direct care workers.° Direct care workers earn less than half of California's median annual income and one in four falls below the federal poverty line. Most caregiving jobs are held by women; many are immigrants, and they are twice as likely as other Californians to live in low-income households. Low wages, stress, and an elevated risk of job-related injury reduce prospects for financial stability for those employed in the caregiving workforce.

As the population age, and the need for caregiving increases, virtual caregiving and telehealth will become more vital for empowering aging adults, people with disabilities, and caregivers to age well at home. However, recent research has shown that older adults with dementia, hearing loss, and impaired vision may have a hard time using digital devices and programs designed without their needs in mind. The lessons from COVID-19's rapid pivot to telehealth, coupled with California's global leadership in the tech sector, have the potential to drive transformative advances in virtual care.

California will pursue Caregiving that Works through three strategies:

- Family & Friends Caregiving Support
 - Family caregivers need supports such as paid family leave, multilingual training resources, virtual care options, and respite so that the role remains rewarding and caregivers can maintain health, well-being, and income while caring for a loved one. Given that lower-income women, particularly women of color, disproportionately provide family caregiving, resources and support should be tailored and prioritized accordingly.
- Good Caregiving Jobs Creation

 The caregiving workforce can be grown through caregiver training and professional development opportunities, along with livable wages, job placement support, and improved job quality. Higher wages will help paid caregivers work toward financial security, alleviate economic disparities, and better reflect the true value of their work.
- Virtual Care Expansion

 New technologies, many pioneered in California, are paving the way for innovations in personal devices, smart home and community design, telehealth and more, and have the potential to help support caregiving and aging well across the state, nation, and alobe.

For a full list of each strategies' 2021-2022 Initiatives, see the next section or visit the MPA Website.

To find out how we are tracking our progress, visit the Data Dashboard for Aging.



GOAL FIVE

AFFORDING AGING

We will have economic security as long as we live.

TARGET: Close the Equity Gaps and Increase Elder Economic Security

Economic security is essential to living and aging well, but retirement income is being outpaced by the rising costs of housing, health, and care. Further, retirement income has traditionally relied on a combination

of three sources for stability: individual savings, employerpaid pensions, and Social Security. However, individual retirement savings are lower than previous generations, and private pensions are declining. As a result, more older Americans and Californians are overly reliant on Social Security income alone and therefore more vulnerable to poverty. Women are particularly at risk because of work that did not count towards Social Security earnings (such as domestic work and unpaid family caregiving) and longer lifespans.

As a result, many middle-income Californians are experiencing downward economic mobility with age. Nearly half of all U.S. households are headed by someone aged 55 or older with no retirement savings.11 One quarter of people over 65 rely almost entirely on their Social Security benefits, which average about \$1,500 per month for retired workers and \$1,250 per month for disabled workers. With California's fair market rent for a one-bedroom apartment at \$1,522, many older renters are left with little or no money for food, healthcare, and other expenses. California has the second highest rate of poverty among older adults in the country, leading to high levels of hunger and increasing homelessness. Approximately 20 percent of all people 65 and over in California live in poverty; however, the portion of Black, Indigenous, and Latino older adults living in poverty is double that.¹²

A particularly alarming trend is that residents over age 50 are now the fastest growing population of homeless

among the wealthiest families, combined with increasing housing and health care costs, dwindling pension plans, and low savings among most households threatens the retirement security of many working Californians. CalSavers is a great start and through innovative

policy options and tailored

The concentration of financial assets

Nari Rhee, PhD
 UC Berkeley Labor Center, MPA
 SAC Member

outreach, California can encourage

employers and individuals to build

Local Model:

San Francisco's Project Homekey and Meals

Expansion during COVID-19

people in many parts of the state, with the median age of the homeless expected to rise. Black men are disproportionately represented within the population of older Californians without homes, reflecting cumulative effects of decades of inequities in housing, education, employment, and criminal justice. The harsh reality of aging without a stable home includes dire health impacts: older adults without homes experience health problems that you would typically see in people who are 20 years older, including cognitive decline and decreased mobility.¹³

California will pursue Affordable Aging through three strategies:

End Homelessness for Older Adults

California will continue to invest in innovative solutions to prevent older adult homelessness, reduce barriers to accessing housing programs and services, and promote the transition of those experiencing homelessness to affordable and accessible housing models, with supportive services.

Income Security as We Age

Challenges require multiple approaches: For income, California will pursue partnerships to assess and strengthen all three sources – individual savings, employer-based retirement, and Social Security – and to expand employment opportunities and economic security at all ages. For expenses, reducing housing and health costs (as discussed in goal one and two) will increase elder economic security.

Protection from Poverty & Hunger

The federal/State safety net for older adults and people with disabilities, Supplemental Security Income/State Supplementary Payment (SSI/SSP), has not kept up with poverty levels. A recent state budget agreement proposes to begin to address the SSP in January 2022. The hunger and nutritional needs of older Californians need greater assessment and coordination to provide affordable and culturally appropriate foods through CalFresh (SNAP), food banks, meal delivery at home, congregate meals at day centers and long-term care facilities, farmers markets, and medically tailored meals, among others.

For a full list of each strategies' 2021-2022 Initiatives, see the next section or visit the MPA website.

To find out how we are tracking our progress, visit the Data Dashboard for Aging.

California Master Plan for Aging (MPA) Equity in Aging Advisory Committee

Tuesday, March 16th, 2021 | 2:00 – 4:00 p.m.







Meeting Logistics

Telephone or webinar (Zoom) only - No in-person meeting

Telephone: Join by phone: 888-788-0099

Webinar: Join by smart phone, tablet, or computer

Meeting ID: 913 3087 6257 Password: 337259

Live captioning streamed through webinar (Zoom)

ASL interpreting streamed through webinar (Zoom)

Meeting slides, transcript, and recording will be posted online





Public Comment

Public comments during meeting, as on agenda and announced:

Attendees joining by **phone**, press *9 on your dial pad to join line. The moderator will announce the last 4 digits of your phone number and will unmute your line.

Attendees joining by **webinar (Zoom)**, click the raise hand button to join line. The moderator will announce your name or your last 4 digits of your phone number and will unmute your line.

For additional public comment, email Engage@aging.ca.gov



Welcome, Introductions, and Overview

Kim McCoy Wade

Director, California Department of Aging (CDA)

Rigo Saborio

President & CEO, St. Barnabas Senior Services

Kevin Prindiville

Executive Director, Justice in Aging

Denny Chan

Directing Attorney, Equity and Racial Justice Advocacy, Justice in Aging



Equity in Aging Advisory Committee Members

Berenice Nuñez Constant, AltaMed

Betsy Butler, CA Women's Law Center/Los Angeles Probation Commission

Catherine Blakemore, Disability Rights CA

Cheryl Brown, Advocate & Former Assembly Member

Darrick Lam, ACC Senior Services

Denny Chan, Justice in Aging

Donna Benton, USC Leonard Davis School of Gerontology

Edie Yau, Alzheimer's Association

Kiara Harris, Sistahs Aging with Grace & Elegance



Equity in Aging Advisory Committee Members, Cont.

Jeffrey Reynoso, Latino Coalition for a Healthy CA

Kevin Prindiville, Justice in Aging

Marcy Adelman, CA Commission on Aging

Marielle Kriesel, Disability Community Resource Center

Marty Lynch, LifeLong Medical

Michael Murray, AARP California

Rigo Saborio, Saint Barnabas Senior Services

Valentine Villa, CA State University, Los Angeles



Meeting Agenda

- 2:00 2:05: Introductions & Welcome Kim McCoy Wade, CDA
- 2:05 2:25: Equity, MPA & CDA Updates Kim McCoy Wade, CDA; Amanda Lawrence, CDA
- 2:25 2:55: COVID-19 Response, Vaccines & Equity Discussion- Kevin Prindiville, Justice in Aging
- 2:55 3:20: Digital Divide Updates Mark Beckley, CDA; Rigo Saborio, St. Barnabas Senior Services
- 3:20 3:40: Committee Structure Discussion- Denny Chan, Justice in Aging; Carmen Gibbs, CDA
- 3:40 3:55: Public Comment
- 3:55 4:00: Closing & Next Steps Kim McCoy Wade, CDA



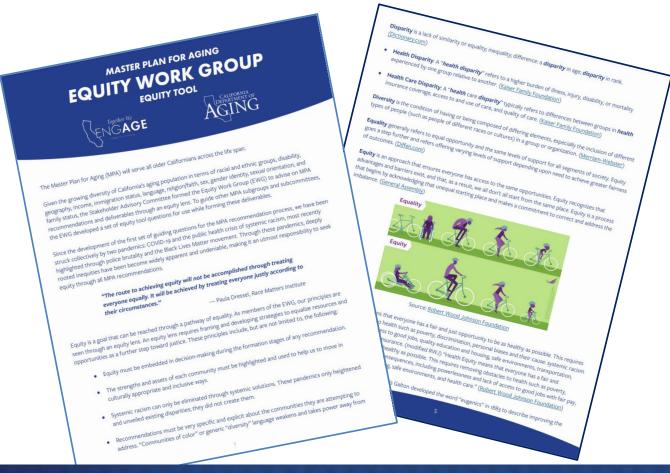
Equity, Master Plan for Aging, and Department of Aging Updates

Kim McCoy Wade, CDA & Amanda Lawrence, CDA





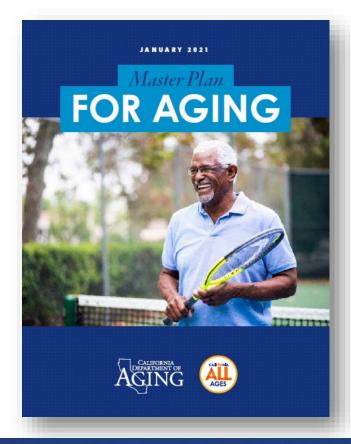
Equity Work Group: 2020 Accomplishments



- Developed <u>Equity Tool Questions</u> to Frame all MPA Recommendations
- Developed an <u>Equity Glossary</u>
- Advising on COVID-19 Response
- Provided Formal Recommendations to the Administration



Master Plan for Aging: Five Bold Goals for 2030 Equity Infused Throughout The Ten-Year Plan





Goal 1: Housing for All Ages and Stages



Goal 2: Health Reimagined



Goal 3: Inclusion and Equity, Not Isolation



Goal 4: Caregiving that Works



Goal 5: Affording Aging



Master Plan for Aging Updates: Implementation

GOAL THREE: Inclusion & Equity, Not Isolation

We will have lifelong opportunities for work, volunteering, engagement, and leadership and will be protected from isolation, discrimination, abuse, neglect, and exploitation.

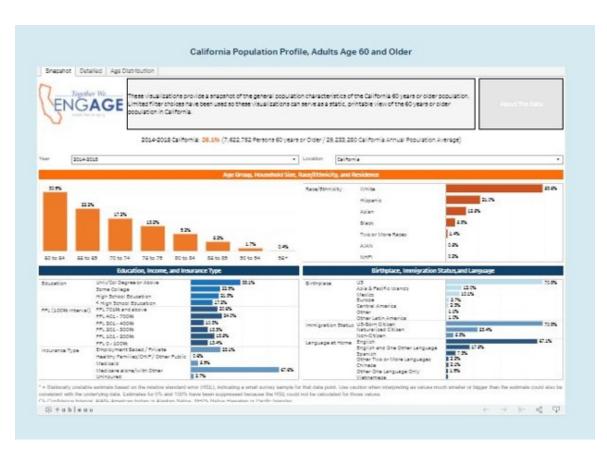
Strategies:

A. Inclusion and Equity in Aging

- B. Closing the Digital Divide
- C.Opportunities to Work
- D. Opportunities to Volunteer and Engage Across Generations
- E. Protection from Abuse, Neglect & Exploitation.
- F. California Leadership in Aging



The Data Dashboard on Aging



Visit the **Data Dashboard on Aging** to follow the MPA's progress over the next ten years, as well as to explore aging and disability demographics, including data at the local level.

Demographic Dashboard (state & local):

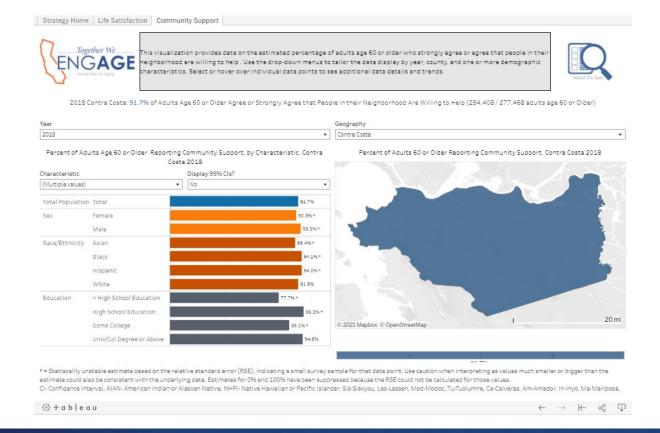
- Education
- FPL
- Insurance Type
- Immigration Status
- Language at Home
- Race/Ethnicity
- Birthplace
- + More to come



The Data Dashboard on Aging: Goal 3 Indicators

Strategy A: Inclusion & Equity in Aging

Learn more about this strategy»



Goal 3 Indicators include:

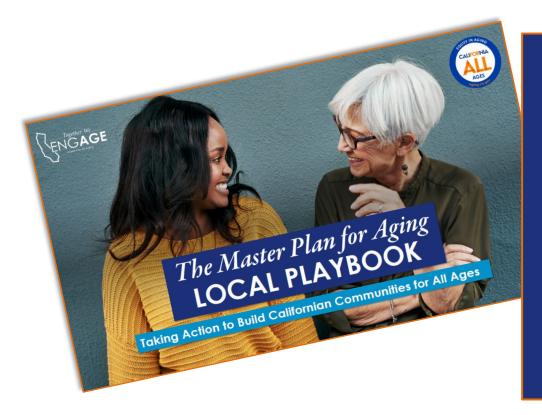
- Life Satisfaction
- Community Support
- Employment & Housing Discrimination

Continually expanding and improving as data become available

(sample: Contra Costa community support)



Master Plan for Aging: Local Playbook Equity Baked Into Your Planning



🍀 Play Five: Build Your Action Plan



Once you've determined your project's focus, it's important to develop a clear scope of work with goals, objectives, strategies, and evaluation measures. Age-friendly community, program, and project planning resources are below.

+ Age-Friendly Community Planning Resources

- Equity Baked Into Your Planning

- League of California Cities: Advancing Equity
- California Department of Aging: Ensuring Equity in Aging Resource Center
- California Department of Aging: California for ALL Ages anti-ageism resources
- An Intersectional Approach to Services and Care for LGBT Elders
- American Planning Association: Equity Resources



Master Plan for Aging Implementation: Next Steps

- Ten Cabinet Agencies + strong partnership with local leaders, private sector, federal government, and all stakeholders, will launch over 100 initiatives w/in first 2years.
- Implementing Master Plan for Aging in California Together (IMPACT)
 Committee to be announced shortly. Will advise on the administration & implementation of MPA.
- Existing and new stakeholder committees will continue to drive policy and program priorities including LTSS, Elder Abuse and Justice, and Equity in Aging.
- The Governor's 2021-22 Budget includes both <u>targeted new, and continuing</u>, <u>investments in aging</u>
- Several pieces of 2021 legislative bills related to MPA



Department of Aging Updates: Implementation of Equity Initiatives

MPA Goal 3 Inclusion & Equity, not Isolation
 Strategy A, Inclusion and Equity in Aging

- CDA COVID 19 Response & Equity



- CHHS Language Access (Initiative 75)
- Equity-Centered Communications (Initiative 76)
- Equity in Aging: Ongoing Addition of Resources
 & Monthly Webinars (Initiative 77)
- CARES Funding (Initiative 78)
- CDA's CCORE Cohort: CCORE-AGE (Initiative 79)
- Equity in Aging Advisory Committee (Initiative 80)



Focus: Improved Language Access

Initiative 75: Continue to expand culturally and linguistically competent communications to older adults, people with disabilities, and families (Lead Agencies: CHHS, GovOps)

Status: Language Access Workgroup Report Submitted to Agency



Focus: Anti-Ageism and Equity-Centered Communications

Initiative 76: Utilize private partnerships and existing funds to implement antiageism and equity campaign ("California for All Ages") with public, employers, and entertainment industry, including equity by age, race, ethnicity, language, citizenship status, sex, gender identity, sexual orientation, family status, disability, dementia/cognitive status, and income.

Status: CDA hired a Communications Director 3/2021, Initiative 76 reflected in workplan.



Focus: Culturally Informed Service Delivery

Initiative 77: Continue new "Equity in Aging" Provider Peerto-Peer Training for aging networks. (Lead Agency: CHHS)

Status: Began in November 2020 and continues



Ensuring Equity in Aging "Peer-to-Peer" Webinar Series



By and for aging service providers addressing the intersection of aging & equity.

First Wednesdays, 10-11AM

March 7: Culturally Informed Policy & Programs With and For Latino Older Adults

Register in advance, ASL & CC provided

Visit CDA's Equity in Aging Resource Center





Focus: Ensuring Our CV19 Work is Effective and Improves Equity

Initiative 78: Produce report on CARES funding to Older American Act programs on impact and equity. (Lead Agency: CHHS)

Status: In progress





Focus: Ensure Diverse Representation and Leadership at CDA

Goal 3, Initiative 79: Set and work towards diversity, equity, and inclusion goals for representation in aging and disability departments and related State boards, such as CDA, DOR, Commission on Aging, and more. (Lead Agency: CHHS)

Status: CDA's <u>CCORE-AGE Cohort</u> began in 2020; Activities thus far: Assessment Continuum, Root Cause Analysis, Communicating About Race



Focus: Ensure Equity is Baked into MPA Implementation & CDA Activities

Goal 3, Initiative 80: Convene a stakeholder Equity in Aging

Advisory group. (Lead Agency: CHHS)

Status: You are here. @





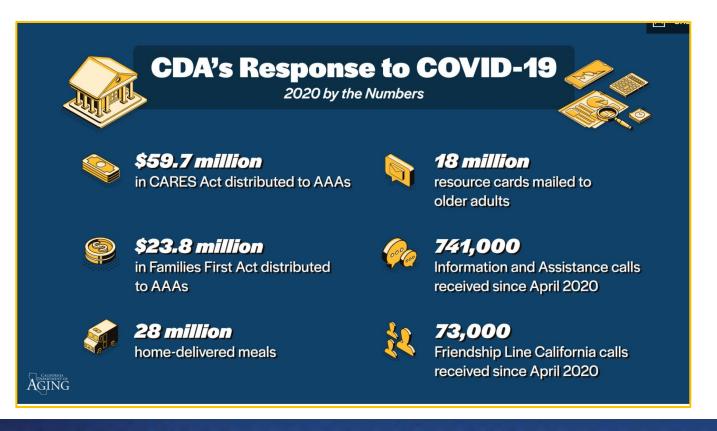
MPA Implementation Updates: Goal 3

More updates soon on Goal 3 activities soon, such as:

- Bridging the digital divide(strategy B)
- Intergenerational & diverse volunteerism and program models (strategy D)
- "Elder story" project in partnership with State Library (strategy D)
- CA joining AARP's Age-Friendly Network (strategy E)
- University research partnership (strategy F)
- Elder Justice Coordinating Council (strategy F)
- And more!



Department of Aging Updates COVID-19 Response Activities Continue









COVID-19 Response, Vaccines & Equity Discussion

Kevin Prindiville, Justice in Aging



VACCINATION HELPS END THE PANDEMIC:

Getting vaccinated will help us <u>reopen the</u>
<u>economy</u> and relieve severely impacted
hospitals and communities.

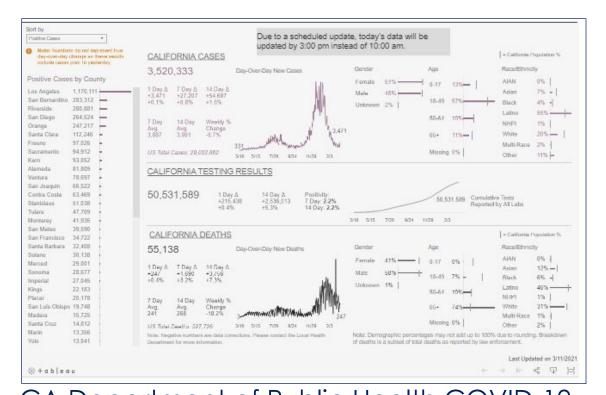
covid19.ca.gov/vaccines





ENGAG state for for Aging

COVID-19 Response, Vaccines & Equity Discussion



CA Department of Public Health COVID-19

<u>Data Dashboard</u>

Vaccination and community health conditions (Vaccine Equity Metric)

This graph compares COVID-19 vaccinations among four different levels of community health, like income,

This graph compares COVID-19 vaccinations among four different levels of community health, like income,

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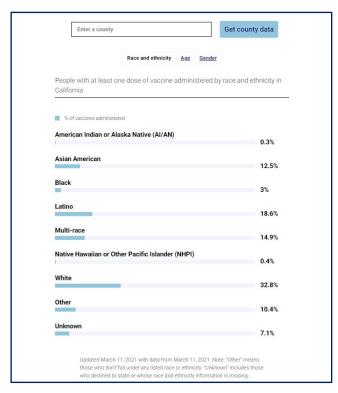
This graph compares COVID-19 vaccinations among four different levels of community

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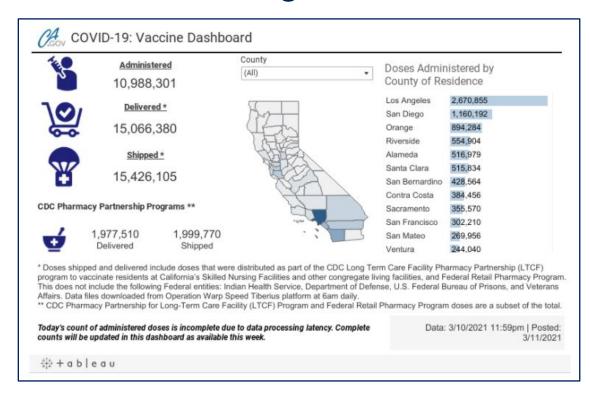


COVID-19 Response, Vaccines & Equity Discussion



Vaccine Equity Metric

Vaccination Progress Dashboard







Digital Divide Updates

Mark Beckley, CDA & Rigo Saborio, St. Barnabas Senior Services



CDA: Digital Divide Background

Governor Newsom issued Executive Order N-73-20 on 8/14/2020

- "The California Broadband Council is requested to create a new State Broadband Action Plan"
- "CDA, in partnership with CDT and CPUC, is directed to analyze the needs of people ages 60 and older for access to affordable, reliable, high-speed broadband, and to identify program and partnership opportunities to close the digital divide among older Californians."



Digital Divide Background: Broadband Access

The Humana Foundation, with Older Adults Technology Services, released a report 1/2021

22 million older Americans still lack wireline broadband access at home (42 percent of the nation's over-65 population).

Lack of Internet Access and Income

Medicaid enrollees are 2.7 times more likely to be offline Older adults with < high school diploma or incomes < \$25K are 10x more likely to be offline

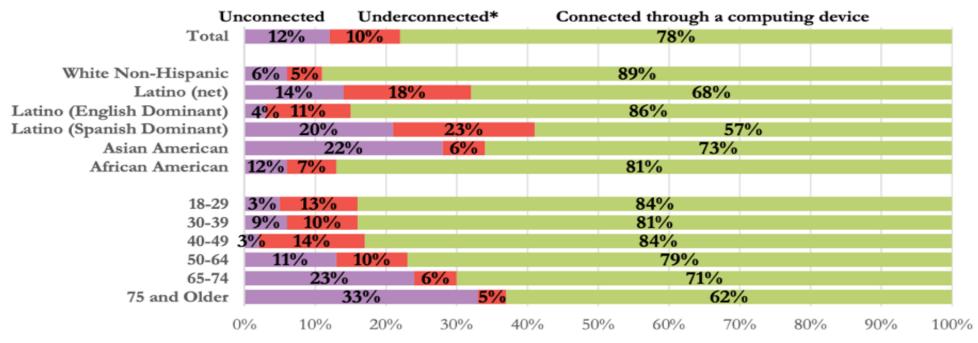
Lack of Internet Access and Equity

Those with functional impairments are 2 times as likely to be offline. Black and Latino seniors are 2.5 and 3.3 times, respectively, to be offline.



Table 4a

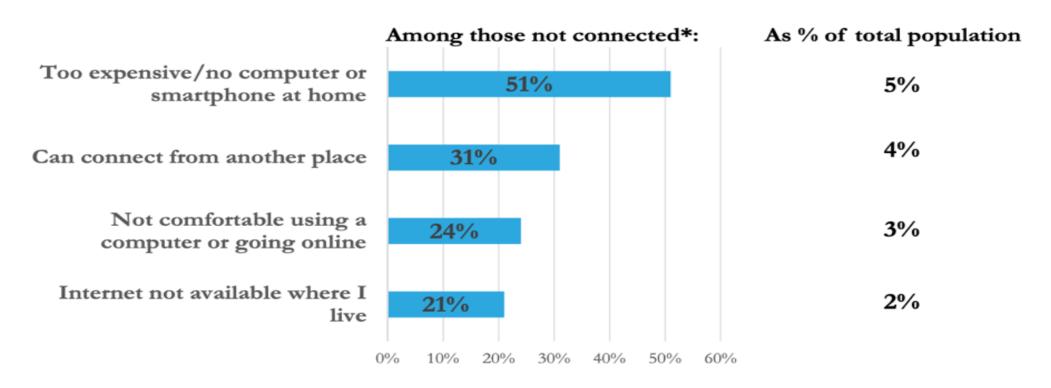
Type of Internet Connectivity within California Households across Demographic Subgroups: (1) Age and Race/Ethnicity



Type of Internet Connectivity at Home

^{*}Connected through a smartphone only

Table 6
Self-Reported Reasons for Lack of Internet Connectivity at Home



^{*}Percentages add to more than 100% due to multiple mentions

CDA Digital Divide Project #1: Google Smart Speakers

- Google donated 8,573 smart speaker devices to CDA
- Devices distributed to local Area Agencies on Aging and Multipurpose Senior Services Sites
- Devices will be distributed to low-income older adults
- Devices will help with phone calls, calendaring, reminders, music & more
- Evaluations will measure success of project in reducing feelings of loneliness and isolation and providing assistance with daily tasks



CDA Digital Divide Project #2: iPad Tablet Pilot

4,000 iPads purchased from AT&T using CARES Act Funding

- 2 year data plans
- Dedicated AT&T training and technical support to device recipients

Tablets distributed to low-income older adults who live alone & do not own a device.

CDA partnering with USC Graduate School of Gerontology to measure isolation reduction through readiness assessment, pre and post evaluations



Other Projects/Partnerships to Bridge the Digital Divide

- Partnering with a foundation on a digital education/literacy project
- Continuing to seek additional philanthropic opportunities for device donations
- Exploring low-cost data plans and plan subsidies for low-income older adults
- Exploring other technology and partnerships such as electronic pets, fall detection devices, and partnerships with local access tv stations to produce more age-friendly content.
- CDA's Digital Divide Page: https://aging.ca.gov/covid19/Digital_Divide/



Issue not only access to broadband, but to lack of knowledge/skills

Need age-sensitive, race, culturally & linguistically training appropriate by trusted providers.

AARP National Survey (March – May 2020)

Of the ~2/3 of respondents interested in telehealth services: 85% say they would use it to renew prescriptions, 79% note they would use telehealth for help in caregiving, 75% in discussing new medical issue, and 74% for routine visit to the doctor

Lack of knowledge on how to use telehealth & concerns about possibility of medical errors, or the confidentiality of health information, noted by nearly ½ of respondents as barriers

Respondents ages 65+ cite lack of access to computers and to high-speed Internet, along with lack of knowledge on use, as barriers to using telehealth services.





New Committee Structure Discussion

Denny Chan, Justice in Aging & Carmen Gibbs, CDA



Public Comment

Public comments during meeting, as on agenda and announced:

Attendees joining by **phone**, press *9 on your dial pad to join line. The moderator will announce the last 4 digits of your phone number and will unmute your line.

Attendees joining by **webinar (Zoom)**, click the raise hand button to join line. The moderator will announce your name or your last 4 digits of your phone number and will unmute your line.

For additional public comment, email Engage@aging.ca.gov



Next Steps

Kim McCoy Wade









2021-22 Governor's Budget: Investments for Aging

The 2021-22 Governor's Budget includes significant new investments that will benefit the growing and diversifying aging population in California, currently totaling 8.6 million older adults age 60 and over, as well as people with disabilities and caregivers.

The Governor's January budget proposes investments to advance the goals of the Master Plan for Aging, released on January 6, 2021 (https://mpa.aging.ca.gov/). The Plan was informed by valuable input from the public, stakeholders, the Legislature, and the Cabinet Work Group, as well as the Governor's Task Force on Alzheimer's Disease Prevention and Preparedness. The Master Plan sets forth five bold goals for 2030 with 23 strategies and outlines over 100 specific initiatives for 2021-22 — such as building housing for all ages, improving access to health services at home and in the community, providing inclusive and equitable opportunities for seniors to live and work without fear of abuse and neglect, bolstering the caregiving workforce, and increasing economic security for aging Californians.

The Governor's January Budget includes both overarching proposals to advance a California for All that will benefit all Californians as we age, as well as targeted new, and continuing, investments in Aging. These investments are proposed across multiple departments in the California Health and Human Services Agency, including CDA. Also, of note, the federal government continues to support state and local aging programs during the COVID crisis with additional stimulus funding included in H.R.133 - Consolidated Appropriations Act, 2021. Those investments are summarized at the end of the document.

Targeted New Investments for Aging Well

Aging and Disability Resource Connection (ADRC)
[\$7.5 million GF in 2021-22; half-year \$5 million GF in 2022-23]

The Governor's Proposed 2021-22 Budget includes \$7.5 million in 2021-22 and half-year funding of \$5 million in 2022-23 for the statewide expansion of the State's Aging and Disability Resource Connection (ADRC) program subject to suspension on December 31, 2022 based on available General Fund resources in the 2022 Budget Process. If not suspended, resources are proposed to continue at an ongoing, full-year, funding level of \$10 million. The ADRC program, also known as "No Wrong Door," which was a key recommendation of both the Master Plan for Aging Stakeholder Advisory Committee and the Task Force on Alzheimer's. The ADRC program is the State's only coordinated "one-stop" telephone and on-line access which enables a single point of entry for older adults and people with disabilities, regardless of age, income, or disability, to navigate their local systems of long-term services and supports. ADRC programs provide warm

2021-22 Governor's Budget Investments for Aging

hand-off information and referral/assistance services, person-centered options counseling, short-term service coordination during times of crisis, and transition services from hospitals to home and from skilled nursing facilities back into the community. There are currently 6 designated and 10 emerging ADRC programs in the state and this funding will enable the establishment of ADRC programs throughout the State.

Office of Medicare Innovation and Integration

The Administration intends to submit a proposal in the spring for State Operations to establish a new Office of Medicare Innovation and Integration that will explore strategies and models to strengthen and expand low and middle-income Californian's access to high-quality services and supports, while developing new partnerships with the federal government.

Bold and Equitable Path Forward on Alzheimer's [\$17 million GF one-time]

The Budget proposes a comprehensive and coordinated approach to Alzheimer's with an emphasis on communities of color and women, who are disproportionately susceptible to the disease and the primary providers of caregiving. Investments to be administered by the Department of Public Health are five-pronged: \$5 million one-time General Fund for a public education campaign on brain health; \$4 million one-time General Fund for new training and certification for caregivers; \$2 million one-time General Fund for expanded training in standards of care for health care providers; \$2 million one-time General Fund for grants to communities to become dementia-friendly; and \$4 million one-time General Fund for research to strengthen California's leadership on disparities and equity in Alzheimer's.

Expand Facilities to Support Housing [\$250 million GF one-time]

The Budget includes \$250 million one-time General Fund for the Department of Social Services to acquire and rehabilitate Adult Residential Facilities (ARFs) and Residential Care Facilities of the Elderly (RCFEs) with a specific focus on persevering and expanding housing for low-income seniors who are homeless or at risk of becoming homeless.

IHSS COVID-19 Back-Up Provider System [\$5.3 million GF one-time]

The Budget includes \$5.3 million one-time General Fund in 2021-22 to extend the back-up provider wage differential to avoid disruptions to caregiving until December-2021. The Administration will evaluate the need of an IHSS provider back-up system for severely impaired individuals as the state recovers from the effects of the COVID-19 pandemic.

Increased Geriatric Care Workforce [\$3 million GF one-time]

The Budget includes \$3 million one-time General Fund for the Office of Statewide Health Planning and Development to grow and diversify the pipeline for the geriatric medicine workforce, as the increasing and diversifying numbers of older adults living longer lives require developing a larger and more diverse pool of health care workers with experience in geriatric medicine.

Senior Advisor on Aging, Disability, and Alzheimer's

The Governor will appoint a Senior Advisor on Aging, Disability, and Alzheimer's to advance cross-Cabinet initiatives and partnerships between government, the private sector, and philanthropy, such as closing the digital divide, transportation options beyond driving, and caregiving workforce solutions, for Californians of all ages.

Master Plan for Aging Placeholder Funding [\$5 million GF]

The Governor's Budget includes \$5 million General Fund in placeholder funding for spring proposals to further implement the Master Plan for Aging.

Continuing Investments in Aging

Home and Community Living

Senior Nutrition [\$17.5 million GF annually, extended until 12/31/22]

The 2020 Budget Act included \$17.5 million General Fund for the Older Americans Act (OAA) Senior Nutrition program (SNP) that was originally set to suspend on 12/31/21. The suspension date of this funding is proposed to be extended until 12/31/2022 which will enable local Area Agencies on Aging (AAAs) to expend the full \$17.5 million in 2021-22. The OAA SNP provides both home-delivered and congregate meals at community and senior centers, nutrition education, and nutrition-risk screening to individuals aged 60 or older.

Total baseline funding for OAA SNP is \$117.8 million (\$26.1 million GF). The baseline funding for OAA SNP was able to provide 19,325,463 meals to 222,448 unduplicated participants in 2019-20. With additional federal Families First Coronavirus Response Act (FFCRA) and Coronavirus Aid, Relief, and Economic Security (CARES) Act funds, the AAAs were able to provide an additional 2,825,981 meals to older adults in 2019-20.

Supportive Services & Family Caregiving [\$61.5 million (\$296,000 GF)]

Older Americans Act Titles III and VII fund services to enable individuals to access the support necessary for them to remain independent in their communities, continue in their caregiving role,

2021-22 Governor's Budget Investments for Aging

and/or receive long-term care services appropriate to their needs. These programs provide services in the community to adults 60 years of age or older and their family caregivers.

Falls Prevention (\$5 million GF from FY 19-20, reappropriation until 06/30/2022)

The Dignity at Home Fall Prevention Program was established in 2019-20 with a one-time \$5 million GF appropriation to provide grants to the local AAAs for information and education on injury prevention; referrals to related resources and services; and home environmental assessments and assessments of individual injury prevention needs, including instructions on behavioral, physical, and environmental aspects of injury prevention. The program originally had a sunset date of 06/30/21. The funds are proposed to be reappropriated until 06/30/2022.

Health at Home

Community-Based Adult Services (CBAS) [\$5.8 million (\$2.7 million GF)]

The CBAS program, also known as Adult Day Health, is an alternative to skilled nursing facilities for those individuals who are capable of living at home with the aid of appropriate health, rehabilitative, personal care, and social services. In 2019-20, the Community-Based Adult Services program served 35,044 individuals at the 257 Community-Based Adult Service centers.

Multipurpose Senior Services (MSSP) [\$23.6 million (\$21.8 million GF)]

The MSSP provides both social and health care coordination services to assist frail individuals aged 65 or older to remain in their own homes and communities. The MSSP serves approximately 11,370 participants a year in 9,232 slots across 38 sites.

Residents in Long-Term Care Facilities

Long-Term Care Ombudsman [\$17.4 million (\$9.2 million GF)]

Long-term Care Ombudsman serve as advocates for residents of long-term care facilities, the State Long-Term Care Ombudsman and the local Ombudsman representatives seek resolution of residential facility complaints with the goal of ensuring residents' rights, dignity, quality of care, and quality of life. Statewide, approximately 723 state-certified Ombudsman volunteers and paid local Long-Term Care Ombudsman Program staff identify, investigate, and resolve complaints and concerns in over 1,200 skilled nursing facilities and approximately 7,300 residential care facilities for the elderly.

2021-22 Governor's Budget Investments for Aging

Information and Assistance

Health Insurance Counseling and Advocacy Program (HICAP) [\$13.6 million (\$41,000 GF)]

HICAP provides free, confidential one-on-one counseling, education, and assistance to individuals and their families on Medicare, Long-Term Care insurance, and other health insurance related issues, and planning ahead for Long-Term Care needs. HICAP also provides legal assistance or legal referrals in dealing with Medicare or Long-Term Care insurance related needs. In 2019-20, the program served 63,255 older adults.

New Federal Stimulus Funds Included in the Federal FY2021 Budget

The federal stimulus funds passed to date provided needed funding for aging programs for older adults so that they had access to services while they are under stay-at-home orders.

- The Families First Coronavirus Response Act (FFCRA) provided \$25 million for the OAA Senior Nutrition programs.
- The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided \$50 million for OAA Senior Nutrition programs, \$31 million for Supportive Services and Family Caregiving, \$3 million for ADRC programs, and \$2 million for Long-Term Care Ombudsman programs.
- The latest stimulus funding in the Federal Fiscal Year 2021 Budget (H.R.133 Consolidated Appropriations Act, 2021) includes a total of \$168 million for Senior Nutrition Programs, and \$100 million for Elder Justice funds, including Long-Term Care Ombudsman programs, for all states. CDA is awaiting the allocation amounts for these programs from the federal Administration for Community Living and will share California's allocation amounts once it receives them.

Program	FY 2020-21 Budget Act	FY 21-22 *** Governor's Budget	Families First Act	CARES Act	H.R. 133- Consolidated Appropriations act, 2021
Aging and Disability Resource Connection	\$5,000	\$7,500	\$0	\$3,005	\$0
Nutrition	\$124,273	\$117,761	\$25,086	\$50,173	\$17,521
Supportive Services and Family Caregiving	\$64,019	\$61,966	\$0	\$31,236	\$0
Community-Based Adult Services	\$6,057	\$5,845	\$0	\$0	\$0
Multipurpose Senior Services Program	\$23,779	\$23,568	\$0	\$0	\$0
Long-Term Care Ombudsman	\$18,770	\$17,376	\$0	\$2,091	\$417
Health Insurance Counseling and Advocacy Program	\$13,714	\$13,625	\$0	\$0	\$0
Other Programs **	\$10,529	\$10,496	\$0	\$0	\$0
Total	\$266,141	\$258,137	\$25,086	\$86,505	\$17,938

^{*} FFCRA and CARES Act funding expires September 30, 2021; H.R. 133 funding expires September 30, 2022

^{**} Other Programs include: Senior Community Employment Service Program (Title V), Medicare Improvements for Patients and Providers Act, and Alzheimer's Local Assistance Grant

^{***}Supportive Services and Family Caregiving, Community-Based Adult Services, Multipurpose Senior Services Program, Long-Term Care Ombudsman and Health Insurance Counseling and Advocacy Program all have minor decreases in State Operations funding to realize savings in Travel, Operating Expenses and Equipment, etc., due to the impacts to business operations associated with COVID-19.

^{****} Does not include funds for Aging & Disability Resource Connection program budgeted under Supportive Services program.

2021 Legislative Bills Related to the Master Plan for Aging

Updated March 17, 2021

HOUSING • HEALTH REIMAGINED • INCLUSION & EQUITY • CAREGIVING • AFFORDING AGING

In January 2021, Governor Newsom released California's Master Plan for Aging (MPA), which lays out a ten-year plan to prepare the state for an aging and changing population. The MPA set five major goals: housing for all ages and stages; health reimagined; inclusion and equity, not isolation; caregiving; and affording aging. Now, in the 2021 legislative session, the Legislature has an opportunity to add its perspective to the path the state charts for older adults.

The list below highlights some of the bills that have been introduced that directly affect older adults and people with disabilities and that align with the goals of the MPA. Justice in Aging compiled this summary of 2021 legislative bills. Sponsors are listed when known. Questions and additions, including to sponsors, can be referred to Claire Ramsey at cramsey@justiceinaging.org. Inclusion on this list does not indicate endorsement by Justice in Aging.

Goal 1: Housing for All Ages and Stages

- 1. <u>AB 71</u> (Luz Rivas)
 - Homeless funding: Bring California Home Act. Includes provisions targeting older homeless adults.
- 2. AB 695 (Arambula)
 - Expand HomeSafe program, lower age to 60 for Adult Protective Services (APS), increase funding for APS and HomeSafe. (Sponsors: CWDA and Justice in Aging)
- 3. AB 1083 (Nazarian)
 - Establish the Housing Plus Services Nursing Pilot Program in five counties. (Sponsors: LeadingAge California and LifeSTEPS)
- 4. SB 91 (Committee on Budget and Fiscal Review) CHAPTERED
 - Extend eviction moratorium until June 30, 2021. Provide rental assistance for tenants facing financial hardship due to COVID.

- 5. SB 591 (Jones)
 - Permit the establishment of intergenerational housing development.
- 6. SB 675 (Ochoa Bogh)
 - Allow board of supervisors to establish monthly property tax payment systems. (Sponsor: California Senior Legislature)

Goal 2: Health Reimagined

- AB 6 (Levine)
 - Require CDPH and CDSS to create health and safety guidelines and best practices for skilled nursing facilities and other congregate facilities.
- 8. AB 98 (Frazier)
 - Establish a pilot program in three counties for reuse and redistribution of durable medical equipment and home health supplies. (Sponsor: California Senior Legislature)
- AB 279 (Muratsuchi)
 - Prohibit long-term care operators from changing services or transferring residents during a state of emergency. (Sponsor: California Advocates for Nursing Home Reform)
- 10. AB 323 (Kalra)
 - Treat a class "AA" violation as a class "A" violation in certain circumstances and increase fines for class "A", "AA", and "B" violations for long-term care facilities.
- 11. AB 383 (Salas)
 - Establish an Older Adult Mental Health Services Administrator within the Department of Health Care Services. (Sponsor: California Senior Legislature)
- 12. AB 470 (Carrillo)
 - Eliminate the Medi-Cal asset limit for seniors and people with disabilities. (Sponsors: Western Center and Justice in Aging)
- 13. AB 523 (Nazarian)
 - Require the Department of Health Care Services to make PACE program COVID-19 flexibilities permanent. (Sponsor: CalPACE)
- 14. AB 540 (Petrie Norris)
 - Exempt PACE beneficiary from active or passive enrollment in Medi-Cal managed care and ensure PACE is presented as an enrollment option. (Sponsor: CalPACE)
- 15. <u>AB 749</u> (Nazarian)
 - Prohibit skilled nursing facilities from hiring medical directors who are not certified by the American Board of Post-Acute and Long-Term Care Medicine as a Certified Medical Director within the last five years.
- 16. AB 848 (Calderon)
 - Increase Medi-Cal monthly maintenance need for long-term care from \$35 to \$80 per month. (Sponsor: California Senior Legislature)

17. <u>AB 849</u> (Reyes)

 Increase long-term care patient's rights violation fines by clarifying the fines are \$500 per occurrence.

18. AB 911 (Nazarian)/SB 515 (Pan)

• Create a framework for creation of an LTSS benefit.

19. AB 1054 (Arambula)

• Establish the Skilled Nursing Facility feeding assistant training program.

20. AB 1234 (Arambula)

 Allow electronic signatures on POLSTs and Advance Health Care Directives and create a statewide POLST electronic registry.

21. <u>AB 1300</u> (Voepel)

• Allow residents of a Residential Care Facilitity for the Elderly (RCFE) to use electronic monitoring devices in their rooms.

22. <u>AB 1502</u> (Muratsuchi)

• Prohibit an entity from operating a skilled nursing facility without first obtaining a license on its own behalf.

23. SB 48 (Limón)

• Require professional training to create dementia-friendly workforce. (Sponsor: Alzheimer's Association)

24. SB 56 (Durazo)

- Expand Medi-Cal to undocumented older adults 65 and over. (Sponsors: CA Immigrant Policy Center and CPEHN)
- AB 4 (Arambula) expand Medi-Cal to all undocumented adults.

25. SB 256 (Pan)

• Require all Medi-Cal managed plans to disclose "in lieu of services" available and to include enhanced care management as a covered benefit.

26. SB 281 (Dodd)

• Make the Community Care Transitions Program permanent; reduce time needed to have resided in a Skilled Nursing Facility to 60 days, even after COVID. (Sponsors: East Bay Innovations and Disability Rights California)

27. SB 460 (Pan)

• Create the Office of the Patient Representative in the Department of Aging.

28. SB 648 (Hurtado)

• Allow Adult Residential Care Facility (ARF) & Residential Care Facilities for the Elderly (RCFE) residents living in facilities with at least 75% SSI recipients to receive up to 60 hours of IHSS.

- 29. SB 650 (Stern)
 - Requires the preparation of filing of an annual consolidated financial report from any organization that operates, conducts, owns, manages, or maintains a skilled nursing facility.

Goal 3: Inclusion & Equity, Not Isolation

- 30. AB 665 (Eduardo Garcia)
 - Require Residential Care Facilities for the Elderly (RCFE) with internet access to provide one common internet access tool for residents.
- 31. <u>AB 774</u> (Voepel)
 - Establish taskforce to improve senior legal services in California.
- 32. AB 1243 (Blanca Rubio)
 - Strengthen elder financial abuse and isolation laws. (Sponsors: Bet Tzedek and Justice in
- 33. <u>SB 258</u> (Laird)
 - Add HIV status to the definition of senior of "greatest social need" for the California Department of Aging to make priority determinations for services and funds.

Goal 4: Caregiving that Works

- 34. AB 123 (Gonzalez)
 - Increase Paid Family Leave benefit to 90% of wages starting Jan. 1, 2022.
- 35. AB 1041 (Wicks)
 - Expand definition of family member for purposes of worker protection and Paid Family Leave Program.
- 36. <u>SB 95</u> (Skinner)/<u>AB 84</u> (Ting)
 - Extend COVID-19 supplemental paid sick leave and expand the definition of covered worker.

Goal 5: Affording Aging

- 37. SB 107 (Weiner):
 - Simplify CalFresh applications for older adults 60 or over and people with disabilities.

Los Angeles County Commission on HIV Aging Task Force Models of Care (for information only)

Golden Compass (out of UCSF)- The Golden Compass Program is a program designed to cater to those with geriatric-HIV needs in order to facilitate health related challenges that are experienced by elder patients with an emphasis on geriatrics and cardiology within clinics that are facilitated for such care within a group oriented fashion. The program setting is within the Ward 86 clinic which is funded through the Ryan White program and according to Greene et al. in 2020, this is able to provide HIV primary care along with different specialties provided to approximately 2600 patients who were both insured and uninsured, with 1200 of these patients being at least 50 years old or older. The program focused on the heart and mind using fitness and functional evaluations on physicality, along with strength, hearing, vision, networking, and navigation assessments and activities. See journal article for additional information.

Program for All-Inclusive Care for the Elderly (PACE) program - a Medicare and Medicaid program that helps people meet their health care needs in the community instead of going to a nursing home or other care facility. PACE is also used to prevent declines in the function of physical movement and quality of life that would consequently result in a placement within an institutionalized facility(Falvey et al, 2019). Another requirement would include being certified to be able to receive this type of care by the state they live in as well as be within the vicinity of a center where this program is eligible. Those who use PACE usually are within the category of having a high level of disability and low physical performance along with neurocognitive disabilities such as dementia that often follow their physical performance. Services covered:

Adult day primary care (including doctor and recreational therapy nursing services)

Dentistry

Emergency services

Home care

Hospital care

Laboratory/x-ray services

Meals

Medical specialty services

Nursing home care

Nutritional counseling

Occupational therapy

Physical therapy

Prescription drugs

Preventive care

Social services, including caregiver training, support groups, and respite care Social work counseling

Transportation to the PACE center for activities or medical appointments, if medically necessary. You may also be able to get transportation to some medical appointments in the community.

Owen Clinic in San Diego/UCSD

The Owen Clinic is a whole-person type of care with an emphasis on professionalism and along with many other services. They are able to provide mental health services using psychiatric consulting, nutrition services for those who need a healthy and balanced weight control, drug and alcohol counseling that details a fine and maintained state of mind and elongates sobriety, case management with referral programs to local services, financial counseling for health insurance purposes, and of course patient confidentiality counseling on how to live with HIV as a patient. The clinic also has a specialty care facility in order to control lipid and cholesterol levels, hepatitis B and C infection clinic, PrEP clinic for HIV-negative patients to educate and fundamentally implement prevention methods of HIV, and medication assisted treatment clinic in order to correct substance abuse disorders.

Desert AIDS Project

The Desert AIDS project is an organization that provides care in a comprehensive style to facilitate quality primary and preventative care services such as medical care, HIV and Hepatitis care, dental services, social services, behavioral services, and sexual health. Along with wellness programs that are implemented such as meditation, strength training and yoga for clients, there is also fundamental research ongoing such as the ANCHOR study which is recruiting patients in order to have their viral load studied and checked with a T-cell count in order to facilitate a more catered care to cervical cancer due to the rise of people with HIV actually dying from this in order to reduce cervical cancer by 80% with this program. GSK/ViiV SOLAR study is also another implementation being done to switch daily HIV medications for those who have undergone treatment for at least 6 months. The last study they are conducting would be the ViiV STAT study which is a study using antiretroviral therapy to increase virologic suppression.

University of CO (Denver)

The University of Colorado, Denver has a clinic for infectious disease on their Anschutz Medical Campus. This clinic specializes in comprehensive HIV/AIDS primary care using PrEP and PEP along with 24 hour physician access, nursing care, psychiatric care with emphasis on evaluation from professionals, social work services, access to clinical trials and studies for clients or patients, endocrinology services for endocrine glands and hormone care, along with STD facilities and dietary consultation from a professionals.

University of Alabama

The University of Alabama has a PrEP clinic that specializes in reducing the risk of acquiring HIV with orientations catered to clients who are looking to participate and speak more to a clinical professional along with lab tests that can be done. The services include a group education session with a provider and prevention materials and handouts given such as brochures and condoms to effectively lower the risk and educate people on HIV. The university also works

with the Alabama Vaccine Research Clinic to enroll men who have sex with men and trans individuals to facilitate studies and tests to monitor new ways of prevention such as their antibody-mediated prevention method. The antibody-mediated prevention method which would consist of giving antibodies to test efficacy of preventing HIV infection.

AGING HIV & LONG-TERM SURVIVORS

JUNE 2019







Introduction

More than 30 years into the HIV epidemic, scientific and clinical advances have helped HIV-infected individuals live longer — most people living with HIV (PLWH) in the United States now die of diseases not specifically related to HIV. However, diseases of aging typically occur in HIV-infected individuals at higher rates and at younger ages than in the general population. This may have negative impacts on the quality of life of older PLWH. HIV-infected individuals who were diagnosed before the advent of highly active antiretroviral therapy in 1996 —a group often referred to as long-term survivors — may be more likely to experience accelerated aging because of longer exposure to the virus and its treatment, in addition to issues they experience by simply being older. This white paper summarizes research on the health and social challenges and opportunities for older people living with HIV (many of whom are also long-term survivors) and provides a description of older PLWH in Oregon.

Aging with HIV/AIDS

With the success of antiretroviral medications (ART), PLWH are living longer than ever before. In addition, improved screening methods have helped to identify more new cases of HIV in older adults.¹ Both of these factors have contributed to a growing population of PLWH over the age of 50. Additional facts:

 Survival rates continue to improve for PLWH, with life expectancies among PLWH who are successfully treated with ART approaching those of HIV negative people.²

- Deaths among PLWH are increasingly related to tobacco use, hypertension, diabetes, and liver-related causes—risk factors which often can be controlled through behavior change or medication.³
- In Oregon, as in the U.S., over 50% of PLWH are 50 and older; the average age of people living with HIV in Oregon is now 49 years.^{4,5}
- More than 10% of PLWH worldwide are 50 and older.⁶

Many older PLWH are part of a group known as long-term survivors (LTS). LTS are typically defined as those who have been living with HIV for more than 10 years and/or who were diagnosed prior before the advent of highly active antiretroviral therapy (i.e., 1996). In Oregon, nearly a quarter of PLWH were diagnosed before 1996. Although not all LTS are older adults – for example, people now in their 20s and 30s who acquired HIV at birth – when this white paper focuses on LTS, we refer to those age 50 and older.

Acceleration of the Aging Process with HIV

Older PLWH face many of the same health challenges as older individuals not infected with HIV. But many people with HIV experience at earlier ages the geriatric syndromes, immune changes, and inflammatory markers typically found in much older adults.⁷ Specific studies have found that HIV is associated with higher rates of: ^{8, 9}

- Frailty
- Osteoporotic bone fractures
- Diabetes
- Hyperlipidemia
- Lipodystrophy
- Cardiovascular disease
- Cancer
- Liver disease
- Renal failure
- Anemia
- Neurocognitive disorder

A growing body of research has identified the many biological mechanisms through which HIV infection may accelerate the aging process. These include: 10, 11, 12, 13, 14, 15, 16

- Genetic instability
- Telomere shortening
- Epigenetic alterations
- Impaired homeostasis
- Deregulated nutrient sensing
- Mitochondrial dysfunction

- Cellular senescence
- Stem cell exhaustion
- Altered intercellular communication
- Abnormal endocrine and neuroendocrine signaling
- Immune dysregulation
- Chronic inflammation
- Oxidative stress
- Abnormal brain atrophy

Still, the extent to which the virus and its treatment is responsible for accelerated aging is yet to be fully understood. PLWH also tend to have higher rates of other risk factors for disease and accelerated aging, such as tobacco use, alcohol use, recreational and illicit drug use, and Hepatitis B and C infection.^{17, 18} In addition, many PLWH lack access to factors that can promote health, like stable housing, sufficient income, and enough food to eat (factors often referred to collectively as the social determinants of health). In general, PLWH experience a higher prevalence of homelessness, social isolation, stigma, discrimination, and psychological factors such as toxic stress/AIDS Survivor Syndrome (a disorder similar to post-traumatic stress disorder [PTSD]) – all of which may further contribute to poor physical and mental health.¹⁹ Although some studies do account for these factors, it's difficult to determine cause and effect.^{20, 21}

Age, Time Living with HIV, Health and Well-Being

Because the HIV virus and its treatment can impair biological function, it is reasonable to think that living with HIV longer may be associated with worse health outcomes, and that LTS would be more likely to suffer these consequences than non-LTS.* In addition, LTS are often older than non-LTS. How do we disentangle the effects of aging from the effects of long-term HIV infection?

First, not all aspects of aging result in poor health. A large body of research has found that older adults tend to have higher resilience than younger adults, which acts as a protective factor against disability, chronic illness, depression, and health-related quality of life. ^{22, 23, 24, 25} In addition, studies show that PLWH experience protective factors, such as continuity and quality of medical care ²⁶ and psychosocial factors, such as coping, acceptance, resilience, hardiness, spirituality, and social support ^{27, 28, 29, 30 31} that may reduce the impact of the adverse health consequences. None of these studies, however, specifically compared older LTS to older non-LTS.

To examine how resilience relates to older age and time living with HIV, and how these factors contribute to various outcomes, McGowen and colleagues examined self-reported resilience and physical and mental well-being in adults with and without HIV.³² Specifically, they separated the effects of advanced age from length of time diagnosed with HIV to see how much resilience people had and how resilience related to

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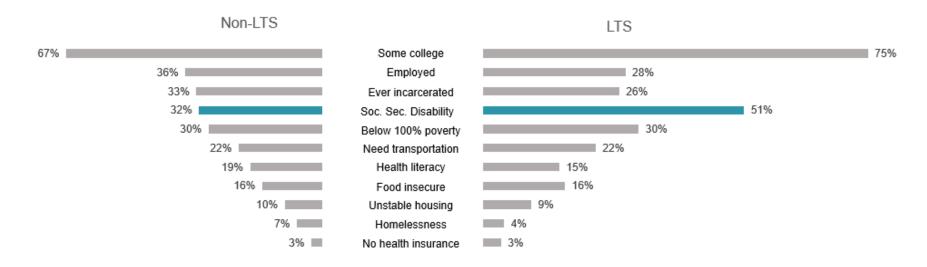
^{*} There is an exception: older adults recently diagnosed with HIV are more likely to have less viral suppression that may result in poorer health outcomes because of compromised immune function associated with aging. (See: Guaraldi G, Zona S, Brothers TD, et al. Aging with HIV vs. HIV seroconversion at older age: a diverse population with distinct comorbidity profiles. PLoS One. 2015 Apr 13;10(4): e0118531. Althoff KN, Gebo KA, Gange SJ, et al. CD4 count at presentation for HIV care in the United States and Canada: are those over 50 years more likely to have a delayed presentation? AIDS Res Ther. 2010;7:45. The Lancet HIV editorial. 2017; 4:e277.

depression, anxiety, and functional status. They found that among PLWH, older age and shorter time with diagnosed HIV were associated with higher levels of resilience and lower levels of anxiety, depression, and functional limitations. Being diagnosed with HIV longer was associated with lower resilience scores and increased functional problems. In an earlier study, McGowen and colleagues also found that length of HIV diagnosis, rather than age, was related to higher symptom distress, depression, anxiety, and functional limitations.³³

The Oregon Experience

In Oregon, we looked at data from the HIV Medical Monitoring Project (MMP) to compare the health and social experiences of LTS and non-LTS. (Refer to Appendix 1 for a description of MMP methods). We controlled for the effects of aging by limiting our comparison to PLWH aged 50 and older. There were no significant differences between the groups by age, race (white vs. all other), gender, or sexual orientation. Figures 1-6 below compare additional health and social factors between the two groups. Factors for which there were significant differences are highlighted. A complete list of factors with p-values is provided in Appendix 2.

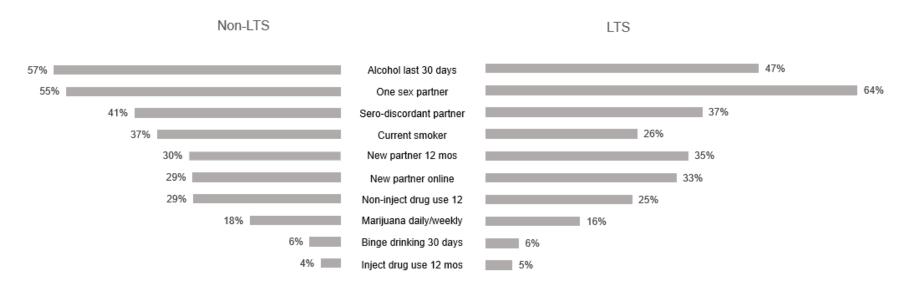
Figure 1. Comparison of demographic and social factors between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276



Key Finding: The proportion of LTS receiving Social Security Disability benefits was significantly higher than for non-LTS. There were no other significant differences.

Note: Some college=some college or higher; Need transportation=needed transportation services; Health literacy= somewhat/little bit/not a bit confident in filling out medical forms by yourself; Food insecure= often/sometimes true that "the food (I/we) bought didn't last and (I/we) didn't have money to get more" in the previous 12 months; Unstable housing= past-year experience of homelessness and/or 2 or more past year moves; Homelessness= past-year experience of homelessness; No health insurance= not having any health insurance/coverage at any time during the past 12 months.

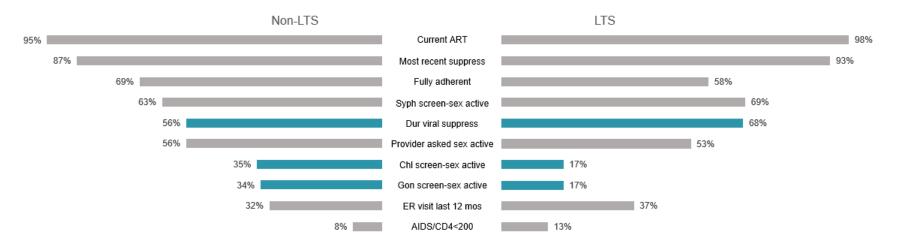
Figure 2. Comparison of health behaviors between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276



Key Finding: There were no significant differences in health behaviors between LTS and non-LTS.

Note: One sex partner=one past-year sex partner among sexually active; Sero-discordant partner=past-year condomless sex with a partner of negative or unknown HIV status among sexually active; New partner 12 mos=new sex partner in past year among sexually active; New partner online=met new past-year sex partner at a public venue or online; Non-inject drug use 12=past-year non-injection drug use, including marijuana.

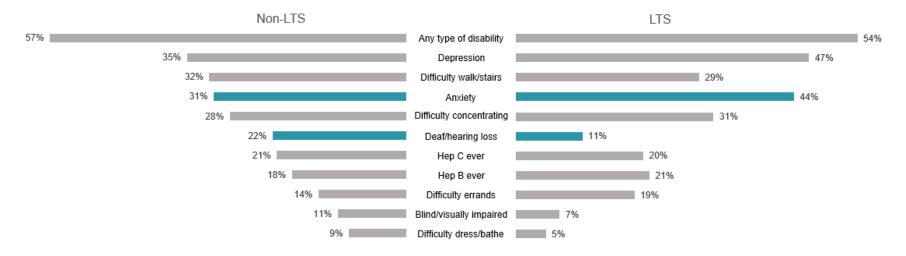
Figure 3. Comparison of clinical characteristics and health care utilization between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276



Key Findings: LTS were significantly less likely to receive screening for some sexually transmitted infections, but a higher proportion of LTS achieved durable viral suppression compared to non-LTS. The average number of annual outpatient visits (not shown) was 3.4 for non-LTS and 3.5 for LTS, and there were no significant differences in other important markers of care, such as use of antiretroviral therapy, hospital visits, or satisfaction with HIV medical care.

Note: Most recent suppress=last viral load <200 copies/ml; Fully adherent= did not miss a dose of ART past 30 days; Syph screen-sex active= past-year syphilis screening among sexually active; Dur viral suppress=at least 2 past-year tests and all viral loads <200 copies/mL; Provider asked sex active= HIV provider asked if sexually active; Chl screen-sex active= past-year chlamydia screening among sexually active; Gon screen-sex active=past-year gonorrhea screening among sexually active; ER visit last 12 mos=any past year visit to ER for own health reason; AIDS/CD4<200=lowest past-year CD count <200.

Figure 4. Comparison of physical and mental health between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276

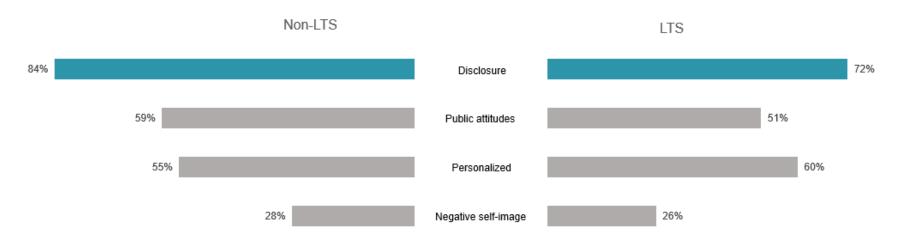


Key Findings: LTS were significantly more likely than non-LTS to experience anxiety. There were also significant differences in self-reported hearing loss. The average number of disabilities (not shown) was 1.2 for non-LTS and 1.0 for LTS.

Note: Any type of disability= a tally of any of the six types of disabilities (i.e., deaf/hearing loss, blind/visually impaired, and difficulty walking/stairs, concentrating, errands, and dress/bathe); Depression=diagnosis or treatment for depression; Anxiety=diagnosis or treatment for anxiety; Hep C ever=self-reported history of hepatitis C infection; Hep B ever=self-reported history of hepatitis B infection.

Figure 5a. Comparison of stigma between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276

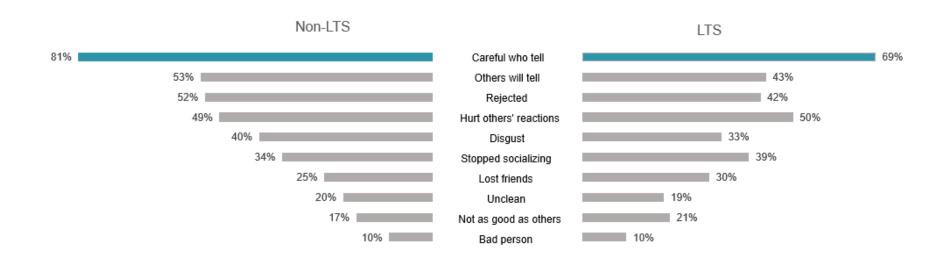
Responses to questions about stigma were grouped into four categories: personalized stigma (hurt by how people reacted, stopped socializing because of others' reactions, and/or lost friends by telling about HIV status); disclosure stigma (careful who you tell about HIV status, worry people who know will tell others); negative self-image stigma (feel not as good as others, feel unclean, feel like you are a bad person); and public attitudes stigma (perceptions that others think that a person with HIV disgusting and/or that people with HIV are rejected).



Key Finding: A significantly higher proportion of non-LTS reported disclosure stigma—that is, they were more likely to express concerns about sharing their HIV status with others.

A detailed breakdown of the stigma items within in each of the four categories is shown below:

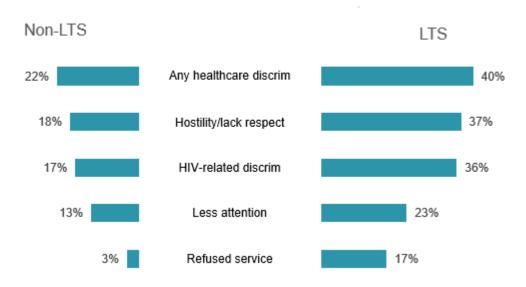
Figure 5b. Comparison of stigma between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276



Key Findings: Significantly higher proportions of non-LTS reported feeling the need to be very careful who they tell about their HIV status. The average stigma score for LTS was 36.6, which was not significantly different than the score of 40.9 for non-LTS.

Figure 6. Comparison of discrimination between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276

MMP collects data on participants' experiences of perceived discrimination within the health care setting. The question asks: "People with HIV sometimes sense discrimination from healthcare providers in different ways. Has anyone in the healthcare system done any of the following to you since testing positive for HIV: exhibited hostility or a lack of respect toward you; given you less attention than other patients; or refused you service?" For those who answered yes to any of those questions, a follow-up question asks, "Did the discrimination occur because of your HIV infection?"



Key Findings: Significantly higher proportions of LTS reported healthcare discrimination since testing HIV positive. There were no differences between LTS and non-LTS for reports of discrimination for demographic reasons; however, significantly higher proportions of LTS reported HIV-related discrimination in the health care setting.

Summary

The demographics of PLWH are shifting, with ever higher proportions of the population age 50 and above. Many PLWH over 50 are long-term survivors, who experienced decades of accumulated trauma as the HIV epidemic unfolded. Many have wondered if LTS possess specific characteristics that helped them survive while so many others died. Because chronological age is a confounding factor for health and well-being for older PLWH, we "removed" the effect of age, comparing people age 50 and older, by LTS status.

Mostly, we found no differences between the groups, although there were a few exceptions. The main difference was that LTS were more likely to report depression and anxiety than those more recently diagnosed. This finding supports the common wisdom of many long-term survivors, who describe a host of psychological symptoms that include depression and anxiety—but also lack of future orientation, survivor's guilt, numbness and other symptoms. This group of symptoms has been dubbed AIDS Survivor Syndrome by Tez Anderson, founder of grassroots activist organization, Let's Kick A*S*S.³⁵

Other differences also seemed related to historical experience; that is, whether one lived through the early years of the epidemic, when HIV was more stigmatized and survival more uncertain. Specifically, LTS were more likely to receive Social Security Disability Insurance benefits and to report ever having experienced discrimination in the health care setting. They were also less likely to report worrying about HIV status disclosure now.

Finally, LTS were less likely to receive STI screenings than more recently diagnosed people over 50. STI screenings, though recommended annually for PLWH, are low

overall in Oregon.³⁶ More recently diagnosed people may be more likely to receive all preventive care and recommended screenings, as they are newer to HIV medical care.

Although we are unable to determine causality with cross-sectional data, none of these characteristics would seem to specifically promote survival. Beginning in 2018, the Oregon Medical Monitoring Project added items to the survey related to resilience, social support, and social connectivity to identify whether any of these factors may be related to long-term survivorship.

Aging is inevitable – but aging in the presence of HIV is more complicated, generally involving more comorbidities and a more rapid decline than observed in the general population. Assessment of aging-related health and functional impairment at younger ages combined with addressing modifiable risk factors, like alcohol, tobacco, and other drug use, may help slow the aging process.

Limitations

- We did not have a measure of resilience in the 2015-17 data but added one in 2018. We did examine measures of discrimination and stigma that may be related to resilience and coping.
- We limited our analysis to the population of PLWH over age 50 to control for the effects of aging among LTS and non-LTS. Age 50 as a cut point is consistent with other studies in the HIV and aging literature and seemed conceptually sound, since PLWH experience the effects of aging at younger ages than in the general population. We did not limit our analysis to an older age group (e.g., 65+) because of small numbers which would have limited our ability to conduct statistical comparisons between LTS and non-LTS groups.

- Although we did not compare health and aging-related factors to the non-HIV population of older adults in Oregon, the literature provides substantial evidence for these differences.
- Our study used cross-sectional data, which means we were unable to determine a causal relationship between advancing age and health and social factors.

Future Study

Starting in 2018, the data will include a measure of resilience that will augment responses to survey questions about social connection and isolation, discrimination, and stigma. We will continue to explore differences between LTS and non-LTS using these new questions. In addition, we may be able to combine additional years of data to generate a larger sample of older PLWH to allow for analysis of adults in different stages of older adulthood, such as age 50-60, 60-70, and >70 years.

APPENDIX 1

Methods

We used data from the HIV Medical Monitoring Project (MMP), which produces nationally and locally representative data to assess the clinical and behavioral characteristics of adults with diagnosed HIV infection in medical care in the United States and Puerto Rico. MMP uses a complex survey sample selected in two consecutive stages: (1) United States and dependent areas and (2) adults with diagnosed HIV infection aged ≥18 years reported to the National HIV Surveillance System (NHSS) as of December 31st of the year preceding data collection. Oregon is one of 23 participating project areas and has participated since 2008.

Persons were eligible for participation if, as of the sampling date, they had received a diagnosis of HIV, were aged ≥18 years, alive, and a resident of an MMP project area. Sampled persons were presumed to be eligible based on their information in NHSS unless data from another source contradicted this status. Persons were classified into 4 categories: (1) eligible respondents, (2) contacted nonrespondents, (3) nonrespondents who were not contacted, and (4) ineligible persons. These categories were used in calculating final response rates and contact rates in accordance with standard formulas.

Data used to generate national estimates were weighted for the probability of selection based upon known probabilities of selection of states and individuals within states. In addition, data were weighted to adjust for nonresponse by using predictors of response, including sex, race/ethnicity, age of most recent contact information, transmission category, and the person's receipt of care as documented by laboratory test results in NHSS records.

For a complete description of sampling and weighting methods see the Centers for Disease Control and Prevention's 2018 *HIV Surveillance Special Report*. ³⁴

For the comparisons between LTS and non-LTS in this report, we combined data from 2015, 2016 and 2017 and conducted statistical comparisons of proportions using chi-square tests or comparisons of means using t-tests in Stata v. 15.

A stigma score was calculated by summing the 10 individual stigma items. Each item was scored 0 to 4 based on the level of agreement/disagreement with the statement and then each score was multiplied by 2.5. The stigma score is the sum of scores on the 10-items, ranging from 0 (no stigma) to 100 (high stigma). The mean stigma score for LTS and non-LTS was compared using a t-test.

APPENDIX 2

Data Table

Comparison of demographic, physical health, mental health, and social factors between long-term survivor and non-long-term survivor PLWH aged 50 and older, Oregon MMP 2015-17, n=276

Factor	%	%	p-value
	Non-LTS	LTS	'
	(n=138) [†]	(n=138) [‡]	
Socio-demographics			
Mean age [§]	58.4 [¥]	59.6 [¥]	0.131
Race/Ethnicity			0.190
White, non-Hispanic	79.0	71.5	
Black, non-Hispanic	4.9	6.0	
Hispanic/Latino	10.4	10.2	
Native Hawaiian, non-Hispanic	0.9	0.0	
American Indian/Alaska Native, non-Hispanic	0.5	0.0	
Multiracial, non-Hispanic	4.2	12.2	
White/Minority group			
White, non-Hispanic	79.0	71.5	0.189
Minority group	21.0	28.5	
Gender			
Male	85.8	87.3	0.394
Female	12.5	12.7	
Transgender	1.7	0.0	
Sexual orientation			
Lesbian/gay	54.8	52.7	0.736
Bisexual	12.1	12.9	
Heterosexual	33.1	29.1	
Something else	0.0	5.4	
Employed	35.8	27.6	0.160
Social Security Disability recipient	32.2	50.8	0.003 ^A
Educational attainment			
High school or less	38.2	28.1	0.029 ^A
Some college or higher	61.8	71.9	
Social Determinants of Health			
Health literacy	18.8	14.7	0.377
Below 100% poverty guideline	29.7	30.2	0.932
Food insecure	15.6	15.8	0.969

Factor	%	%	p-value
	Non-LTS	LTS	μ
	(n=138) [†]	(n=138) [‡]	
No health insurance for any time past 12 months	2.7	3.3	0.731
Unstable housing	9.7	9.2	0.906
Homelessness	6.5	3.9	0.323
Need transportation services	21.8	21.8	0.995
Ever incarcerated	32.9	26.4	0.252
Clinical Characteristics/Health Care Utilization			
AIDS/Lowest CD4 <200 copies/mL past year	8.0	12.9	0.204
Durable viral suppression past 12 months	55.6	68.1	0.051 ^A
Most recent viral load <200 copies/mL	86.8	92.7	0.149
Average # outpatient visits to HIV provider	3.4 [¥]	3.5 [¥]	0.817
Currently taking ART	95.3	98.0	0.221
Fully adherent (0 days missed past 30 days)	68.9	58.3	0.276**
Provider asked if sexually active	55.6	53.3	0.713
ER visits past 12 months	31.9	37.2	0.363
Syphilis screening - among sexually active	62.5	68.7	0.521
Gonorrhea screening – among sexually active	34.4	17.3	0.045 ^A
Chlamydia screening – among sexually active	35.4	17.3	0.036 ^A
Physical/Mental Health Status			3,700
History of hepatitis B infection	18.4	21.2	0.580
History of hepatitis C infection	20.8	20.2	0.909
Hearing impaired, deaf	21.5	10.5	0.012 ^A
Visually impaired, blind	11.0	6.9	0.239
Difficulty concentrating, remembering	28.4	31.4	0.610
Difficulty walking or climbing stairs	31.7	29.1	0.674
Difficulty dressing or bathing	9.2	4.7	0.176
Difficulty doing errands along	14.1	18.8	0.351
Any type of disability	57.4	54.3	0.619
Depression, treatment or diagnosis	35.3	46.6	0.073
Anxiety, treatment or diagnosis	31.0	44.2	0.032 ^A
Health Behaviors			
Any anal or vaginal sex past 12 months	42.5	40.2	0.710
One sex partner among sex active past 12 mos	54.6	63.6	0.346
Sero-discordant sex	41.0	37.0	0.685
New partner past 12 months	30.1	34.6	0.618
Met new sex partner public venue or online	29.4	32.6	0.721
Current cigarette user	36.5	25.9	0.065
Alcohol past 30 days	57.0	46.7	0.106
Binge drinking past 30 days	6.1	5.6	0.863
Use non-injection drugs past 12 months	29.3	25.0	0.431
Use injection drugs past 12 months	3.9	4.5	0.766
Marijuana use (daily/weekly)	18.0	16.1	0.350
Stigma			
Average stigma score	40.9 [¥]	36.6 [¥]	0.134

Factor	%	%	p-value
	Non-LTS	LTS	
	(n=138) ⁺	(n=138) [‡]	
Personalized	54.7	60.2	0.370
hurt by others' reactions	48.5	49.6	0.869
stopped socializing	34.2	39.2	0.424
lost friends by telling	24.6	29.8	0.392
Disclosure	83.7	72.3	0.029 ≜
careful who tell	80.7	69.1	0.034 ^A
others will tell	52.8	43.2	0.130
Negative self-image	28.4	26.0	0.678
not as good a person	17.3	20.5	0.544
feel unclean	20.3	19.1	0.823
feel bad person	9.8	10.2	0.920
Public attitudes	58.7	51.4	0.239
disgust	39.5	32.7	0.278
rejected	51.8	41.9	0.113
Discrimination			
Discrimination from health care providers			
hostility/lack of respect	18.4	37.1	0.001 ^A
gave less attention	12.8	22.7	0.039 [∆]
refused service	3.3	17.3	0.000 A
any reason	21.9	40.3	0.002 ≜
Discrimination occurred because of HIV infection	16.7	36.4	0.001 ^A

^{*}weighted survey data

[†] non-LTS includes 8 (3%) recently diagnosed within past 5 years and 130 (48%) intermediate diagnosed >5 to <=10 years.

[‡]There are 171 individuals in the sample classified as LTS. 33 of them are under the age of 50.

 $^{^{\}S}\text{Mean}$ age of 3 groups: Recently diagnosed 64, Intermediate 58, LTS 60.

[¥]Not a %

^A Statistically significant difference between groups where p-values are <=0.05.

^{**} p-value for group of comparisons

References

¹ Youssef E, Cooper V, Delpech V, Davies K, Wright J. Barriers and facilitators to HIV testing in people age 50 and above: a systematic review. Clin Med (Lond). 2017;17(6):508–520.

² The Antiretroviral Therapy Cohort Collaborative. Survival of HIV positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. Lancet HIV, 2017; 4(8): 349-56.

³ D:A:D Study Group. Factors associated with specific causes of death amongst people living with HIV in the D:A:D study. AIDS 2010;24(10):1537-48.

⁴ Oregon Public Health Division. Epidemiologic profile of HIV infection in Oregon. Oregon Health Authority. Portland, OR: 2018 December.

⁵ Wing EJ. HIV and aging. Int J Infect Dis. 2016;53:61-68.

⁶ Wing 2016

⁷ Wing 2016

⁸ The Well Project. Long-term survivors of HIV. 2018. Available at: https://www.thewellproject.org/hiv-information/long-term-survivors-hiv.

⁹ Harris TG, Rabkin M, El-Sadr WM 2018. Achieving the fourth 90: health aging for people living with HIV. AIDS 32:1563-69.

¹⁰ Kaplan-Lewis E, Aberg JA, Lee M. Aging with HIV in the ART era. Semin Diagn Pathol. 2017 Jul;34(4):384-397.

¹¹ López-Otín C, Blasco MA, Partridge L, Serrano M, Kroemer G. The hallmarks of aging. Cell. 2013;153(6):1194-217.

¹² Wing 2016

¹³ De Francesco D, Wit FW, Bürkle A, Oehlke S, Kootstra NA, Winston A, Franceschi C, Garagnani P, Pirazzini C, Libert C, Grune T, Weber D, Jansen EHJM, Sabin CA, Reiss P; the Co-morBidity in Relation to AIDS (COBRA) Collaboration. Do people living with HIV experience greater age advancement than their HIV-negative counterparts? AIDS. 2019;33(2):259-268.

¹⁴ Jenny NS. Inflammation in aging: cause, effect, or both? Discov Med. 2012;13(73):451-60.

¹⁵ Harris TG, Rabkin M, El-Sadr WM. Achieving the fourth 90: healthy aging for people living with HIV. AIDS.2018;32(12):1563-1569

¹⁶ Cole JH, Underwood J, Caan MW, De Francesco D, van Zoest RA, Leech R, Wit FW, Portegies P, Geurtsen GJ, Schmand BA, Schim van der Loeff MF, Franceschi C, Sabin CA, Majoie CB, Winston A, Reiss P, Sharp DJ; COBRA collaboration. Increased brain-predicted aging in treated HIV disease. Neurology. 2017;88(14):1349-1357.

¹⁷ Kaplan-Lewis et al. 2017

¹⁸ Oh JY, Greene K, He H, Schafer S, Hedberg K. Population-based study of risk factors for coronary heart disease among HIV-infected persons. Open AIDS J. 2012;6:177-80.

¹⁹ Anderson T. AIDS survivor syndrome fact sheet. 2018. Available athttp://www.cascadeaids.org/wp-content/uploads/2018/08/AIDS-Survivor-Syndrome-Fact-Sheet.pdf.

²⁰ Harris et al. 2018

²¹ De Francesco et al. 2019

- ²² Manning LK, Carr DC, Kail BL. Do Higher Levels of Resilience Buffer the Deleterious Impact of Chronic Illness on Disability in Later Life? Gerontologist. 2016;56(3):514-24.
- ²³ Silverman AM, Molton IR, Alschuler KN, Ehde DM, Jensen MP. Resilience predicts functional outcomes in people aging with disability: a longitudinal investigation. Arch Phys Med Rehabil. 2015;96(7):1262-8.
- ²⁴ Gooding PA, Hurst A, Johnson J, Tarrier N. Psychological resilience in young and older adults. Int J Geriatr Psychiatry. 2012;27(3):262-70.
- ²⁵ Netuveli G, Wiggins RD, Montgomery SM, Hildon Z, Blane D. Mental health and resilience at older ages: bouncing back after adversity in the British Household Panel Survey. J Epidemiol Community Health. 2008 Nov;62(11):987-91.
- ²⁶ Krentz HB, Gill MJ. Long-term HIV/AIDS survivors: Patients living with HIV infection retained in care for over 20 years. What have we learned? International Journal of STD & AIDS 2018;29(11):1098–1105.
- ²⁷ Côté J, Bourbonnais A, Rouleau G, Ramirez-Garcìa P, Couture M, Massé B, Tremblay C. Psychosocial profile and lived experience of HIV-infected long-term nonprogressors: a mixed method study. J Assoc Nurses AIDS Care. 2015;26(2):164-75.
- ²⁸ Rubtsova AA, Kempf MC, Taylor TN, Konkle-Parker D, Wingood GM, Holstad MM. Healthy Aging in Older Women Living with HIV Infection: a Systematic Review of Psychosocial Factors. Curr HIV/AIDS Rep. 2017 Feb;14(1):17-30.
- ²⁹ Roger KS, Mignone J, Kirkland S. Social aspects of HIV/AIDS and aging: a thematic review. Can J Aging. 2013;32(3):298-306.
- ³⁰ Vance DE, Burrage JW. Promoting successful cognitive aging in adults with HIV: strategies for intervention. J Gerontol Nurs. 2006 Nov;32(11):34-41.
- ³¹ Rubtsova et al. 2017
- ³² McGowan JA, Brown J, Lampe FC, Lipman M, Smith C, Rodger A. Resilience and Physical and Mental Well-Being in Adults with and Without HIV. AIDS Behav. 2018;22(5):1688-1698.
- ³³ McGowan JA, Sherr L, Rodger AJ, Fisher M, Miners A, Anderson J, Johnson MA, Elford J, Collins S, Hart G, Phillips AN, Speakman A, Lampe FC; Antiretrovirals, Sexual Transmission Risk and Attitudes (ASTRA) Study Group. Age, time living with diagnosed HIV infection, and self-rated health. HIV Med. 2017;18(2):89-103.
- ³⁴ Centers for Disease Control and Prevention. Behavioral and Clinical Characteristics of Persons with Diagnosed HIV Infection—Medical Monitoring Project, United States, 2015 Cycle (June 2015–May 2016). HIV Surveillance Special Report 20. Published May 2018. Available at: https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.
- 35 Let's Kick A*S*S. https://letskickass.hiv
- ³⁶ Hixson LK, Drach L, Maher JE, Knapp AT, Ferrer JS, Menza TW. Factors Associated with Increased Syphilis Screening Among People Living with Human Immunodeficiency Virus. Sex Transm Dis. 2019 Aug; 46(8):521-526.







Using HIV Medical Monitoring Project data to assess the needs of long-term survivors

CDC MMP CAB Meeting | March 29, 2021



Lindsay Hixson, PhD Linda Drach, MPH Myde Boles, PhD Tim Menza, MD, PhD

Oregon Public Health Division & Multnomah County Health Department

Presentation Goals

- Describe the research on the health and social challenges and opportunities for older people living with HIV
- HIV Medical Monitoring Project (MMP) overview
- Provide of profile of older people living with HIV in Oregon

 Describe the differences between long-term survivors and those recently diagnosed with HIV among those older than age 50 in Oregon







The health and social challenges and opportunities for older PLWH

Aging with HIV: We've Come a Long Way

People with HIV are leading longer, healthier lives:

- Mortality rates have declined by 96%.
- Only 25% of deaths among PLWH are due to HIV.
- 10% of people with HIV <u>worldwide</u> are over 50; 45% of people with HIV <u>in the U.S.</u> are over 50.





Physical Health Challenges & Opportunities

- Symptom burden and comorbidities often high among older PLWH:
 - Chronic conditions like cardiovascular disease, osteoporosis, and dislypidemia
 - Chronic inflammation/accelerated aging
 - Comorbidities & polypharmacy seem to be related to duration of HIV infection, not age
- People who are diagnosed with HIV at an older age may have poorer immune response to ART.
- PLWH can take control by quitting tobacco, limiting alcohol, eating well, and exercising.





Mental Health Challenges

- Data on mental health are mixed:
 - Some studies show higher prevalence of depression and anxiety in older PLWH;
 some say it's lower.
 - Systematic review showed perceived lack of social support/social networks among older PLWH in both rural and urban areas.
- Effect of accumulated trauma/long-term survivor syndrome:
 - Multiple deaths, losses, accumulated grief
 - Living through early years of intense stigma and fear
 - "Prepared to die; not prepared to live" financial worries, interrupted careers
 - Survivor's guilt





Mental Health Opportunities

- Older PLWH are not alone:
 - A large and growing proportion of PLWH are over 50; most have been diagnosed for 10 years or longer.
 - Opportunities for involvement: Let's Kick A*S*S, speakers' bureaus, other forms of activism (helping others has been positively related with wellbeing, physical activity, and multiple health behaviors for those doing the helping)
 - U = U
- Resilience is associated with better cognitive and functional outcomes in people aging with HIV. Interventions to build resilience may promote successful aging.



How do we disentangle the effects of aging from the effects of long-term HIV infection?

Not all aspects of aging result in poor health

PLWH experience protective factors

 Older age and shorter time with diagnosed HIV have been associated with higher levels of resilience

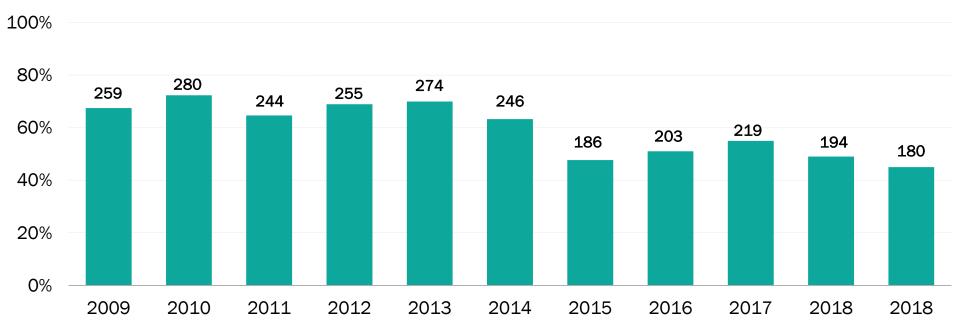




Oregon HIV Medical Monitoring Project Overview

Annual Data Collection

400 people in Oregon sampled each year
Participation includes ~1-hour interview & medical record review
MMP interviews use both a core & local questionnaire









What does aging with HIV look like in Oregon?

PLWH over 50 reflect more likely to identify as male, white, and gay

- ¾ have some college of more education
- 1 in 3 are employed; 1 in 3 live in poverty

Clinically, PLWH over 50 do not differ significantly from people under 50:

 Equally likely to have high CD4 counts, durable viral suppression, and medication adherence

But many PLWH over 50 do have health problems that can impact quality of life:

- 68% report chronic pain (vs. 45% among younger PLWH)
- About 1 in 3 report depression (40%) or anxiety (36%) (but these % are not higher than younger PLWH)





What do older PLWH need?

Sexual Health Services and STI Screening

- Fewer are sexually active: 45% PLWH over 50 vs. 70% of younger PLWH
- Among sexually active, no difference between older and younger: same behaviors, same prevention needs
- PLWH over 50 are less likely to be asked by their provider if they were sexually active (60% vs. 70%)
- Sexually active PLWH over 50 are less likely to be screened for syphilis (68% vs. 79%) and gonorrhea/chlamydia (25% vs. 50%)





What do older PLWH need?

Social Service Needs

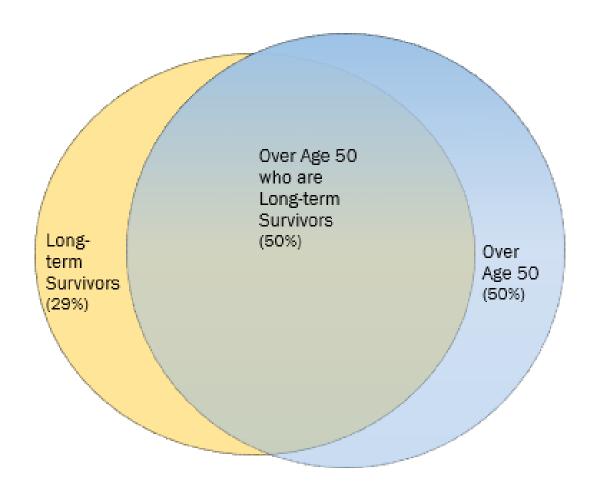
- PLWH over 50 do not have higher unmet service needs than younger PLWH
- 1 in 3 PLWH over 50 currently smoke given increased medical risks, quitting is important





Duration of HIV infection and Aging

PLWH over age 50: LTS and non-LTS







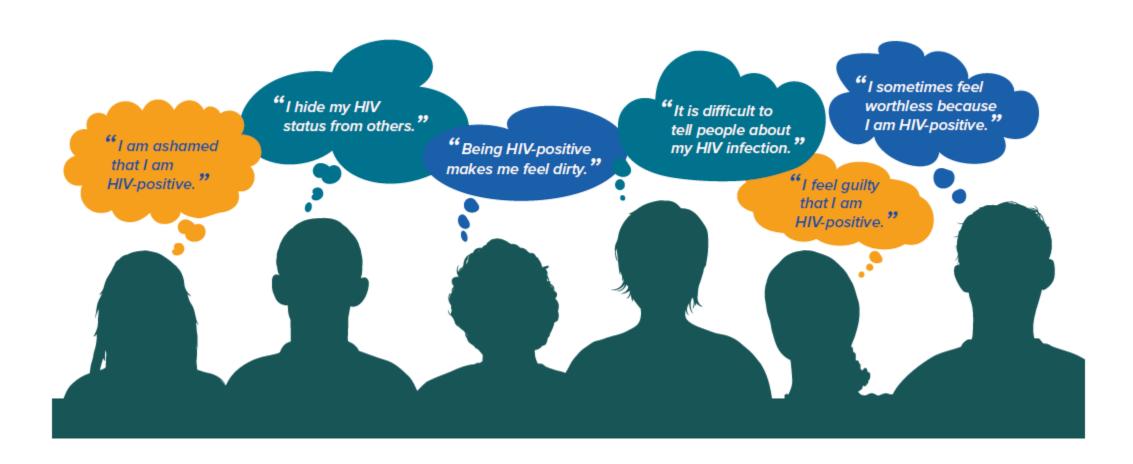
Few differences between LTS and non-LTS, among PLWH over age 50

- No significant differences by demographics or health behaviors.
- LTS were more likely to receive Social Security Disability benefits than non-LTS.
- LTS were more likely to experience depression & anxiety and report healthcare discrimination since testing positive than non-LTS.
- LTS were less likely to receive STI screening, but a higher proportion of LTS achieved durable viral suppression compared to non-LTS.





Internalized HIV-Related Stigma







What can we learn from long-term survivors about healthy aging with HIV?

Stigma

 LTS were less likely to report disclosure stigma — express concerns about sharing their HIV status with others – than non-LTS.

Social Isolation

 Majority of LTS disagree with social isolation measures, "I have stopped socializing with some people because of their reactions to my HIV status" and "I have lost friends by telling them I have HIV"





Discussion

 LTS were more likely to report depression and anxiety than more recently diagnosed people over 50.

Other differences also seemed related to historical experience.

 LTS were less likely to receive STI screenings than more recently diagnosed people over 50.





References

Fazeli PL, Moore RC, Vance DE. Resilience attenuates the association between neurocognitive functioning and everyday functioning in individuals aging with HIV in the Deep South. *International Journal Of Geriatric Psychiatry*. September 2018. doi:10.1002/gps.4988.

Gannon, et al. "Review of the Literature: A Rural–Urban Comparison of Social Networks of Older Adults Living With HIV." *Journal of the Association of Nurses in AIDS Care* 27.4 (2016): 419-429.

Guaraldi G, Malagoli A, Calcagno A, et al. The increasing burden and complexity of multi-morbidity and polypharmacy in geriatric HIV patients: a cross sectional study of people aged 65 - 74 years and more than 75 years. *BMC Geriatrics*. 2018;18(1):99. doi:10.1186/s12877-018-0789-0.

Hearps AC, Martin GE, Rajasuriar R, Crowe SM. Inflammatory co-morbidities in HIV+ individuals: learning lessons from healthy ageing. *Current HIV/AIDS Reports*. 2014;11(1):20-34.

McGowan JA, Brown J, Lampe FC, Lipman M, Smith C, Rodger A. Resilience and Physical and Mental Well-Being in Adults with and Without HIV. AIDS Behav. 2018;22(5):1688-1698.

O'Brien et al. (2016). Effectiveness of aerobic exercise for adults living with HIV: systematic review and meta-analysis using the Cochrane Collaboration protocol. BMC Infectious Diseases, 16(1), 182.

Oghenowede Eyawo et al. Changes in mortality rates and causes of death in a population-based cohort of persons living with and without HIV from 1996 to 2012. BMC Infect Dis. 2017 Feb 27;17(1):174





Aging, HIV & Long-term Survivors Report

https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/COMMUNICABLEDISEASE/DISEASESURVEILLANCEDATA/HIVDATA/Documents/Aging_LTS.pdf

Thank You









The Golden Compass Program: Overview of the Initial Implementation of a Comprehensive Program for Older Adults Living with HIV

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Meredith Greene, MD¹, Janet Myers, PhD², Judy Y. Tan, PhD², Cinthia Blat, MPH3, Allison O'Hollaren, MHA4, Francisco Quintanilla, BS¹, Priscilla Hsue, MD⁵, Mary Shiels, RN⁴, Mary Lawrence Hicks, FNP⁴, Bill Olson, MS⁴, Janet Grochowski, PharmD, BCPS, AAHIVP4, Jon Oskarsson, RN, MN⁴, Diane Havlir, MD⁴, and Monica Gandhi, MD, MPH4

Abstract

The population with HIV is aging and has unique health needs. We present findings from an evaluation of the geriatric-HIV program, Golden Compass, at San Francisco General Hospital. We used the implementation science framework, RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) to guide the evaluation and used quantitative and qualitative methods to assess RE-AIM dimensions. From January 2017 to June 2018, 198 adults age ≥50 years participated in the program, with an estimated reach of 17%. Providers and patients indicated high acceptability of the program and were satisfied with clinics and classes. Colocation of services, specific pharmacy and geriatric assessments, and social support from classes were valued (effectiveness). Provider adoption was high, and the program was implemented as originally designed. Areas for improvement included challenges of framing aging services to patients. Future efforts will focus on expanding the reach of the program and examining long-term outcomes.

Keywords

HIV, aging, geriatrics

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Introduction

With expanded access to antiretroviral therapy, life expectancy for people living with HIV (PLWH) has improved, approaching that of the general population. ¹⁻³ As a result, the number of older adults living with HIV has steadily increased. Worldwide in 2016, 5.7 million PLWH were age 50 years or older, a number estimated to increase to at least 7.5 million older adults in 2020. While the majority of older PLWH live in low- and middle-income countries, in high-income countries like the United States, the proportion of older PLWH is higher, with 50% of PLWH in the United States now age \geq 50.^{1,4} Although most older adults living with HIV were diagnosed at younger ages and have "aged with HIV," new HIV diagnoses in people aged 50 years or older also occur. In the United States, people aged 50 years or older account for 17% of new HIV diagnoses.⁴

Corresponding Author:

Meredith Greene, Division of Geriatrics, Department of Medicine, University of California-San Francisco, 995 Potrero Ave, Bldg 80, 4th floor, San Francisco, CA 94110, USA.

Email: meredith.greene@ucsf.edu



Division of Geriatrics, Department of Medicine, University of California-San Francisco, San Francisco, CA, USA

² Division of Prevention Science, Department of Medicine, University of California-San Francisco, San Francisco, CA, USA

³ Department of Obstetrics, Gynecology & Reproductive Sciences, University of California-San Francisco, San Francisco, CA, USA

Division of HIV, ID and Global Medicine, Department of Medicine, University of California-San Francisco, San Francisco, CA, USA

 $^{^{\}rm 5}$ Division of Cardiology, Department of Medicine, University of California–San Francisco, San Francisco, CA, USA

What Do We Already Know about This Topic?

People living with HIV are aging, and new care models are needed to address the health needs of this population, including comorbidities and geriatric conditions.

How Does Your Research Contribute to the Field?

We describe the successes and challenges from the implementation of the Golden Compass geriatric-HIV program based at San Francisco General Hospital using an implementation science framework Reach-Effectiveness-Adoption-Implementation-Maintenance (RE-AIM).

What Are Your Research's Implications toward Theory, Practice, or Policy?

The use of the RE-AIM framework allows for knowledge learned from our program implementation to be applied to other settings or practices.

Age 50 is commonly used to define "older" for PLWH in part due to studies showing that PLWH are at increased risk of agerelated comorbidities like cardiovascular disease and osteoporosis and that PLWH experience geriatric conditions such as falls and frailty at relatively younger ages than the general population. 5-9 This increased risk of other comorbid diseases stems from a combination of factors, including chronic inflammation from HIV infection, antiretroviral medication toxicities, and lifestyle factors such as alcohol and tobacco use. 10,11 Older PLWH often experience multiple comorbid conditions, or multimorbidity, which can lead to polypharmacy. 12-14 Adding to this medical complexity, some older PLWH also face mental health conditions and psychosocial issues such as substance use, loneliness and social isolation, and stigma. 11,15-17 The combined burden of HIV, comorbidities, and geriatric conditions in this population necessitates a shift in HIV care from a focus primarily on HIV-related outcomes toward more holistic models of care aimed at treating comorbidities and improving quality of life. Addressing geriatric conditions can be especially important as conditions such as functional and neurocognitive impairments are associated with poorer quality of life in PLWH. 18,19 This paradigm shift, dubbed "geriatric-HIV medicine," endorses that geriatricians and HIV providers start sharing the "same language" and incorporate geriatric medicine principles when caring for this burgeoning population.²⁰⁻²²

In response to this needed shift in care, a small number of geriatric-HIV programs have emerged worldwide, mostly in high-income countries in Europe and the United States. ²³ A few programs, such as in Italy and Australia, emerged from clinics originally focused on metabolic complications of HIV and are now focused on multimorbidity and frailty. ²³ Other programs are based on a consultative model where a consultant or team

conducts geriatric assessments focused on domains such as cognition, mental health, and physical function. ²³ Examples of consultative models include a geriatrician-led weekly consultative clinic embedded in an HIV clinic (Center for Special Services clinic in New York City); an interdisciplinary review of geriatric screening results by a team comprised of a physician with geriatrics and infectious disease expertise, a pharmacist, a social worker, and a nurse practitioner (former Mmutu Clinic in New Orleans); and a separate, dedicated referral clinic consisting of an HIV consultant, nurse practitioner, pharmacist, and nutritionist (Over 50 clinic in London). ^{20,23-25} Although 3 clinics (New York, New Orleans, London) have program descriptions reported in the literature, empirical data on such programs are lacking, especially program evaluation data. 25-27 Few shortterm outcomes are described, and we are unaware of data on concepts such as program acceptability, which is important for long-term programmatic success. 25-27

The field of implementation science can help address this knowledge gap, to allow for better understanding of how geriatric-HIV programs address age-related challenges in realworld clinical settings. Broadly, implementation science can be defined as the study of the strategies used to translate research knowledge into clinical practice.²⁸ Implementation science research has been proposed as a solution to address gaps in HIV prevention and the HIV care continuum and could also be applied to help identify and address gaps in the care of older adults living with HIV. 29,30 Further, implementation science frameworks provide a way to organize data for dissemination of program findings to other settings. Although multiple implementation science frameworks exist, the Reach-Effectiveness-Adoption-Implementation-Maintenance (RE-AIM) framework is an established framework used in public health settings for 20 years and has been specifically proposed for HIV research.³¹⁻³⁴

To expand on the current knowledge of geriatric-HIV programs, in this study, we evaluated the initial implementation of the Golden Compass Program, at the Ward 86 outpatient HIV clinic at San Francisco General Hospital, using the RE-AIM framework. The Golden Compass Program is a geriatric-HIV program designed to address key health-related challenges experienced by older PLWH and consists of consultative geriatrics and cardiology clinics located within the HIV clinic and participatory group classes for patients; the theory-based design of the program is described previously. This evaluation focuses on the period from program inception in January 2017 through June 2018. Importantly, through the use of the RE-AIM framework, this article presents assessment of initial outcomes such as acceptability and satisfaction with the program among patients and providers.

Methods

Program Setting and Participants

The Ward 86 clinic is a Ryan White and public health funded clinic located on the San Francisco General Hospital campus. Ward 86 provides HIV primary care and specialty services to

approximately 2600 PLWH who are publicly insured or underinsured. From 2017 to 2018, the time frame of this study, approximately 1200 patients were age 50 years or older. All PLWH age \geq 50 seen at Ward 86 were eligible to participate in the Golden Compass program. Although we focused on patients at Ward 86, programming was open to the larger San Francisco community.

Program Description

The Golden Compass Program launched in January 2017 involving a team of MDs (medical director, cardiologist, geriatrician), a registered nurse (RN), a pharmacist, a program coordinator, who managed classes, and a medical assistant. We developed the program with input from patients and providers, described in detail previously.³⁵ Specifically, the program name, including the idea of a compass, came from focus groups with patients who reported feeling unprepared for their "Golden Years" and who reported needing help navigating the health care system.³⁵ Using this input, we conceptualized the Golden Compass program as a comprehensive care program for PLWH aged 50 years or older, framed around the 4 points of a compass: (1) Heart and Mind (Northern Point) includes on-site cardiology, cognitive evaluations, and brain health classes; (2) Bones and Strength (Eastern Point) focuses on bone health, fitness, and physical function, through exercise classes and on-site geriatric consultation; (3) Dental, Hearing, and Vision (Western Point) ensures appropriate screenings and linkage to dental, audiology, and optometric/ophthalmology services; and (4) Networking and Navigation (Southern Point) focuses on social and community-building activities.³⁵ Key features of this program are that patients maintain their primary care provider and access the Golden Compass program within their HIV primary care setting. Consultations and class programming, including inperson visits with an HIV-focused geriatrician and cardiologist, are accessed in the same familiar clinic environment. Although conceptualized along the compass framework, not all services map precisely to a single point and are meant to overlap and be complementary. For example, while the cardiology clinic aligns directly with the Northern Point (Heart and Mind), the geriatrics clinic overlaps with Northern (Heart and Mind), Eastern (Bones and Strength), and Western Points (Dental, Hearing, Vision) by assessment of cognition, physical function and falls, and screening for sensory impairment, respectively.

Program Referrals

We employed a 2-pronged strategy to introduce the Golden Compass Program to patients and medical providers. First, program components were advertised to patients through flyers and handouts posted around the clinic. Second, we introduced the program to providers and staff via a series of routine staff meetings. To participate in the program, patients could be referred by their primary care provider (most common mechanism), or by a social worker or RN on their clinical care team, to 1 or more program components. Separate referrals existed for the

cardiology and geriatrics clinics, although a patient could be referred to both clinics. Participatory group classes (brain health and exercise classes) were attended on a drop-in basis and did not require provider referral. However, if a provider thought a patient might benefit from a class, they could share patient names with the program coordinator, who in turn contacted the patient with details and provided reminder calls for upcoming sessions. Additionally, participation in one programmatic component could facilitate participation in another component. For example, if a patient seen in geriatrics clinic was found to have cognitive concerns or problems with mobility and balance, they were offered participation in brain health or exercise classes. Through these systems, a patient could participate in one component (eg cardiology clinic) or multiple components (eg, geriatrics clinic and brain health classes). The extent of participation was determined by each patient and there were no time limits on participation.

Description of Initial Program Implementation

Initial program implementation focused on 3 programmatic components: (1) group classes, specifically exercise and brain health classes (Eastern and Northern Points, respectively); (2) a bimonthly consultative cardiology clinic (Northern Point); and (3) a weekly consultative geriatrics clinic (Eastern, Western, and Northern Points). All classes were on a drop-in basis and there were no limits or caps on the number of classes each patient could attend. Brain health classes were developed in conjunction with a community-based gerontologist, who led the classes. The curriculum was adapted to focus on cognitive domains relevant to HIV-associated neurocognitive disorder.³⁶ We conducted 3 series of brain health classes, occurring weekly for 9 weeks, between February 2017 and April 2018. Each class in the series was 2 hours long and concluded with a meal at the end. Content included strategies for addressing cognitive concerns and included sessions on mental health issues such as depression. Exercise classes, known as "Wellness Club," focused on balance, cardiovascular, and strengthening exercises. Wellness club classes were conducted on a weekly basis over 2 time periods, between January and April 2017 and then from January 2018 on an ongoing basis. An exercise instructor with experience in leading classes for older adults in a medical setting, led the Wellness Club classes. Classes were 50 minutes in length and all exercises could be performed sitting in a chair or wheelchair.

For implementation of the cardiology clinic, a cardiologist with HIV expertise conducted cardiology consultations twice a month at Ward 86 for patients aged ≥50 years. Electrocardiography and laboratory specimens needed for cardiology clinic could be done at Ward 86, while other testing was done on the same hospital campus. For the geriatric consult clinic, a geriatrician with HIV expertise held a weekly consult clinic at Ward 86. Each initial geriatric consultation visit was scheduled for 60 minutes and included a consultation with the clinic pharmacist to review all medications. During this visit, geriatric assessments were performed and a treatment plan developed.

Table 1. Definitions and Data Sources of RE-AIM Dimensions.^a

RE-AIM dimension:	Definition	Source	
Reach ^b	-Overall reach: Proportion and demographics of patients who participated in 1 or more program components	-Manual tracking of geriatric and cardiology clinic visits including cancellations and no-show appointments	
	-Proportion and demographics of patients seen in geriatrics	-Tracking class attendance	
	and cardiology clinics; we compared demographics between those who attended clinic appointments and	 Electronic medical record demographic data and surveys with demographic questions 	
	those who had cancelled/no-show	-Qualitative interviews with patients and providers	
	-Class attendance and demographics of attendees		
	 -Number of patients screened for vision, hearing and dental issues 		
Effectiveness	-Patient satisfaction with and acceptability of program components	 Surveys of patients and providers/staff regarding program satisfaction and acceptability (provider surveys also included questions about knowledge, attitudes, beliefs, patient surveys self-rated health) Surveys of patients at end of each class cycle 	
	-Patient satisfaction and feedback on classes -Provider/staff satisfaction with services, acceptability of		
	program components		
	 Provider/staff changes in knowledge, attitudes and beliefs about aging services 	-Qualitative interviews with patients and providers	
	-Reports of benefits from services		
Adoption ^c	-Provider/staff referrals to program components, especially geriatrics and cardiology clinics	-Manual tracking of providers who referred to clinics	
		 Survey questions about reasons why did or did not make referrals 	
		-Qualitative interviews with patients and providers	
Implementation	-Fidelity to proposed structure of clinics and programming	-Internal notes/reports on activities and operations-Qualitative interviews with patients and providers	

^aMaintenance phase not included.

Assessments included depression screening (Patient Health Questionnaire-9), cognitive assessment (Montreal Cognitive Assessment), functional status (Activities of Daily Living and Instrumental Activities of Daily Living), falls and gait assessment, and assessment of social supports. In this initial program implementation, only patients who were seen in geriatrics clinic underwent geriatric assessment (eg, someone who only participated in Wellness Club did not undergo geriatric screening). For both geriatrics and cardiology clinics, the need for ongoing follow-up visits was at the discretion of the consultant. Consultant notes with assessment results and treatment plans were sent to primary care providers and any medication changes discussed with providers over email or phone.

Initial implementation of screenings for dental problems and sensory impairment (Western Point) focused on older adults seen in the geriatric consultation clinic. Standard single-item screening questions assessed vision, hearing, and dental concerns and dates of last screening exams.^{37,38} Referrals were made to appropriate services and information provided about discounted eyeglasses or hearing aids. Initial activities to address social isolation (Southern Point) focused on a pilot support group for older adults, along with linking patients, as appropriate, to community-based programs to address social isolation.

Evaluation Using the RE-AIM Framework

The implementation science framework RE-AIM focuses on the *reach* of a program to a representative proportion of the target population (often defined at the patient level), effectiveness of the program on specific outcomes, adoption of the program in a specified setting (often defined at the provider level), fidelity to the originally planned implementation, and long-term effects including how a program becomes incorporated into routine practices, or program maintenance. 31,32-34,39 For this initial evaluation of the first 1.5 years of the program (from January 2017 to June 2018), we did not examine the maintenance dimension of RE-AIM. We used both quantitative and qualitative methods as data sources for the RE-AIM dimensions. Satisfaction surveys for the overall program and consultative clinics were administered once in the fall of 2018, at the same time and one-on-one qualitative interviews with primary care providers and patients were conducted. Qualitative interviews provided important data on barriers and facilitators of each RE-AIM dimension as well as additional effectiveness data. Table 1 summarizes the definitions and data sources utilized in our study for each RE-AIM dimension.

RE-AIM Dimensions

Overall *reach* was defined as the proportion of patients who participated in ≥ 1 program components compared to the total number of patients aged ≥ 50 years listed as patients in the clinic. The primary data source was attendance at clinic appointments and classes. We also examined participant demographics and compared the demographics of those who attended clinic appointments in the cardiology and geriatrics

^bReach defined at patient level.

^cAdoption defined at provider/staff level.

clinics to those who did not attend (cancelled and no-show appointments).

We examined *effectiveness* among patients, primary care providers, and staff in terms of the degrees of acceptability and satisfaction with the Golden Compass program. This was done through quantitative methods (satisfaction surveys done at one time point in the fall of 2018) and qualitative interviews with patients and primary care providers, for example, through benefits of the program reported during interviews. Acceptability was measured using a single item, "I would recommend *x service* to another person," rated on a Likert scale from strongly agree to strongly disagree. ⁴⁰ We assessed satisfaction with program components using survey items, "How satisfied were you with x," rated on a Likert scale from very satisfied to very dissatisfied.

For patients who attended one of the consult clinics, we also assessed satisfaction with geriatrics and cardiology clinics using the 18-item Interpersonal Processes of Care scale, 41 which focuses on communication and patient-centered decision-making (items scored between 1 "never" and 5 "always"). Self-rated health before and after geriatrics and cardiology clinics was assessed retrospectively using 2 items: "How would you rate your overall health before your appointment with Dr X?" and "How would you rate your overall health after your appointment with Dr X?" The response scale for each item ranged from "excellent," "very good," "good," "fair," to "poor." Items rating patient satisfaction with classes included satisfaction with instructors and open-ended questions about what participants liked most and least about classes, as well as any specific benefits observed or learned in classes ("Please describe any specific benefits achieved").

Among providers and staff, we also assessed changes in knowledge, attitudes, and beliefs about aging issues and services (eg, "As a result of the Golden Compass Program, I am knowledgeable in providing care to older adults," ranked on a Likert scale of strongly agree to strongly disagree).

Adoption was defined as provider uptake of the program, or the number of providers who made referrals to geriatrics and cardiology clinics. Provider referrals were assessed primarily through tracking scheduled appointments in each clinic. Provider satisfaction surveys also included questions about which program components they referred patients to and reasons for non-referral. Barriers and facilitators of provider adoption of the program were explored further in qualitative interviews.

We assessed fidelity to the proposed *implementation* of the program through internal notes, activity reports on operational changes, and through qualitative interviews of patients' and providers' experiences of the program.

Data Collection

Data on referrals and class attendance were collected from January 2017 through June 2018 (cardiology clinic began March 2017 and geriatrics clinic July 2016). We administered satisfaction surveys evaluating satisfaction and acceptability with the overall program and consultative clinics at a single

time point in the fall of 2018 with staff, providers, and patients. We also conducted one-on-one qualitative interviews with primary care providers and patients during this time. Patient satisfaction with classes was assessed at the end of each brain health class cycle (April 2017, September 2017, and April 2018) and at the end of the second series of exercise classes (June 2018).

Patients were recruited for surveys (approximately 15 minutes in length) and interviews (45-60 minutes in length) via flyers. Flyers were posted in the clinic and were also given to patients who attended the geriatrics and cardiology clinics by a medical assistant. The flyer included a brief description of the evaluation goals and a telephone contact. Patients in turn contacted the evaluation team if they were interested in completing surveys or interviews. All providers and staff were recruited through email with links to an online survey (approximately 10 minutes in length). Primary care providers who had referred at least 1 patient to the program were recruited over email to participate in qualitative interviews (20-45 minutes in length). Patient surveys were self-administered in person, either on paper or on a tablet device, with staff assistance if needed. Provider surveys were self-administered online directly through the secure UCSF REDCap survey platform. All survey data were entered and stored using REDCap electronic data capture tools hosted at UCSF.42 Interviews were conducted by researchers experienced in conducting qualitative research in person or via videoconference using a semi-structured interview guide with open-ended questions about experiences with the program. A transcription company approved by the UCSF Committee on Human Subjects Research transcribed interview data. Patients received a \$10 gift card for survey completion and a \$20 gift card for qualitative interviews. Providers who completed qualitative interviews received \$10 gift cards.

Data Analysis

We used descriptive statistics to summarize survey data and participant demographics. We used a framework analysis to analyze the qualitative interview data, with codes based on the RE-AIM dimensions.⁴³ Three coders independently reviewed the interview transcripts and met to discuss codes (JM, JT,CB). Representative quotes for each RE-AIM dimension were selected for this study.

Ethical Approval and Informed Consent

The study was conducted in accordance with the World Medical Association Declaration of Helsinki. All study procedures and activities were reviewed by the UCSF Committee for Human Subjects Research (study # 15-17859) and determined to be a project that includes program evaluations, quality improvement activities, or other activities which did not require further institutional review board oversight according to US federal regulations. Even with the exemption, we still followed principles of informed consent including emphasizing the voluntary nature of participation in the evaluation process.

Table 2. Demographics of Golden Compass Program Participants (n = 198).

Age in years, mean (SD)	62 (7.6)
Race	
White	78 (39%)
Black	43 (22%)
Asian	14 (7%)
American Indian/Alaska Native	10 (5%)
Other	33 (17%)
Hispanic/Latino ethnicity	31 (17%)
Male sex	178 (89%)
CD4 T cell (cell/mL), median (IQR)	514 (368-734)
Undetectable viral load (<40 copies/mL)	171 (91%)

Results

Results are reported in the context of each RE-AIM dimension. During the evaluation period of January 2017 to June 2018, a total of 39 providers and 28 staff worked at Ward 86, and 198 patients participated in the Golden Compass program. Sixty-three percent (n = 42) of staff and providers and 20% (n = 39) of patient participants completed satisfaction surveys. Ten patients and 9 primary care providers completed qualitative interviews.

Reach

In the first year-and-a-half since formal program launch, 198 individuals participated in 1 or more components of the Golden Compass program. Specifically, 119 were seen in geriatrics clinic, 48 in cardiology clinic, 40 attended brain health classes, and 32 attended exercise classes. Moreover, 30 (15%) participated in \geq 2 components of the program. The mean age was 62 years (range 48-81); the majority were male (89%); 17% were Latino; 14 participants were from outside Ward 86. Other participant demographics are given in Table 2. Since 1200 adults aged 50 years or older are listed as patients of Ward 86, the estimated overall reach was approximately 17%.

In geriatrics clinic, 119 patients were seen for a total of 182 visits. An additional 34 patients were referred to clinic but did not attend. Compared to those who attended, there were no statistically significant differences by demographic characteristics including race and ethnicity, although it was noted that those who did not attend were relatively younger (59 versus 64 years, P=.07) and more likely to identify as female (P=.08). In cardiology clinic, 48 patients were seen for a total of 98 visits. In cardiology clinic, an additional 17 referred patients did not attend appointments. Compared to those who attended, patients who did not were more likely to identify as female (23% versus 6%, P=.05); no differences were seen by race, ethnicity, or age.

Attendance in Golden Compass classes increased over time. Brain health class attendance grew from a regular group of 4 participants to a group of 10. Similarly, attendance increased over time in the exercise classes with an initial group of 8 participants attending on average 2 weeks of classes, to a group of 30 participants attending on average 5 weeks of classes.

Notably, 7 participants attended ≥ 10 consecutive weeks of classes. For the Western point (Dental, Hearing, Vision), among geriatric clinic patients, 42 (34%) had difficulty seeing, 55 (45%) had difficulty hearing, and 45 (36%) noted dentition problems. Attendance in the support group (Southern Point) at Ward 86 was low, necessitating outside referrals.

In qualitative interviews, providers noted that convincing patients to participate in an aging-focused program was sometimes a barrier to *reach*. Many providers noted that discussing the program with younger patients (such as those in their early 50s) could be challenging. One provider noted that although cognitive assessments were valued (reflecting provider level *effectiveness*), cognitive impairment carries its own stigma, which could also be a barrier to patient reach. Table 3 includes example quotes related to the *reach* of the Golden Compass program.

Patient Effectiveness

Thirty-nine (20%) program participants completed satisfaction surveys. Overall satisfaction and acceptability with programmatic components were high (>90%; Table 4). Interpersonal processes of care scores also reflected high satisfaction with clinics (Table 4). Although self-rated health was assessed by retrospective report, patients reported higher self-rated health (more "excellent", "very good" responses) after being seen in geriatrics clinic (P = 0.015; Table 4). Twenty-three participants completed class surveys about brain health classes and 9 completed surveys about Wellness Club. Across all 3 brain health class cycles, in response to the prompt "What did you like most about the class?," the most common response was interactions with others. In a prompt about benefits gained from Wellness Club, participants reported improvements in balance and posture, with one-third noting improvements in mental health ("feel happier," "more motivated," "emotional health has improved") and one-third noting connection with others.

In qualitative interviews, patients noted benefits of attending classes, including social aspects and interactions, as well as specific benefits such as learning how to "feel calm" in brain health classes. Patients appreciated meeting with the pharmacist to review medications during geriatrics clinic and appreciated a "more broad, wider" or holistic approach to health in geriatrics clinic including addressing mobility problems, which was noted as an issue for many older adults. Table 3 includes example patient quotes related to the *effectiveness* of the Golden Compass program.

Provider and Staff Effectiveness

Overall, 42 (63%) of staff and providers completed satisfaction surveys (16 staff and 26 providers, with 18 providers having referred at least 1 patient to geriatrics clinic and 14 providers having referred at least 1 patient to cardiology clinic). All disciplines were represented among survey respondents, with MD/NP providers (n = 22), nursing (n = 4), medical assistants (n = 8), and other staff (n = 8). Table 5 summarizes staff and provider satisfaction survey data. Satisfaction with the Golden

Table 3. Example Quotes for Each Re-AIM Dimension from Qualitative Interviews with Patients and Providers.

Reach

[My doctor] said [Golden Compass] was a program for people who were older... That I would meet those kind of people... I had a whole peer group die on me, and I'd like to have some peers and some people with HIV who are in their 60s or older. I know there are not too many of us, but I'd like to see if our experiences are similar or connect in any way. So that was my primary interest in the program. (Patient) Providers framing aging services

I talk about as we get older it's nice to have somebody who that's their specialty, I do primary care, I'm an HIV specialist but it's also nice as we get older to have kind of global look at your overall health from that point of view, and it's not that you're old because a lot of people, they roll their eyes, "I'm 50 I don't want to get referred to as a geriatric." And I say, "Well it's not that you're so old now but what we want to do is look at ways to keep you healthy as you get older." (Provider)

Effectiveness

Overall effectiveness of Golden Compass

[The program] is another set of eyes on taking care of my health, they're like, "How can we support this person, what could we do to make it easier for them?" (Patient)

We often learn from our subspecialist colleagues and subsequent recommendations and notes. So, even though I don't always refer my patients who are over fifty, the assessments are actually quite helpful in informing how to approach all of my patients over fifty, even if they don't go to—or don't want to go to Golden Compass." (Provider)

Benefits of classes

[The classes] really taught you...Don't blame yourself...I didn't do anything wrong. Somebody just took [HIV] from themselves and just gave it to me...I got so sick. I didn't have no other choice. I got so sick I was on my knees crawling for somebody to take me to the hospital because I'm knowing but not believing. So the classes really taught me, calm yourself down. Just deal with whatever it is that you need to deal with. And you will never be okay but you'll be all right. All right. You know what you need to do to make yourself feel better. (Patient)

I have had a couple patients attend [the classes] and they really like it. I sell it to them by saying that there will be people of their age group so they're not feeling like they're in an uncomfortable environment, with younger people, and maybe not being able to do things. Patients have really enjoyed it who have gone. So I often try and get [more of] them to go. (Provider)

Adoption

Satisfaction with prior experience facilitates adoption

"And for the most part, part of what makes you want to refer a patient is the experience you have when one patient's been seen and in general my experience has been really good," (Provider)

Staff can help facilitate referrals

"The best way would be to have the nurses query the providers, because they do the scrubbing and the charts before [visits] for healthcare maintenance elements, and then just saying "Do you think that this [person] would be a candidate for a Golden Compass referral?" (Provider)

Implementation

I wish I can have all of my appointments here . . . I'm familiar with the building. When I [have to] go somewhere else, I still show up but it's just more far away and it's different, so I got to plan my timing and stuff. The area, the closeness, it's a plus. (Patient)

I'll look at my clinic list and I'll have 70-year-olds, a bunch of 60-year-olds—that's my typical panel. Maybe not all 70s but 50s, 60s, definitely aging. So, [it is critical] having Golden Compass be an integral part of the clinic and provide routine follow-up as part of the person's care as well. Often I'll have a patient with psychiatric issues and, because they're a little bit disorganized and can't make appointments with a psychiatrist and all that, I'll end up managing, I'll prescribe their antipsychotics but then I'll want them to see the psychiatrist once a year just to check in, med check, give an overall global view of how things are going. [The benefit of] Golden Compass is not only just the initial consultation but also the following up. (Provider)

Compass program was high, with 38 (90%) reporting very satisfied or satisfied with the program overall and with cardiology and geriatric clinics. A majority (90%) of staff and providers agreed or strongly agreed that the program improved the health of older adults at Ward 86. In open-ended survey responses, comments included phrases such as "pivotal program," or "welcomed addition." Areas for improvement in comments included appointment wait times, how to best communicate with specialists and refer to appointments, and advertising more effectively.

With regard to knowledge, attitudes, and beliefs about aging services among staff and providers, 30 (72%) strongly agreed

or agreed that their comfort in providing care for older adults had increased since program inception and 26 (62%) strongly agreed/agreed that they felt knowledgeable about caring for older adults since program inception. Similar responses were obtained regarding changes in confidence in ability to care for older adults, with 25 (59%) noting strongly agree/agree. Overall, 11 (76%) providers who referred to cardiology clinic felt the referral increased their knowledge of cardiology topics and 17 (94%) providers who referred to geriatrics clinic felt their knowledge of geriatric assessment and management increased.

Among the 9 primary care providers who completed qualitative interviews, combined they referred 70 patients to

Table 4. Patient Satisfaction with and Acceptability of Golden Compass Program Components.

	Percentage reporting satisfied/very satisfied or agree/strongly agree, $n=39$		
Satisfaction with care overall	97% (77% very s	satisfied)	
Geriatrics clinic			
Satisfaction with geriatrics clinic ^a	100% (75% very	100% (75% very satisfied)	
Acceptability of geriatrics clinic ^b	93% (75% strongly agree)		
Self-rated health before and after geriatrics ^c clinic	Before	After	
Excellent	3 (11/%)	4 (14%)	
Very good	2 (7%)	4 (14%)	
Good	II (4 0%)	12 (43%)	
Fair	9 (32%)	8 (29%)	
Poor	3 (11%)	0 (0%)	
	,	P value = 0.015	
Cardiology clinic			
Satisfaction with cardiology clinic ^a	100% (88% very satisfied)		
Self-rated health before and after cardiology ^c clinic	Before	After	
Excellent	0 (0%)	0 (0%)	
Very good	I (13%)	4 (38%)	
Good	6 (75%)	5 (62%)	
Fair	I (I3%)	0 (0%)	
Poor	0 (0%)	0 (0%)	
	• •	P value = 0.5	
Acceptability of cardiology clinic ^b Interpersonal processes of care scores ^d	100% (63% strongly agree)		
Communication	Lack of clarity	1.12	
Communication	Elicited concerns	4.60	
	Explained results	4.48	
Decision-making	Decided together	4.24	
Interpersonal style	Compassionate	4.83	
inter personal seyle	Discrimination	1.00	
	Disrespectful office staff	1.03	
Classes	2.5. 55p 555.5. 555 556		
Satisfaction with brain health classes ^a	93% (80% very satisfied)		
Acceptability brain health classes ^b	100% (88% strongly agree)		
Satisfaction with Wellness Club ^a	100% (76% very satisfied)		
Acceptability Wellness Club ^b	100% (88% strongly agree)		
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 $^{^{}a}N = 28$ for geriatrics clinic, 8 for cardiology clinic, 16 for brain health, 17 for Wellness Club.

Table 5. Provider and Staff Satisfaction with and Acceptability of Golden Compass Program Components.

	Percentage reporting strongly agree/agree or satisfied/very satisfied, $n=42$
Overall Golden Compass Program	
Satisfaction with Golden Compass Program	90%
Program improved health of patients age ≥50	90%
Acceptability ^a	96%
Geriatrics clinic ^b	
Satisfaction with geriatrics clinic	94%
Adequately addressed your clinical concern	100% (83% strongly agree)
Improved patient care	100% (67% strongly agree)
Communicated recommendations clearly	` 94%
Cardiology clinic ^b	
Satisfaction with cardiology clinic	94%
Adequately addressed your clinical concern	92%
Improved patient care	92%
Communicated recommendations clearly	83%
Classes	
Satisfaction with patient experience of Wellness Club	90%
Satisfaction with patient experience of Brain Health ^c	66%

^aAcceptability measured by "How strongly do you agree, "I would recommend the x to someone else?"

^bAcceptability measured by "How strongly do you agree, "I would recommend the x to someone else?".

^cAsked at one time point, retrospectively, P values using Wilcoxon signed-rank test.

dAsked for both cardiology and geriatrics clinics, reported as average scores from 1 to 5, with 1 being a low score or "never" and 5 being a high score or "always."

 $^{^{}b}n=18$ for responses to geriatric consults, n=14 for responses to cardiology consults.

^cNo one answered dissatisfied or very dissatisfied, but 29% answered "unsure" or that "patients referred did not participate."

cardiology and geriatrics clinics, with an average of 2 referrals to cardiology and 5 referrals to geriatrics. Complementary to survey data, reviewing consultants' notes and applying knowledge gained to other patients was noted during interviews (Table 3). Improvement in patients' lives, such as addressing cognition and mobility issues in geriatrics clinic, was another notable theme. Addressing polypharmacy and pharmacist support was viewed as a benefit to patients and helpful to providers. Providers also observed that patients benefitted from class participation (Table 3). A desire for increased mental health services for older adults was noted.

Adoption

A total of 39 providers and 28 staff were working at Ward 86 in 2017 to 2018. Through tracking clinic appointments, 33 (85%) providers had referred at least 1 patient to the geriatrics clinic, with a range of 1 to 16 patients referred. Twenty-three (59%) had referred to the cardiology clinic, with a range of 1 to 14 patients referred. The most common reasons for referral to geriatrics clinic included general evaluation (n = 48, 40%), cognition (37, 31%), and falls (14, 11%). The most common referral reasons to cardiology clinic included coronary artery disease (20, 42%), congestive heart failure (7, 15%), arrhythmias (including atrial fibrillation, n = 5, 10%), and pulmonary hypertension (5, 10%).

Among the staff and providers who completed surveys (n = 42, 63% of total staff and providers), 12 (80%) staff and 23 (90%) providers reported recommending 1 or more program components to patients. The majority of respondents had referred to geriatrics clinic (n = 27, 77%), brain health classes (n = 25, 72%) followed by exercise classes (n = 21, 60%), and cardiology clinic (n = 17, 17, 49%). Staff (n = 3) who did not discuss the program with patients cited time constraints (n = 1) and role responsibilities as reasons (eg, more the role of the patient's primary care provider, n = 2). Two providers who had not referred to any program components indicated not knowing how to make a referral, being unaware of program components or not understanding what a geriatric consult provides.

In interviews with primary care providers, confusion over referral workflows to geriatrics and cardiology clinics was noted as a minor barrier to adoption. Value and perceived benefits to patients seen from prior referrals facilitated further referrals and overall adoption (Table 3).

Implementation

Overall, the program was implemented as originally planned. A few changes did occur including refocusing the Southern Point (social support) to our community partners with active support groups. Interviews supported fidelity to proposed implementation, including the flow of initial geriatrics clinic visits with the pharmacist and geriatrician (Table 3). Both providers and patients identified colocation of geriatrics and cardiology clinics at Ward 86 as helpful and important. Both groups noted lack of Spanish-language programming as a challenge. Providers noted

a need for clarity regarding the role of the Golden Compass team as either providing consultation or ongoing follow-up support, with some desiring more comanagement options (eg, ongoing geriatric care).

Discussion

As the field of "geriatric-HIV medicine" evolves, improved knowledge of existing geriatric-HIV programs is needed. In this study, we evaluate the initial implementation of the Golden Compass geriatric-HIV program in San Francisco, using the RE-AIM framework. The Golden Compass program offers comprehensive services with a focus not just on consultative clinics in geriatrics and cardiology but also on classes and fostering social connections. In the first year and a half, we reached approximately 17% of older adults at the Ward 86 HIV clinic with overall fidelity to the original program design. Provider adoption of services was high with 60% and 80% of providers referring at least 1 patient to cardiology and geriatrics clinic, respectively. Overall, patients and providers found the program to be highly acceptable and were satisfied with services. Our study helps address the knowledge gap about geriatric-HIV programs by providing evaluation data including data on short-term outcomes and acceptability of services.

Use of the implementation science framework RE-AIM is a strength of this evaluation, as it allowed us to consider and analyze relevant public health dimensions such as reach and effectiveness. 29,32 Additionally, the qualitative and quantitative methods used to define the RE-AIM dimensions were complementary. For example, with regard to reach, during provider interviews, stigma against attending an "aging" program was perceived as a barrier to participation for some patients, especially those in their 50s. While we had heard that sentiment expressed by patients during program development, and intentionally omitted the word "HIV" or "geriatrics" or "aging," it can be challenging to frame the program to patients, especially to the geriatrics clinic, without using the term "aging." Indeed, those who did not attend geriatric clinic appointments (canceled or no-show appointments) were relatively younger compared to those who did attend (age 59 versus 64 years). Missed appointments also helps explain the high adoption rate of the Golden Compass Program through provider referrals yet lower overall reach. Provider suggestions on how to address this concern included framing the program as "staying healthy as you get older" or "living longer with HIV," both of which we plan to incorporate in the future.

Regarding *effectiveness*, we focused on early implementation outcomes, including satisfaction and acceptability of services. Overall, we found a high degree of satisfaction with all program components, often ≥90% among both patients and providers. Patients retrospectively reported improvements in self-rated health after attending geriatrics clinic appointments, a measure which has been used as a single-item measure of quality of life in HIV clinics.⁴⁴ In interviews, providers and patients valued services through the program, especially addressing medications and mobility problems, although the need for greater mental health services was noted. Colocation

of services was also valued. The preliminary finding of improved self-rated health and the value of geriatric assessments supports the literature on geriatric assessment being associated with quality of life in older PLWH. The value of colocation of services supports a study of Ryan White HIV/AIDS program funded clinics, which also reported the importance of colocation of services. 45

A greater range of responses was seen in terms of knowledge, attitudes, and beliefs among providers and staff; 70% noted increases in comfort, confidence, and knowledge since program inception. Of note, initial program activities did not include specific educational outreach to staff and providers, which may explain the result. Overall *implementation* of the program proceeded as intended, except for the unexpected low attendance rate at the social support group, necessitating referrals to established community-based groups. Importantly, patients found support and connection through Wellness Club (exercise classes) and brain health classes offered, so may not have required an additional social support group.

Although it is difficult to make direct comparisons, for context on our RE-AIM findings, in terms of *reach*, the geriatric-HIV program in New Orleans (Mmutu Clinic) saw 60 of 160 eligible patients age \geq 60 in 1 year; the Over 50 clinic in London saw 150 patients over 2 years, and the Center for Special Studies program in New York City saw 76 patients over 4 years (2800 patients all ages). The Center for Special Services program in New York reported that 7 of 10 providers found geriatric consultations very or extremely useful, which similar to our results suggest that providers find services valuable. The context of the suggestion o

Another strength of using the RE-AIM framework in our evaluation is it provides a structure to organize key findings and how these findings might be applied or adapted to other settings.²⁹ For example, to expand the *reach* of geriatric-HIV programs, it is critical to not only frame services to avoid stigma from HIV but also agism. Through qualitative interviews, we learned more about the challenges of framing or advertising aging services to patients, despite our original best intentions of developing the program name, Golden Compass, to avoid "aging" or "geriatrics." Another key finding relates to the preliminary effectiveness data, as patients reported developing new social connections through the program's classes. This is important as more literature emerges about the hazards of isolation and loneliness on the overall health for older adults. 15,46-48 We learned that fostering new social connections can occur through different types of programming and not just formal support groups. Also relevant to effectiveness, colocated services were valued by both patients and providers. We acknowledge that access to a colocated geriatrician may be difficult in some settings, given the limited numbers of geriatricians in the United States. Training HIV staff and interested providers in geriatric principles to conduct on-site geriatric assessments or using telemedicine consults could be adaptations, which still offer the spirit of colocated services. Furthermore, we found that the program was implemented largely as planned, which allows our program description to be reviewed by others and adapted to local resources. This is especially relevant as resources may vary

between urban settings like ours and rural areas in the United States, and especially relevant to differences in resources between high- and low- and middle-income countries.

Limitations do exist in our study, especially with our definition of reach. The denominator we used to examine reach is a current estimate of patients aged 50 years or older assigned to Ward 86, many of whom may not be actively engaged in services or attending clinic during the study time frame (2017-2018). Additionally, it is unclear that everyone age 50 years or older needs or would benefit from the Golden Compass services. Determining who would benefit most from aging services, especially geriatric consultative services, remains a gap in the literature. If anything, these limitations mean our current reach may be underestimated. In terms of effectiveness, we focused on satisfaction and acceptability in survey data and less on patient-reported outcomes, which is a future focus, including geriatric assessment results and prospective assessment of measures such as self-rated health. Our current retrospective measure of self-rated health limits interpretation of this result. However, survey data were enhanced by data from the qualitative interviews. We did not specifically evaluate the "maintenance" phase of RE-AIM, but funding for the program is ongoing and we are planning to use this study to further refine processes and improve services.

Our findings have important implications for further research and policy directions in "geriatric-HIV medicine." Our effectiveness findings, such as satisfaction with and acceptability of services, not only fill a knowledge gap regarding geriatric-HIV programs but also provide early evidence for policy makers to support development and funding of these programs. Use of implementation science frameworks such as RE-AIM for program evaluation will be an important tool to advance the field, to allow for better comparisons across programs. The addition of qualitative methodology, as used in our study, is also an important tool to improve internal program processes and provide additional program outcome data, which in turn can support ongoing funding and program maintenance. For policy makers in the United States, where our program is based, 2 of the largest HIV service providers, the Veterans Health Administration (VA) and the Ryan White HIV/AIDS Program, may be ideal settings to implement a program like the Golden Compass program. Both settings could implement colocated services and programming such as classes. The VA has a strong tradition of geriatric services such as the Geriatric Research Education and Clinical Centers and the Ryan White program already emphasizes comprehensive colocated and wrap-around services which could be extended to geriatric and other subspecialist consultants. 49-51

A critical need exists for the development and improved understanding of geriatric-HIV programs for older PLWH, given the medical and psychosocial challenges facing this population. The Golden Compass program based at San Francisco General Hospital is an innovative program designed to address key issues facing older HIV-positive adults. This initial evaluation of the program holds key lessons for replication in other settings to serve the increasing number of older adults living with HIV.

Authors' Note

All study procedures and activities were reviewed by the UCSF Committee for Human Subjects Research (study # 15-17859) and determined to be a project that includes program evaluations, quality improvement activities, or other activities which did not require further IRB oversight according to the federal regulations summarized in 45 CFR 46.102(d).

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ORCID iD

Meredith Greene, MD https://orcid.org/0000-0002-6548-6078

References

- 1. Autenrieth CS, Beck EJ, Stelzle D, Mallouris C, Mahy M, Ghys P. Global and regional trends of people living with HIV aged 50 and over: estimates and projections for 2000-2020. *PLoS ONE*. 2018; 13(11):e0207005. doi: 10.1371/journal.pone.0207005.
- 2. Katz IT, Maughan-Brown B. Improved life expectancy of people living with HIV: who is left behind? *Lancet HIV*. 2017;4(8): e324–e326. doi: 10.1016/s2352-3018(17)30086-3.
- Antiretroviral Therapy Cohort Collaboration. Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. *Lancet HIV*. 2017;4(8):e349–e356. doi: 10.1016/s2352-3018(17)30066-8.
- HIV Among People Aged 50 and Over. Centers for Disease Control and Prevention. https://www.cdc.gov/hiv/group/age/oldera mericans/index.html. Published November 12, 2019. Accessed April 21, 2020.
- 5. Freiberg MS, Chang CC, Kuller LH, et al. HIV infection and the risk of acute myocardial infarction. *JAMA Intern Med.* 2013; 173(8):614–622. doi: 10.1001/jamainternmed.2013.3728.
- Althoff KN, McGinnis KA, Wyatt CM, et al. Comparison of risk and age at diagnosis of myocardial infarction, end-stage renal disease, and non-AIDS-defining cancer in HIV-infected versus uninfected adults. *Clin Infect Dis*. 2015;60(4):627–638. doi: 10. 1093/cid/ciu869.
- 7. Starup-Linde J, Rosendahl SB, Storgaard M, Langdahl B. Management of osteoporosis in patients living with HIV a systematic review and meta-analysis. *J Acquir Immune Defic Syndr*. 2020; 83(1):1–8. doi: 10.1097/qai.000000000002207.

- 8. Greene M, Covinsky KE, Valcour V, et al. Geriatric syndromes in older HIV-infected adults. *J Acquir Immune Defic Syndr*. 2015; 69(2):161–167. doi: 10.1097/qai.0000000000000556.
- Greene M, Justice AC, Covinsky KE. Assessment of geriatric syndromes and physical function in people living with HIV. *Virulence*. 2017;8(5):586–598. doi: 10.1080/21505594.2016.1245269.
- Stellbrink HJ, Orkin C, Arribas JR, et al. Comparison of changes in bone density and turnover with abacavir-lamivudine versus tenofovir-emtricitabine in HIV-infected adults: 48-week results from the ASSERT study. *Clin Infect Dis.* 2010;51(8):963–972. doi: 10.1086/656417.
- Greene M, Justice AC, Lampiris HW, Valcour V. Management of human immunodeficiency virus infection in advanced age. *JAMA*. 2013;309(13):1397–1405. doi: 10.1001/jama.2013.2963.
- Schouten J, Wit FW, Stolte IG, et al. Cross-sectional comparison of the prevalence of age-associated comorbidities and their risk factors between HIV-infected and uninfected individuals: the AGEhIV cohort study. *Clin Infect Dis.* 2014;59(12):1787–1797. doi: 10.1093/cid/ciu701.
- 13. Guaraldi G, Malagoli A, Calcagno A, et al. The increasing burden and complexity of multi-morbidity and polypharmacy in geriatric HIV patients: a cross sectional study of people aged 65-74 years and more than 75 years. *BMC Geriatr*. 2018;18(1):99. doi: 10. 1186/s12877-018-0789-0.
- Halloran MO, Boyle C, Kehoe B, et al. Polypharmacy and drugdrug interactions in older and younger people living with HIV: the POPPY study. *Antivir Ther*. 2019;24(3):193–201. doi: 10.3851/ imp3293.
- Greene M, Hessol NA, Perissinotto C, et al. Loneliness in older adults living with HIV. *AIDS Behav*. 2018;22(5):1475–1484. doi: 10.1007/s10461-017-1985-1.
- 16. Green TC, Kershaw T, Lin H, et al. Patterns of drug use and abuse among aging adults with and without HIV: a latent class analysis of a US Veteran cohort. *Drug Alcohol Depend*. 2010;110(3): 208–220. doi: 10.1016/j.drugalcdep.2010.02.020.
- Johnson Shen M, Freeman R, Karpiak S, et al. The intersectionality of stigmas among key populations of older adults affected by HIV: a thematic analysis. *Clin Gerontol*. 2018:1–13. doi: 10. 1080/07317115.2018.1456500.
- Erlandson KM, Allshouse AA, Jankowski CM, et al. Relationship of physical function and quality of life among persons aging with HIV infection. *AIDS*. 2014;28(13):1939–1943. doi: 10.1097/qad. 000000000000384.
- Moore RC, Fazeli PL, Jeste DV, et al. Successful cognitive aging and health-related quality of life in younger and older adults infected with HIV. *AIDS Behav*. 2014;18(6):1186–1197. doi: 10.1007/s10461-014-0743-x.
- Singh HK, Del Carmen T, Freeman R, Glesby MJ, Siegler EL.
 From one syndrome to many: incorporating geriatric consultation
 into HIV Care. Clin Infect Dis. 2017;65(3):501–506. doi: 10.
 1093/cid/cix311.
- 21. Guaraldi G, Rockwood K. Geriatric-HIV medicine is born. *Clin Infect Dis.* 2017;65(3):507–509. doi: 10.1093/cid/cix316.
- 22. Guaraldi G, Cossarizza A. Geriatric-HIV medicine: a science in its infancy. *Virulence*. 2017;8(5):504–507. doi: 10.1080/21505594.2017.1306622.

- 23. Siegler EL, Burchett CO, Glesby MJ. Older people with HIV are an essential part of the continuum of HIV care. *J Int AIDS Soc.* 2018;21(10):e25188. doi: 10.1002/jia2.25188.
- Ruiz M, Cefalu C, Ogbuokiri J. A dedicated screening program for geriatric HIV-infected patients integrating HIV and geriatric care. *J Int Assoc Physicians AIDS Care (Chic)*. 2010;9(3):157–161. doi: 10.1177/1545109710367519.
- 25. Waters L, Patterson B, Scourfield A, et al. A dedicated clinic for HIV-positive individuals over 50 years of age: a multidisciplinary experience. *Int J STD AIDS*. 2012;23(8):546–552. doi: 10.1258/ijsa.2012.011412.
- Bitas C, Jones S, Singh HK, et al. Adherence to recommendations from comprehensive geriatric assessment of older individuals with HIV. *J Int Assoc Provid AIDS Care*. 2019;18:2325958218 821656. doi: 10.1177/2325958218821656.
- Ruiz M, Cefalu C. Characteristics of frail patients in a geriatric-HIV program: the experience of an urban academic center at one year follow-up. *J Int Assoc Physicians AIDS Care (Chic)*. 2011; 10(3):138–143. doi: 10.1177/1545109711399658.
- 28. Burnham JP, Geng E, Venkatram C, Colditz GA, McKay VR. Putting the dissemination and implementation in infectious diseases. *Clin Infect Dis.* 2019:ciz1011. doi: 10.1093/cid/ciz1011.
- 29. Geng E, Hargreaves J, Peterson M, Baral S. Implementation research to advance the global HIV response: introduction to the JAIDS supplement. *J Acquir Immune Defic Syndr*. 2019;82 Suppl 3:S173–S175. doi: 10.1097/qai.000000000002208.
- Eisinger RW, Dieffenbach CW, Fauci AS. Role of implementation science: linking fundamental discovery science and innovation science to ending the HIV epidemic at the community level.
 J Acquir Immune Defic Syndr. 2019;82 Suppl 3:S171–S172. doi: 10.1097/qai.0000000000002227.
- 31. RE-AIM. Reach-Effectiveness-Adoption-Implementation-Maitenance (RE-AIM). http://www.re-aim.org/. Published April 1, 2020. Accessed April 21, 2020.
- 32. Glasgow RE, Eckstein ET, Elzarrad MK. Implementation science perspectives and opportunities for HIV/AIDS research: integrating science, practice, and policy. *J Acquir Immune Defic Syndr*. 2013;63 Suppl 1:S26–S31. doi: 10.1097/QAI.0b013e3182920286.
- 33. Glasgow RE, Estabrooks PE. Pragmatic applications of RE-AIM for health care initiatives in community and clinical settings. *Prev Chronic Dis.* 2018;15: E02. doi: 10.5888/pcd15.170271.
- 34. Glasgow RE, Harden SM, Gaglio B, et al. RE-AIM planning and evaluation framework: adapting to new science and practice with a 20-year review. *Front Public Health*. 2019;7:64. doi: 10.3389/fpubh.2019.00064.
- 35. Greene ML, Tan JY, Weiser SD, et al. Patient and provider perceptions of a comprehensive care program for HIV-positive adults over 50 years of age: the formation of the Golden Compass HIV and aging care program in San Francisco. *PLoS One*. 2018; 13(12):e0208486. doi: 10.1371/journal.pone.0208486.
- Brain Health. There's Always Hope. http://www.theresalwaysho peconsulting.com/brain-health.html. Published January 1, 2017. Accessed April 27, 2020.
- 37. Bagai A, Thavendiranathan P, Detsky AS. Does this patient have hearing impairment? *JAMA*. 2006;295(4):416–428. doi: 10.1001/jama.295.4.416.

- 38. Torre P, Hoffman HJ, Springer G, et al. Hearing loss among HIV-seropositive and HIV-seronegative men and women. *JAMA Otolaryngol Head Neck Surg.* 2015;141(3):202–210. doi: 10.1001/jamaoto.2014.3302.
- 39. Chao MT, Abercrombie PD, Santana T, Duncan LG. Applying the RE-AIM framework to evaluate integrative medicine group visits among diverse women with chronic pelvic pain. *Pain Manag Nurs*. 2015;16(6):920–929. doi: 10.1016/j.pmn.2015.07.007.
- Mensch BS, Katzen LL, Van Der Straten A. Acceptability in microbicide and PrEP trials: current status and a reconceptualization. *Curr Opin HIV AIDS*. 2012;7(6):534–541. doi: 10.1097/ COH.0b013e3283590632.
- 41. Stewart AL, Napoles-Springer AM, Gregorich SE, Santoyo-Olsson J. Interpersonal processes of care survey: patient-reported measures for diverse groups. *Health Serv Res.* 2007;42(3 pt 1): 1235–1256. doi: 10.1111/j.1475-6773.2006.00637.x.
- 42. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009;42(2): 377–381. doi: 10.1016/j.jbi.2008.08.010.
- 43. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*. 2013; 13:117. doi: 10.1186/1471-2288-13-117.
- 44. Crane HM, Van Rompaey SE, Dillingham PW, Herman E, Diehr P, Kitahata MM. A single-item measure of health-related quality-of-life for HIV-infected patients in routine clinical care. *AIDS Patient Care STDS*. 2006;20(3):161–174. doi: 10.1089/apc. 2006.20.161.
- 45. Ojikutu B, Holman J, Kunches L, et al. Interdisciplinary HIV care in a changing healthcare environment in the USA. *AIDS Care*. 2014;26(6):731–735. doi: 10.1080/09540121.2013.855299.
- Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci.* 2015;10(2): 227–237. doi: 10.1177/1745691614568352.
- 47. Valtorta NK, Kanaan M, Gilbody S, Ronzi S, Hanratty B. Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. *Heart*. 2016;102(13):1009–1016. doi: 10. 1136/heartjnl-2015-308790.
- 48. Loneliness Research. Campaign to End Loneliness. https://www.campaigntoendloneliness.org/loneliness-research/. Published February 7, 2019. Accessed April 21, 2020.
- About the Ryan White HIV/AIDS Program. HIV/AIDS Bureau. https://hab.hrsa.gov/about-ryan-white-hivaids-program/about-ryan-white-hivaids-program. Published February 5, 2019. Accessed April 27, 2020.
- 50. Rashid M, Thielke S. Geriatric Research Education and Clinical Center (GRECC). *U.S. Department of Veterans Affairs*. https://www.va.gov/GRECC/index.asp. Published March 1, 2017. Accessed April 27, 2020.
- Veterans Health Administration. National Human Immunodeficiency Virus Program. Washington, DC: Department of Veterans Affairs; August 15, 2019. 1304.