

Preparing for the Old Age Wave: Promising Healthy Aging Plans, Policies, and Programs

by

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Abstract

Science, technology, and medicine have advanced so far as to enable aging individuals to live longer lives of greater quality in their waning years. What continues to lag, however, is widespread policy within every state that ensures the ability to age is equitable, affordable, and rewarding for the elders and community alike. By the year 2030, it is projected that 1 in 5 Americans will be aged 65 years or more. Most individuals receiving care outside of a nursing home are receiving care and support from friends or family. This comparative policy analysis provides a basic overview of the trends, implications, and potential threats to Healthy Aging in the coming years. West Virginia, Kentucky, Louisiana, Arkansas, and Mississippi have continued to trail the rest of the US in Healthy Aging. By mimicking model plans, policies, programs from more successful states, the low-performing states can improve the holistic wellbeing of their seniors and become an exemplar for Healthy Aging. These tailored improvements consider political feasibility, alignment to explicit aging priorities, and a pragmatic focus on populations with greater potential benefit. The predominate limitations and qualms to these propositions are summarized as financial feasibility. However, the data clearly predicts that without investment in the growing elder population, future generations will experience resultant economic burden to a far greater extent. The immediate and long-term benefits of creating a sustainable approach to aging far outweigh the investment cost. Healthy Aging programs will enable older Americans to age with dignity, protect the integrity of our economy, and preserve public health before the crash of the Baby Boomer Age Wave.

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1.0 Problem Identification

1.1 Introduction

Science, technology, and medicine have advanced so far as to enable aging individuals to live longer lives of greater quality in their waning years. What continues to lag, however, is widespread policy within every state that ensures the ability to age is equitable, affordable, and rewarding for the elders and community alike. By the year 2030, it is projected that 1 in 5 Americans will be aged 65 years or more. Within that 20% of all Americans, a greater share of individuals will be members of ethnic or racial groups than ever before (Iriundo & Jordan, 2018). Caricatures of the elderly depict them as frail, senile, and generally burdensome, but there is great value in life experience. Many cultures throughout history have respected and admired elders in the community, acknowledging their purpose, importance, and social capital within society. Wisdom, insight, and economic contribution are only three of the many benefits that older Americans could provide for budding generations. This experience, acquired over a lifetime, comes at a cost manifested in a variety of forms; mental, social, physical, and financial. The negative realities of aging pervade every aspect of one's health and wellbeing, forming interwoven pressures and consequences that effect the elder, their family, community, and the broader public.

1.1.1 Physical

Aging affects all individuals differently and is determined by the unique personal history and genetic makeup of that individual. Generally, the physical effects of aging – decreased bone

and muscle density – limit mobility and strength that can interfere, if not impede, with day-to-day tasks (Freedman, Carr, Cornman, & Lucas, 2017). From navigating stairs in and out of the home to cooking or bathing, the ability to execute these tasks is essential to living safely and independently. Activities of Daily Living (ADL) are routine tasks needed to care for oneself, including six essential categories: ambulating, feeding, dressing, hygiene, continence, and toileting (Edemekong, Bomgaars, Sukumaran, & Levy, 2022). Further, instrumental ADL (IADL) are those activities that require higher cognitive and physical function such as home maintenance and medication management. The greatest threats to the health and safety of the elderly are chronic diseases (COPD, obesity, heart disease), falls – which are impacted by balance issues, muscle and bone density, unnavigable homes – and cognitive decline including Alzheimer’s Disease (American Senior Communities, 2017). The emergence of COVID-19 has posed an additional threat to older Americans through increased risk to individuals with multiple chronic diseases and rampant spread within long-term care facilities. It is imperative to note the drastic changes and particularly negative effects that the COVID-19 pandemic has had on each facet of older adult health. The list of repercussions continues to grow as seniors face social isolation from friends and family, limited public transportation, and healthcare provider shortages.

1.1.2 Mental, Social

Mental health may be jeopardized by aging through loneliness, inability to practice hobbies, social isolation and more. Social vulnerability has a unique influence on older adult’s health that can contribute to further decline in other aspects of wellness (Andrew & Keefe, 2014). Even with limited mobility and compromised lifestyle behaviors, older Americans can reap the benefits of being purposeful and autonomous by establishing—or reestablishing—mutualistic roles

and relationships within their community. Age-associated social vulnerability increases health deficits and is compounded by vulnerability attributed to demographics such as SES, race, and ability (Andrew, Mitnitski, & Rockwood, 2008). A direct contributor to mental health is perceived self-efficacy – does the elderly individual have an accurate grasp of his or her abilities, and is the perception of said abilities positive or negative? Elders that believe they are in control of their environment report greater mental health than those who do not (Abeliansky, Erel, & Strulik, 2021). However, this perception’s accuracy to reality may impact future physical or mental health. A predominantly cited benefit of the aging in place model is increased mental health (Wiles, Leibing, Guberman, Reeve, & Allen, 2012). It is no surprise that people prefer to age in their own homes and maintain a connection of familiarity and control with their identity and place in the community. The core benefit of this concept is the preservation of independence, or even perceived autonomy. Elderly adults want the freedom and capability to access transportation, fill leisure with hobbies, and socialize with friends and family, even if these activities are altered by physical limitations. A culture that values the interests, autonomy, and dignity of the elderly and encourages adapting to the throes of aging by fostering Healthy Aging behaviors, is a culture that lives longer and richer, with more purpose in the community.

1.1.3 Financial, Familial

In a three-part investigation into Long-Term Supports and Services (LTSS) needs and costs, academics at the Center for Retirement Research (CRR) at Boston College elucidate the classification of levels of care older adults will need, the costs for those needs, and the type of individual that most likely to need care. LTSS can be costly, and while CRR reports that only 12% of retirees will spend 4 or more years in a nursing home, a majority of older adults will receive

some sort of formal or informal care that has its own associated price tag (Belbase, Chen, & Munnell, 2021a). LTSS severity is categorized based on a two-dimensional assessment of care applying duration (up to 1 year, 1-3 years, more than 3 years) and intensity (Support with only IADLs, Support with 1 ADL, Support with 2 or more ADLs), derived from extensive Health and Retirement Study (HRS) data. The different levels of care duration and intensity are used to illustrate different scenarios, such as an individual who needs occasional help in order to recover from an injury or an individual with dementia that needs to be monitored for most, if not all, tasks throughout the day. This information is critical, as informal caregivers supporting individuals with 1 or 2 ADLs will spend 30% more time providing care compared to a person with only IADL support needs (The Office of the Assistant Secretary for Planning and Evaluation, 2014). As presented by Table 1, there is a 56% probability that an older individual will require high intensity care at some point in the remainder of their lives. 12% will require care for 0-1 years, 22% will require care for 1-3 years, and 22% will require high intensity care for 3+ years (Belbase et al., 2021a).

Table 1. Lifetime Probability of 65-year-old Developing Minimal, Moderate, or Severe LTSS Needs

Duration	Care Intensity			
	None	Low	Medium	High
0-1 Years	17%	8%	4%	12%
1-3 Years		6%	4%	22%
3+ Years		4%	2%	22%

Racial and ethnic disparities are apparent within this data, depicted in Figure 1. 33% of older Black adults will need require severe LTSS needs compared to 23% for both Hispanics and Whites. 43% and 50% of Black and Hispanic older adults, respectively, will need moderate LTSS needs compared to 36% of their White counterparts (Belbase et al., 2021a).

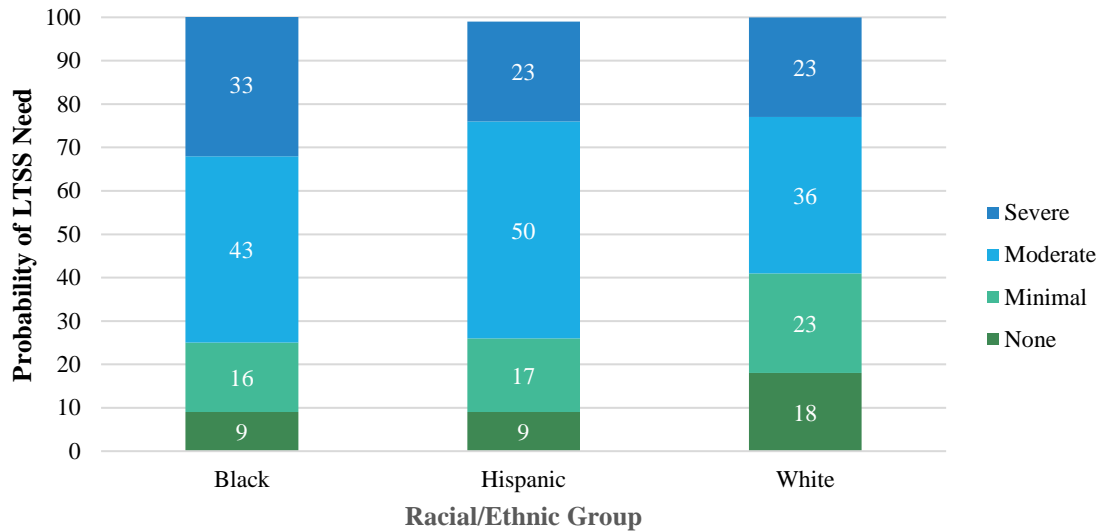


Figure 1. Probability a 65-year-old Will Develop Minimal, Moderate, or Severe LTSS Needs, by Race/Ethnicity

The next logical question asks whether the individuals in this population have the resources to access and pay for the care that they need. This question is answered through a series of tradeoff evaluations and cost-benefit analyses with results that vary drastically depending on the circumstances of the patient. Paid care is expensive and only 11% of older adults have long term care insurance (Belbase, Chen, & Munnell, 2021b). Some adults may have the resources to afford care out-of-pocket, but the costs are staggering. Nationally, based on monthly median expenses, home health aides cost \$4,576 and assisted living facilities cost \$4,300 (Genworth, 2022). A majority (64%) of the rendered care is informal thanks to the assistance of spouses, children, friends, or other relatives (Commission on Long-Term Care, 2013). However, this type of care comes with costs beyond financial loss. Family caregivers sacrifice an average of 24.4 hours per week with assistance. In terms of monetary loss, family caregivers age 50 and up who leave the workforce to assist an elder lose nearly \$304,000 in wages and benefits

(Reinhard, Feinberg, Houser, Choula, & Evans, 2019). This situation is not uncommon as nearly 53 million Americans serve as unpaid caregivers (Huntsberry-Lett, 2021). The physical and financial demands of caregiving can be tremendously burdensome and impact the relationship dynamic between caregiver and elder. Caregivers can face strained relationships with the elder, as a result of changing health status and the high stress environment that can come from caregiving. Caregivers show higher levels of depression, stress, and frustration that can lead to substance abuse and animosity toward non-caregiver relatives (Beach et al., 2005). The physical demands of caregiving can take a toll on the health and wellbeing of caregiving-adults who themselves may be encountering the effects of aging. The busyness of caregiving further restricts the time, energy, and resources one may have to practice their own self-care and preventative health behaviors (Schulz et al., 1997). All of these effects appear to be more severe among female caregivers who make up the lion's share (66%) of caregivers in general (Marks, Lambert, & Choi, 2002). Medicaid will cover homecare through variety of programs that often vary among states, however one must qualify among standards that often require an exhaustion of other assets to receive entitlements (Belbase et al., 2021b). Further some of these programs may not be designed to enable the senior to age in the manner that they desire.

Financial resources, alongside familial support and social networks are the major determinant of the amount and quality of care that may be administered for the remainder of an older person's life. According to the National Council on Aging (NCOA), about 1 out of 3 (15 million) older adults have incomes at or below 200% of the federal poverty line (The National Council on Aging, 2021). As a result of historical wage discrimination, these rates are higher among women and members of racial and/or ethnic minorities. Further, this statistic does not represent the total disparity of financial resources, including assets and savings – or

conversely debt – between the aforementioned demographic subgroups. The Boston College research group, CRR, determined the resources that are generally available for older adults based on the severity of LTSS needs. This was calculated by adding the predicted number of family care hours available to the number of paid hours that each individual or household can afford based on income and other assets. This sum is compared to the number of hours deemed to be required for each level of care. The results of this step-down assessment categorize the individual into a resource bracket depicted in Figure 2. 27% of 65-year-olds cannot cover future care needs, 36% cannot cover future care without exhausting all resources. As one would expect, these proportions are greater among unmarried women, those with less formal education, and members of racial or ethnic minorities (Belbase et al., 2021b; Taylor, 2019).

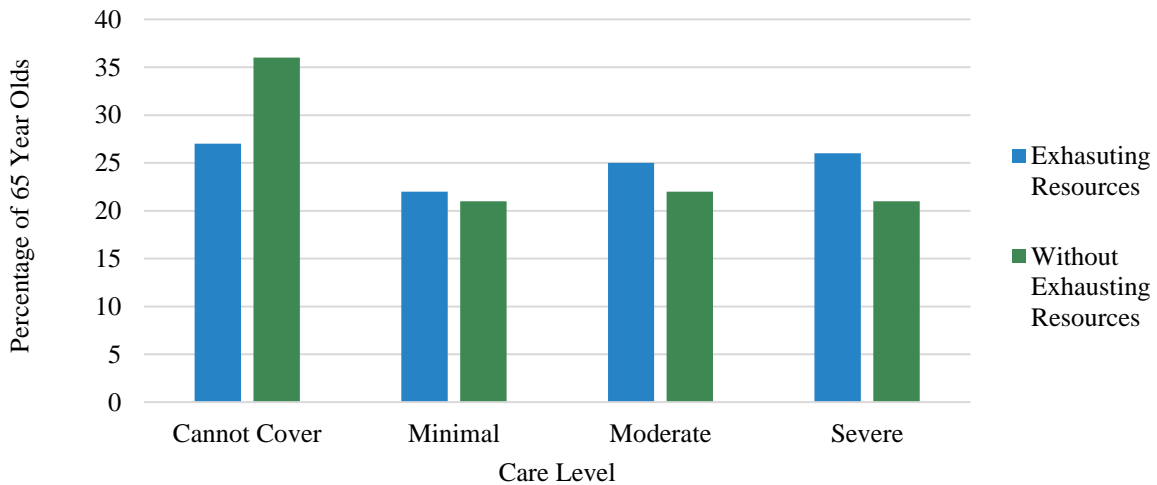


Figure 2. Percentage of 65-Year-Olds Who Can Cover Future Care

1.2 Current Status and Stakeholders: Baby Boom Age Wave

The first trickling of the “Coming of Old Age” wave of the Baby Boomer cohort began in 2012 and will continue to crash for the next 30 years, complicating an already defunct healthcare system. The difficulties of this “age wave” are predominantly financial: the need to raise taxes to cover the cost of care, hindered economic growth due to the cost of care, and burden and strain to future generations and current workers (Knickman & Snell, 2002). On the individual level, Baby Boomers will have to reconcile with 4 intense shocks associated with the cost of aging. Though varied based on one’s circumstances, every senior will be impacted by the costs associated with prescription drugs, care not covered by Medicare, additional care to fill in coverage gaps, and uncovered long-term care. The typical lifetime figures for each of these costs are \$12,000, \$16,000, \$18,000, and \$44,000, respectively. These price tags are astonishing for even financially secure Baby Boomers, a continually dwindling portion of these 65-plus-year-olds. At the national government level, the federal spending on programs for older adults, namely Social Security and Medicare, is projected to increase to nearly 10% of the GDP by 2029. As a result of the higher proportion of adults over 65 and greater accessibility of expensive lifesaving treatments, the Congressional Budget Office (CBO) projects \$3.5 trillion in spending towards these programs (Super, 2020).

2.0 Aging Policy

2.1 Aging Policy: Context & History

The first considerable policy effort to address the health of older Americans materialized as the Older Americans Act (OAA) of 1965. President Lyndon Johnson signed this act as one of the major social reforms of the Great Society Era, including the Social Security Act that maintains Medicare and Medicaid, to establish programs and services for Americans over 60. This program established the Administration on Aging, which serves as the principal authority and provider of services for the elderly. Section 101 of the OAA states its established purpose. “The Congress hereby finds and declares that, in keeping with the traditional American concept of the inherent dignity of the individual in our democratic society, the older people of our Nation are entitled to, and it is the joint and several duty and responsibility of the governments of the United States, of the several States and their political subdivisions, and of Indian tribes to assist our older people to secure equal opportunity to the full and free enjoyment of the following objectives:

1. An adequate income in retirement in accordance with the American standard of living.
2. The best possible physical and mental health (including access to person-centered, trauma-informed services as appropriate) which science can make available and without regard to economic status.
3. Obtaining and maintaining suitable housing, independently selected, designed and located with reference to special needs and available at costs which older citizens can afford.
4. Full restorative services for those who require institutional care, and a comprehensive array of community-based, long-term care services adequate to appropriately sustain older

people in their communities and in their homes, including support to family members and other persons providing voluntary care to older individuals needing long-term care services.

5. Opportunity for employment with no discriminatory personnel practices because of age.
6. Retirement in health, honor, dignity—after years of contribution to the economy.
7. Participating in and contributing to meaningful activity within the widest range of civic, cultural, educational and training and recreational opportunities.
8. Efficient community services, including access to low-cost transportation, which provide a choice in supported living arrangements and social assistance in a coordinated manner and which are readily available when needed, with emphasis on maintaining a continuum of care for vulnerable older individuals.
9. Immediate benefit from proven research knowledge which can sustain and improve health and happiness.
10. Freedom, independence, and the free exercise of individual initiative in planning and managing their own lives, full participation in the planning and operation of community-based services and programs provided for their benefit, and protection against abuse, neglect, and exploitation” (Older Americans Act).

The generosity of these programs continued to accumulate throughout history as more emphasis was coordinated to support an increasingly vulnerable population. Subsequent Reauthorization Acts reauthorize, modify, and establish new programs in complement with the original OAA to modernize programs and language to benefit the elderly population, including Tribal Nations and formerly incarcerated individuals.

The primary funding streams for Healthy Aging policies are sourced from Title III and Title VII of the OAA. Title III is the largest focus area of the OAA that regulates aging direction and directs fund from the federal government to each state to pay for numerous services; adult day services, caregiver support, etc. Title VII pertains specifically to elder abuse prevention though education and training. These funds can then be disseminated depending on the health agency structure of that state. To receive these funds, states must develop an informed State Plan that satisfies numerous content criteria. These guidelines allow room for flexibility under the following highlighted and summarized requirements under Sections 307 and 1321 of the OAA:

1) Section 307

a) The plan shall provide that the State agency will –

- i) Evaluate the need for support services, nutrition services, and multipurpose senior centers within the state
- ii) Develop a process to determine the extent to which need is met but public or private programs and resources
- iii) The plan shall provide assurances that area agencies on aging will conduct efforts to facilitate the coordination of community-based, long-term care services for older individuals who—
 - (1) reside at home and are at risk of institutionalization because of limitations on their ability to function independently
 - (2) are patients in hospitals and are at risk of prolonged institutionalization
 - (3) are patients in long-term care facilities, but who can return to their homes if community-based services are provided to them.
- iv) The plan shall provide assurances that demonstrable efforts will be made—

(1) to coordinate services provided under this Act with other State services that benefit older individuals

(2) to provide multigenerational activities, such as opportunities for older individuals to serve as mentors, advisers in childcare, etc.

2) Section 1321

a) The plan shall include –

i) Identification of a sole State agency to develop and administer the plan.

ii) Statewide program objectives aligned with Title III requirements.

iii) Detailed resource allocation plan

iv) Identification of geographical boundaries

b) Provision of prior federal fiscal year information related to low-income minority and rural older adults

c) Assurances and provisions required by sections 305 and 307

These guidelines enable states to develop goals and focus areas for their state plans while ensuring the minimum provisions for essential Healthy Aging areas. State plans vary dramatically in detail and effort, but ultimately must be approved by the ACL Assistant Secretary for Aging (United States, 2020).

2.2 Aging Policy: Healthy Aging

The advancement of Healthy Aging and adoption of healthy prevention behaviors has succeeded in small steps and great strides. Healthy Aging advocates prioritize policies affecting older adults with multiple chronic conditions, the economic and physical protection of vulnerable

adults, and those that promote community engagement (Health and Aging Policy, n.d.). Investing in prevention and dispersing the social, physical, financial burden of aging will enable older adults to improve holistic health, while strengthening community and social ties and dampening the threat of caregiver burnout or financial resource depletion. The overarching goals of Healthy Aging can be distilled into two aspirations: sustainability and dignity. Sustainability implies a tenuous balance between providing comfort and care for older adults without applying undue financial, physical, and emotional burden to caregivers, the healthcare system, and the patient. Dignity is what our elders deserve, the right to age comfortably on terms that empower them, the ability to participate the parts of life that bring them joy, and an active, reciprocal relationship with their community. There are several approaches and mechanisms that policy can apply to advance the Healthy Aging agenda. The following analysis will examine an index of successful aging domains to identify several low-performing regions, exemplary states and highlight areas of improvement. Recommendations will be tailored to sustainably improve deficient domains based on successful aging-related practices from more effective states or evidence-based guidance. These improvements to the Healthy Aging policy landscape target the non-Medicaid poor, a growing population that faces the greatest barriers to aging with dignity.

2.3 Assessment Criteria and Methods

The Millbank Quarterly published an Index of Successful Aging (SA) that outlines differences among states based on five domains that support health aging: productivity and engagement, security, equity, cohesion, and wellbeing (Rehkopf et al., 2021). Table 2 represents the weighted evaluation criteria. Although based primarily on data from 2017, this index applies

19 measurement items for aging. This index serves as the primary source of rationale for choosing the states for improvement. The domains and items isolated in this index provide direction as to which measure to target for improvement. These metrics, while useful for isolating deficiencies in policy, are extensions of the social determinants of health (SDH) – the conditions that influence health on all levels of the Social Ecological Model from individual to societal. These factors have complicated relationships with one another and are deeply uniquely interwoven depending on an individual’s social position. State Aging Plans are a narrative document that states must craft in order to receive funding for OAA activities and programs from the Federal Government. Monitored by the Administration on Community Living and approved by the discretion of the Secretary on Aging, Aging Plans provide a wealth of information of state intention, success, and failure. Recommendations tailored to these states will combine shortcomings based on SA criteria and the explicit goals of low performing states, as outlined by their respective Aging Plans. The following analysis and subsequent recommendations are intended to serve as pragmatic solutions for broad weaknesses in Healthy Aging policies.

Table 2. Domains, Items, Weighting, and Sources of Data for the US State Index of Successful Aging

Domain	Item	Weight	Source of data
Productivity and engagement (0.22)	Labor force participation	0.45	American Community Survey
	Participating in community organizations	0.15	CPS Civic Engagement Supplement
	Participating in service/civic organizations	0.15	CPS Civic Engagement Supplement
	Average hours volunteering	0.25	CPS Volunteer Supplement
Security (0.19)	Pension wealth*	0.15	Annual Survey of Public Pensions
	Gross state product*	0.15	US Bureau of Economic Analysis
	Poverty	0.25	American Community Survey
	Food security	0.15	CPS Food Security Supplement
	Violent crime rate*	0.15	Uniform Crime Reporting Statistics
	Property crime rate*	0.15	Uniform Crime Reporting Statistics

Equity (0.18)	State income inequality*	0.5	Sam Houston State University
	Education tertiary*	0.25	American Community Survey
	High school completion rate*	0.25	American Community Survey
Cohesion (0.17)	Frequency of eating dinner with household	0.5	CPS Civic Engagement Supplement
	Frequency of talking with neighbors	0.25	CPS Civic Engagement Supplement
	Frequency of doing favors for neighbors	0.25	CPS Civic Engagement Supplement
Well-being (0.25)	Age-standardized mortality rate	0.5	Compressed Mortality File
	Physical health	0.25	BRFSS
	Mental health	0.25	BRFSS

2.4 Regional Introductions: Demography, Health, and Policy Landscapes

A comparison of five low-achieving states, from two predominantly affected regions– The Appalachians (West Virginia and Kentucky) and Mississippi Basin (Louisiana, Arkansas, and Mississippi)– and isolation of policy failures and programmatic shortcomings will illustrate the major areas to address in promoting Healthy Aging. The exemplar states vary in population makeup, culture, and geography, but are generalized by regionality that extends to surrounding states. Evidence-based best practices and model programs from moderately to high-achieving, comparable states will be recommended and tailored to serve the non-Medicaid elderly and improve state Healthy Aging strategies. Exploring demography, health statistics, culture, politics, and State Aging Plans of these states will extract themes from state goals and objectives, identify areas to direct Healthy Aging improvements, and, ultimately, narrow the gaps between low and high achieving states.

Table 3. Demographic Comparison of WV, KY, LA, AR, & MS

State	% 65+	Population	RDI	Nutrition *	Physical Inactivity **	Obesity **	Smoking **	Multiple Chronic Conditions **	Depression **
WV	20.5	1,782,959	20.2	47	47	49	44	48	47
KY	16.8	4,509,394	32.8	50	49	38	47	49	38
LA	15.9	4,624,047	58.6	44	39	27	48	47	41
AR	17.4	3,025,891	49.8	42	45	35	37	29	38
MS	16.4	2,949,965	55.9	48	50	49	40	44	40

*State rankings based on United Health Foundation Rankings

** State rankings based on United Health Foundation Rankings for 65+ population (Urban Health Foundation, n.d.)

Table 4. Uninsured, Medicaid, Medicare, and Dual Eligibility Comparison of WV, KY, LA, AR, & MS

State	Uninsured	Medicaid	Medicare	Duals as % of Medicare Beneficiaries	% of Duals (Black)	% of Duals (White)
WV	6.6	26.6	19	19	3	89
KY	6.4	25.5	15.8	19	9	83
LA	8.9	29.3	13.7	25	45	41
AR	9.1	26.2	15.9	21	24	67
MS	12.9	24.2	14.2	27	50	43
US	9.2	19.8	14.2	18	19	54

(Kaiser Family Fund, n.d., n.d., n.d.)

Table 5. Self-Reported Health Status Comparison of Comparison of WV, KY, LA, AR, & MS

"Poor" Rank	State	Poor	Fair	Good	Very Good	Excellent
1	AR	7	15	30.3	30.1	17.6
2	KY	6.9	15.1	30.5	31.8	15.6
3	WV	6.6	16.2	33	30.6	13.7
6	MS	5.4	16.4	34.1	28.9	15.2
8	LA	4.9	14.5	29.8	32.7	18.1
18	US	3.6	11.2	29.2	34	22

(Kaiser Family Fund, n.d.)

2.4.1 The Appalachians (WV and KY)

The Appalachian Region spans over 206,000 miles along the peaks and foothills of the Mid-Atlantic mountain system known as the Appalachian (Appalachian Regional Commission, n.d.). This region is characterized by a history of blue-collar economy, and a unique cultural and political setting that generally favors left-leaning economic principles clashed with dichotomous cultural beliefs. Appalachians have long been ignored in the elite political realm and disparaged for lagging educational, health, technological, and social progress, perpetuating disparity and prejudice for this region and its people. The region is plagued with poverty, rampant opioid abuse, high prevalence of chronic diseases, and other issues that reinforce Appalachians as the object of

ridicule for the greater American public, notably among coastal urbanites (White, 2014). However, this misrepresentation of Appalachian culture likely has more to do with continual neglect from the federal government and exploitation by elected officials (Baker, 2021) (Couto, 1977). West Virginia (WV) and Kentucky (KY) are two low-performing states from the Appalachian region with related cultural and political values that face a similar Healthy Aging plight. KY and WV rank the second and third highest on self-reported “poor” health. These two states regularly rank the worst in the nation for smoking, obesity, and multiple chronic conditions. Table 5 describes these ranking in greater detail, while Table 3 provides a possible explanation for these high rates of such unhealthy health behaviors that persist into old age. WV and KY have uncharacteristically low rates of uninsured due to the considerable proportion of individuals on Medicare and Medicaid, see Table 4. For non-Medicaid poor, access is inhibited beyond financial resources, other factors such as choice of provider, transportation, and ability to take time off work for treatment and recover may inhibit their practical access to care (Ramlagan, 2021). *Aging in Appalachia*, a series by West Virginia Public Broadcasting, details this grim struggle of navigating waitlists for care and sacrificing resources and time to provide care through several anecdotes that are all too familiar among Appalachian communities (Appalachian Regional Commission, n.d.).

Public health governance varies by state with many different health department structures, agency hierarchies, and health service delivery arms. West Virginia functions with a decentralized structure broken up into 47 local health departments and 5 regional offices that govern at the county or municipal level. Tables 6 and 7 simplify the Appalachian states’ Aging Plans. Table 6 lists West Virginia’s 4 Goals supported by 15 objectives but omits the numerous strategies for the sake of brevity and clarity. Overall themes include promulgating existing resources and services, promoting aging in place, increase physical wellness practices and chronic condition management,

and elder abuse protection. Notably, the West Virginia plan provides more detailed improvement strategies and performance measure timelines compared to the other low achieving states.

Table 6. WV State Aging Plan Goals and Objectives

State	SAP Goals	SAP Objectives	
WV	1 Enable older adults and other interested parties to make informed decisions regarding services and supports for older individuals.	1.1	Provide awareness, educational and training opportunities to the West Virginia aging population and stakeholders regarding available services and supports for older adults.
		1.2	Work to strengthen the aging network workforce through recruitment, retention, and training opportunities.
		1.3	Enhance technology capabilities and knowledge to expand training and educational opportunities.
		1.4	The WV Aging Network will be trained and knowledgeable about participant-directed, person-centered planning that focuses on each individual’s goals to promote independence, respect and dignity.
	2 Support and empower older adults to continue to remain in the least restrictive environment.	2.1	The WV Aging Network will target seniors who reside in rural communities, and those who are minorities, low income and/or more at-risk, based on activities of daily living assessments.
		2.2	County aging network providers will provide nutritious, cost-effective meals and reduce food insecurity.
		2.3	County aging network providers will continue to maintain or increase transportation services to older individuals that meet their needs and support aging in place.
		2.4	County aging network providers will continue to improve the capacity to serve older adults through in-home service programs that meet their needs and support aging in place.
		2.5	Utilize technology to improve the quality and efficiency of aging network services.
	3 Enable and empower older adults to stay active and healthy and manage chronic conditions.	3.1	The WV Aging Network will continue to train/facilitate how seniors with chronic diseases can be assisted with managing chronic conditions through in person education, in home care and other education opportunities.
		3.2	Increase the level of physical activity for in-home care service recipients, family caregivers and care receivers.
		3.3	Promote evidence-based exercise and health promotion programs for all older adults, regardless of age and/or ability.
	4 Ensure the dignity and rights of older West Virginians, and reduce abuse, neglect, and financial exploitation.	4.1	The State Unit on Aging will implement an electronic incident management system (i.e., Falls, minor injuries of unknown origin, environmental issue, etc.) for County aging provider programs.
		4.2	Strengthen the WV Aging Network’s efforts to prevent and respond to reports of abuse, neglect, and financial exploitation among all agencies to ensure the rights of older individuals are protected.
		4.3	The Aging Network will provide information to older individuals, caregivers, providers and other stakeholders about abuse, neglect, financial exploitation, and reporting.

(Justice, 2021)

Kentucky is one of only three states that operates with a shared public health department that shares operating power and funding between the state agency and local health departments. Many of the programs and services rely heavily on partnerships with private organizations and businesses that operate within the state. As depicted in Table 7, Kentucky’s goals tend to be broad,

with objectives that focus on existing “core” programs such as elder abuse protection, preventative care, LTC Ombudsman (programs that promote health, safety, and welfare of LTC residents), etc.

Table 7. KY State Aging Plan Goals and Objectives

State	SAP Goals	SAP Objectives	
KY	Provide long-term services and supports that enable older Kentuckians, their families, caregivers, and persons with disabilities to fully engage and participate in their communities for as long as possible.	1.1	Provide for & promote evidence-based interventions to increase physical activity.
		1.2	Support health promotion, disease prevention activities under Title IIIB
		1.3	Provide for additional health education opportunities for homebound older adults & disabled Kentuckians & their caregivers
		1.4	Utilize discretionary grants to further develop & enhance health programs in Kentucky.
		1.5	Train SHIP counselors on how to educate Medicare beneficiaries on prevention benefits available through Medicare.
		1.6	Engage with local health departments to promote smoking cessation among older adults.
		1.7	Decrease food insecurity in Kentucky among older adults.
		1.8	Promote positive mental health among older adults.
	Ensure older Kentuckians, persons with disabilities, their caregivers and families have access to person-centered planning and options counseling for their long-term services and supports.	2.1	Increase the number of first-time contacts to the ADRC through outreach and education.
		2.2	Incorporate person-centered counseling and planning into contracts and tools used by DAIL.
		2.3	Recruit & train SHIP counselors to provide person-centered counseling in the PSA.
		2.4	Engage in ongoing stakeholder engagement discussions on how DAIL can improve and enhance LTSS delivery.
		2.5	Increase long-term care resident knowledge of home and community based long-term services and supports options.
		2.6	Increase marketing materials to underserved communities to ensure health equity outreach.
		2.7	Reduce social isolation among seniors.
	Increase the development and implementation of business-related strategies that promote innovation, collaboration, and sustainability of aging and disability network partners.	3.1	Expand and diversify revenue streams of the AAAs.
		3.2	Increase private pay, cost share, and voluntary contributions.
		3.3	Implement a new training curriculum for the aging network.
		3.4	Maintain a resilient, disaster ready Aging network.
	Prevent abuse, neglect, and exploitation while protecting the rights of older Kentuckians and persons with disabilities.	4.1	Strengthen regulations related to abuse, neglect, and exploitations.
		4.2	Revise standard operating procedures for programs administered by DAIL.
		4.3	Enhance the efforts of the Elder Abuse Councils in KY to provide education and training on elder abuse, prevention & reporting.
		4.4	Provide education on the guardianship process to ensure the safety and well-being of those at risk of abuse, neglect and exploitation in collaboration with DCBS/APS and Ombudsman, on concerns and reports made
		4.5	Promote the use of less restrictive alternatives to Guardianship through community training.
		4.6	Ensure adequate coverage of ombudsman to support individuals in nursing homes.

		4.7	Provide Kentuckians with legal assistance services available through the Title III program.
5	Ensure continuous quality improvement principles to ensure the State Unit on Aging operates efficiently and effectively.	5.1	Monitor the integrity of the data captured by the PSA staff
		5.2	Evaluate DAIL's internal controls
		5.3	Provide effective technical assistance to providers
		5.4	Develop education & training program for state staff
		5.5	Promote continuous quality improvement
6	Ensure that all Kentucky elders have equitable access to services regardless of any social, cultural, or geographic barriers.	6.1	Utilize current data to identify and resolve disparities that may exist around service delivery, accessibility, and outcomes among various racial/ethnic groups across the state.
		6.2	Determine whether agency policies & actions create or exacerbate barriers to accessing services.
		6.3	Determine whether agency policies & actions create or exacerbate barriers to providers.
		6.4	Training in cultural humility and racial equity.

(Beshear, 2021)

2.4.2 The Mississippi Basin (LA, AR, MS)

Three additional low-performing states – Mississippi, Arkansas, and Louisiana – are regionalized as the Mississippi Basin. This series of semi-analogous states is both similar and dissimilar to the Appalachian states. The Deep South maintains reduced, albeit still stark, dichotomy of affluence and poverty as it did through the chattel slavery of Antebellum, Jim Crowe, the Civil Rights Movement, and systemic racism of modern day (Shah & Adolphe, 2019). Louisiana and Mississippi rank 4th and 5th (Arkansas ranks 14th) in terms of income inequality, a metric that compares the average incomes of highest and lowest 20% of households (Stebbins, 2021). Whereas the Appalachian States, particularly West Virginia, are much more racially homogenous, race and racial differences play an inherent role in public health and Healthy Aging among Southern States. This is not to assert that health disparities of the South only exist among Poor Blacks, rather explicit and innate racism has created diverse challenges for public health with differing ripple effects in the health of the elderly. Outright, mal-intended medical practices on Blacks, systemic neglect on every facet of the Social Determinants of Health, Medicaid expansion reticence, and impeded class consciousness through prejudice between poor Whites and Blacks, are some of the innumerable manifestations of racism in public health and southern society (Michener, 2020; Simpson, 2021). Public health policies and Healthy Aging programs must be implemented and improved to support these states' elderly and confront the magnified disparities within the larger population.

As illustrated by Table 4, all of the low-performing states exhibit Medicaid utilization rates higher than the national average, despite some of the more stringent requirements that are common in Southern states. However, the racial disparities are more pronounced among seniors of Basin states. Converse to the Appalachians where Dual Eligibility (DE) is somewhat representative of

racial diversity, the proportion of Duals that are Black is staggeringly disproportionate to both the national average and proportion of Black seniors living in those states. To reiterate, eligibility and enrollment in Medicaid/Medicare does not equate to access of quality care. Rather, non-Medicaid, under/uninsured are at greater risk for the resource limitation and negative influences that complicate Healthy Aging (Garfield, Ortega, & Damico, 2021). It is this specific population that may yield the strongest return on investment through increased preventative medicine and behaviors, community and labor engagement, economic security, and equitable public health programs.

Louisiana, Arkansas, and Mississippi are all governed by centralized or largely centralized public health departments. State employees lead local health departments and administer programs and services funded by the state department of health. Tables 8, 9, and 10 detail the outline goals and objectives of the respective State Aging Plans.

Table 8. LA State Aging Plan Goals and Objectives

State	SAP Goals		SAP Objectives	
LA	1	Information: GOEA will provide information regarding the interests of older persons in Louisiana	1.1	Increase public awareness and needs of the elderly population
			1.2	Ensure that current policies and programs address and meet the needs of the elderly individuals in Louisiana and their family
	2	Protect Rights and Prevent Abuse: GOEA will work collaboratively with Elder Rights agencies to enhance the rights of older individuals and to prevent abuse, neglect, and exploitation.	2.1	Provide legal assistance to older individuals who are over age 60
			2.2	Provide regular monthly and timely access to Long - Term Care Ombudsman services to residents of nursing and adult residential care facilities.
			2.3	Provide awareness and education presentations regarding elder abuse
	3	Long Term Care Services and Supports: GOEA will enable older individuals and individuals with disabilities access to long - term care services and supports, including supports for families and their caregivers.	3.1	Provide supportive and nutritional services to at least 8% of elderly individuals.
			3.2	Provide LTC Options Counseling to consumers who are seeking information regarding Long Term Care options.
			3.3	Serve 11% of elderly and disabled individuals by providing resources for prescription medication.
	4	Empowerment and Self Determination & Control: Provide education and resources to empower elderly individuals and their families	4.1	To provide educational resources to elderly and disabled individuals regarding community options.
			4.2	Provide awareness activities regarding Medicare Wellness and Preventative Services.

	to make informed decisions about their health, independence and wellbeing.	4.3	Provide awareness activities regarding wellness and disease management with special emphasis on evidenced based programs
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(Edwards, 2019)

Table 9. AR State Aging Plan Goals and Objectives

State	SAP Goals	SAP Objectives	
AR	1 Empower older people, their families, and other consumers to make informed decisions about, and to be able to easily access, existing health and long-term care options	1.1	DAABHS will improve access to Long-Term Services and Supports (LTSS) Home and Community Based Services for older adults, informal caregivers, and the aging population.
		1.2	DAABHS/AAAs will provide information and assistance services and outreach services for older adults, informal caregivers, and the aging population.
		1.3	DAABHS/AAA will expend a portion of their allotted Title III Part B funds for Priority Services toward information/ assistance and outreach for mental health services.
	2 Enable seniors to remain in their own homes with high quality of life for as long as possible through the provision of home and community-based services, including supports for family caregivers	2.1	Through the National Family Caregiver Support Program (NFCSP), DAABHS/AAAs will enhance long- term care supports and services for informal caregivers.
		2.2	DAABHS/AAAs will increase public awareness to maximize state and local resources dedicated to serving caregivers.
		2.3	Through the Money Follows the Person program, DAABHS will enable eligible persons, from designated institutions, to transition to and live in their choice of settings.
	3 Empower older people to stay active and healthy through OAA services and new prevention benefits under Medicare	3.1	DAABHS/AAAs will empower older adults to take an active role in health promotion and disease prevention.
		3.2	DAABHS will provide a fair opportunity for older adults to participate in the Senior Community Service Employment Program (Title V of the Older Americans Act).
		3.3	DAABHS will collaborate with other agencies to develop a statewide transportation directory designed to enhance community mobility for older adults, people with disabilities and people with limited incomes.
		3.4	DAABHS will ensure that older adults will lead more meaningful, productive, and social lives.
		3.5	Older Arkansans will be informed of new Medicare benefits through the Medicare Improvements for Patients and Providers Act for Beneficiary Outreach and Assistance grant implementation statewide through the Arkansas’s AAAs.
	4 Ensure the rights of older people and prevent their abuse, neglect, and exploitation	4.1	DAABHS will coordinate legal assistance, advice, technical support, provider training, and consumer education for older individuals.
		4.2	The Arkansas LTC Ombudsman Program will ensure that long-term care facility residents have the right to live their lives with dignity, feeling free to voice complaints or concerns without fear of retaliation.
		4.3	The Arkansas Senior Medicare Patrol (ASMP), through DAABHS, will empower and assist Medicare and/or Medicaid beneficiaries prevent, detect, and report healthcare fraud, errors and abuse through outreach, counseling, and education.
		4.4	DAABHS will increase the ability of Arkansas service professionals to recognize and report cases of elder abuse, neglect, and exploitation.

(Hutchinson, 2019)

Similar themes prevail among these state plans: increasing program and service awareness, preventing elder abuse, promoting aging in place, and Healthy Aging and prevention. These states

have not entirely failed at providing effective resources and services to seniors and their caregivers. Rather, these efforts have not been a strong enough opposition to the health and aging trends that will overwhelm an already fragmented, expensive healthcare delivery system.

Table 10. MS State Aging Plan Goals and Objectives

State	SAP Goals		SAP Objectives	
MS	1	Empower older adults and their families to make informed decisions about LTSS.	1.1	Establish MAC Centers as state-wide resource database.
	2	Increase output and expand outreach of services for insurance counseling, state-wide.	2.1	Establish a successful Volunteer Recruitment Program
			2.2	Implement training and education standards for SHIP counselors and volunteers.
			2.3	Increase informative Preventative Health Outreach.
			2.4	Establish a sustainable Veteran’s Services program to provide support and/or activities targeted to Mississippi Veterans
			2.5	Support statewide enrollment for Low Income Subsidy/Extra Help, Medicare Savings Program, Medicaid, Supplemental Nutrition Assistance Program, and Low - Income Home Energy Assistance Program
			2.6	Expand the state nutrition program for Home Delivered Meals (HDM).
	3	Enable seniors to remain in their homes with high quality of life for as long as possible through the provision of HCBS, including supports for family caregivers.	3.1	Support independent living
	4	Ensure the rights of older people and prevent their abuse, neglect, and exploitation.	4.1	Reduce costs to DHS
			4.2	Strengthen partnerships with the Law Enforcement Community
			4.3	Educate the public on the role of APS
	5	Empower more Mississippians to live with dignity by promoting resident rights, advocating for those who cannot help themselves, educating families and communities of those rights and reducing incidences of abuse, neglect, and exploitation of LTC residents.	5.1	Provide adequate coverage and access to ombudsman services.
			5.2	Expand the Mississippi Long - Term Care Ombudsman program.
			5.3	Ensure effective program and fiscal management.

(Bryant, 2018)

Each low-achieving state is aware of the inadequacies seniors face, whether through needs assessment or the narrative established by the OAA-mandated health statistic provision. Further,

intention to correct these malfunctions is explicit in the goals, objectives, and strategies of the State Aging plans. Conventional strategies and existing programs have largely failed to endure the crashing age wave that has been intensified by the COVID-19 pandemic. It is vital to the wellbeing of elders, caregivers, state healthcare systems, and the national economy to invest in and implement innovative Healthy Aging programs modeled by more successful states.

2.5 Policy Analysis: Model Programs and Areas of Improvement

Table 11. Outline of Improvement Goals, Strategies, and Models to Improve Successful Aging Domains

Improvement Goal	Improvement Strategy	SA Domain(s)	SA Item(s)	Model	Model or Target Program(s)	
Reduce financial resource exhaustion	Prescription Assistance	Well-being	Physical Health	PA	PACE Program PACENET Program	
			Mental Health			
			Mortality rate			
		Security	Pension Wealth			
			Poverty			
Promote safety and comfort within the home Foster independent living Reduce financial resource exhaustion	Non-Medicaid HCBS for Home Modifications	Well-being	Physical Health	IN	CHOICE Program	
			Mental Health			
			Mortality rate			
		Security	Pension Wealth	PA	OPTIONS Program	
			Poverty			
Reduce caregiver burden Reduce financial resource exhaustion	Non-Medicaid Adult Foster Care and Supportive Services (Sliding Scale)	Well-being	Physical Health	OH	Elderly Services Program	
			Mental Health			
			Mortality rate			
		Security	Pension Wealth	PA	Domiciliary Care Program	
			Poverty Food Security			KS
Increase access to primary care Promote the practice of Healthy Aging behaviors Reduce spread and intensity of Health Provider Shortage Areas	Rural/Occupational Mobile Health Clinics	Well-being	Physical Health	VA KY	The Health Wagon	
			Mental Health	KY WV	CHW-based Chronic Care Management Program	
			Mortality rate	AR	Aging Well Outreach Network	
			Productivity & Engagement	Workforce Engagement	AARP	Senior Community Service Employment Program
				Community & Civic Engagement		
Volunteer Hours						
Increase access to community landmarks	Transportation Programs	Productivity & Engagement	Community & Civic Engagement	WV KY	-	

Foster independent living Reduce elderly automobile accidents		Cohesion	Social Interaction	LA AR MS	
Reduce financial resource exhaustion Reduce caregiver burden Promote the practice of Healthy Aging behaviors	Long-term Care/ Pension Programs	Security	Pension Wealth Poverty Food Security	WA	WA Cares Fund
Apply an equitable lens to all Healthy Aging policies Improve access for marginalized and vulnerable populations Reduce racial/ethnic disparities	Extensive engagement with stakeholders during plan development and program evaluation	Equity	-	SCAN	Master Plan Blueprint

(Rehkopf et al., 2021)

2.5.1 Well-Being, Security: The Appalachians (WV, KY)

2.5.1.1 Prescription Assistance

Living with multiple chronic conditions means adhering to a laundry list prescription regimen and a daily piling of pills, tablets, and capsules. However complicated the doctor's orders may be, these medications save lives and enable people to live with less significant health burden. Prescriptions drug costs continue to grow in the United States. In 2020 alone, overall pharmaceutical expenditures grew 4.9% compared to 2019 (Tichy et al., 2021). Medicare Part D has succeeded in a number of ways to reduce the financial burden of medication costs but continues to leave some individuals in the "Donut Hole", a liminal stage between initial and catastrophic coverage that requires you to pay a percentage of the cost of your drugs. Even with generics, the exorbitant costs associated with the "Donut Hole" have left people with three choices: find financial assistance (family members, charities, etc.), deplete financial resources, and/or stop vital pharmaceutical regimens (Bauer, 2021). Each of these options poses a threat to the wellbeing and security of older adults. Pennsylvania has made significant efforts to shield its seniors from skyrocketing prescription costs through the PACE and PACENET programs. PACE/PACENET

are the PA version of a State Pharmaceutical Assistance Program (SPAP) that support over 300,000 seniors of varying in eligibility requirements and benefit levels (National Council on Aging, n.d.). Notedly, this program is funded by the revenue from the Pennsylvania Lottery. PACE is designed for non-Medicaid PA seniors whose income does not exceed \$14,500 for a single person, or \$17,700 combined for married couples. PACENET has higher income limits that range from \$14,5000 to \$33,5000 for single persons and \$17,700 to \$41,500 for married couples. PACE and PACENET beneficiaries will pay \$6 and \$8 for generic drugs, and \$9 and \$15 for prescription drugs, respectively (Pennsylvania Department of Aging, n.d.). PACENET enrollees may have to pay a low monthly premium to their pharmacy, but there is no cost to enroll in PACE. These programs are expanding even further to include 100,000 more enrollees, providing security for the physical and financial wellbeing of older Pennsylvanians. To reduce the financial strain of medication costs, physical and economic cost of non-adherence, implementing a SPAP would particularly behoove Appalachian states. West Virginia even has the infrastructure and enrollee network established through its Golden Mountaineer Card, a card that broadly offers discounts on pharmaceuticals, retail, and state parks (National Council on Aging, n.d.).

2.5.1.2 Non-Medicaid HCBS for Home Modifications (Sliding Scale Payment)

Home Modification is a critical component of the Aging in Place model that has proven value most evidently through preventing falls and reducing physical strain on caregivers (Stark, Keglovits, Arbesman, & Lieberman, 2017; Stark, Landsbaum, Palmer, Somerville, & Morris, 2009). Home modifications aim to make the home more navigable for individuals with impaired mobility or cognitive deficits. Ramps, grab bars, and stairlifts are alterations that can vastly improve safety and access to more areas of the home. However, home modifications can be

incredibly expensive, requiring equipment cost, and installation fees that result in a financial or emotional burden can be too much to bear without assistance. Many seniors that would benefit from such modifications do not qualify for assistance through Medicaid yet are unable to take on the financial endeavor with their savings alone despite cost-effectiveness (Wilson, Kvizhinadze, Pega, Nair, & Blakely, 2017). Non-Medicaid HCBS programs exist (CHOICE in Indiana and OPTIONS in Pennsylvania) delivery financial feasibility of Home Modification to the non-Medicaid, particularly rural, poor. There are some variations between the programs but they share key aspects that are particularly effective for home modifications. Participant copays based on a sliding scale determined by need. OPTIONS requires cost-sharing for incomes between 135% and 300% of the Federal Poverty Line (FPL) with a lifetime home modification cap of \$15,000 (PA Department of Aging, 2018). CHOICE, Indiana's variation, establishes a sliding scale contribution from participants with income between 150% and 350% of the FPL. In contrast to PA, there is no hard cap on income eligibility (Family and Social Services Administration, n.d.). Rather, those who exceed the upper threshold will be required to pay for the fees and services associated with the modifications. Both programs offer support for a number of services but are unique to others by offering home modification. Old, rural homes of the Appalachians can be as sentimental as they are dangerous to navigate. Emotional attachment to the home is understandable, particularly for the generational home that is so common to the Appalachians. Home modifications enable seniors and their families to adjust the home to make up for limitations, reduce falls, and maintain comfort by simply aging in place.

2.5.2 Well-Being, Security: Low-Performing Rural States (WV, KY, LA, AR, MS)

2.5.2.1 Non-Medicaid Adult Foster Care (Sliding Scale Payment)

Adult Foster Care is non-medical care provided that assists with ADL. Adult Foster Care is similar to Assisted Living in terms of the services and level of care provided. The main distinction is that Adult Foster Care is more suitable to rural areas and allows more flexibility for families. Example non-Medicaid Adult Foster Care and Support Services programs are also known as Nursing Home Diversion programs – those that attempt to avoid nursing home placement. Kansas’ Senior Care Act Program, Ohio’s Elderly Services Program, and Pennsylvania’s Domiciliary Care Program all share three important components: consumer direction, a sliding scale payment model, and non-Medicaid population scope (Paying for Senior Care, 2020a, 2020b, 2020c). Consumer direction allows beneficiaries to hire their own provider which may be family, friends, or neighbors. This allows seniors to get the personal care from someone they know and trust while providing compensation that lessens the personal and financial strain placed on caregivers. Many familial caregivers happily devote time and effort to caregivers obliged out of love or duty without compensation. Providing financial assistance to caregivers makes this act less of a personal sacrifice, lessening the tension that may arise between caregivers and other relatives, and protecting the relationship between caregiver and care-receiver. Sliding Scale Payment (SSP) models will play an important role in expanding benefit eligibility as the age wave continues to crash. SSP shifts the proportion of cost sharing based on income and asset criteria. Programs that utilize this tool tend to be more modest yet still promote Healthy Aging and keep elders from under the landslide of healthcare costs. Because these programs offer less expensive services, they can be scaled to include a wider population. Broadened program scope that includes a greater portion of the non-Medicaid poor allows them to

receive the support of desperately needed services without going through financial ruin to receive them. Keeping this population out of poverty and entitlement programs allows them more agency over their health while reducing the broader economic cost and reinforcing diversion from nursing home placement.

2.5.2.2 Rural/Occupational Mobile Health Clinics

Health Provider Shortage Areas (HPSAs) – areas designated as medically underserved by the Health Resources and Services Administration – pose a major threat to the health of rural communities. Sprawling HPSAs, particularly for primary care, limit early intervention and cessation for preventable chronic diseases, implementation of Health Aging behaviors, and health services resource connection (Rural Health Information Hub, n.d.). Even in areas where health provider density meets the population needs, physical distance, topographical obstacles, transportation access, inability to take time off work or caregiving, and of course cost may interfere with primary care utilization. High levels of blue-collar employment combined with low union participation rates provides little protection against the occupational health hazards that frustrate workers in their youth and punish them as they age (Citation). Primary care intervention through mobile health clinics may curtail the consequences of occupational health hazard exposure and increase the delivery of primary care to inhabitants of rural areas. Appalachian states already have mobile health clinics operating within their region. Based in Virginia, The Health Wagon provides extensive, holistic services to the medically underserved through scheduled Mobile clinic stops and appointment requests (Rural Health Information Hub, n.d.). Boasting 18,364 encounters with 6,161 different patients, The Health Wagon is an excellent model for the rural mobile health clinic (The Health Wagon, n.d.). Additional success has been demonstrated in the Appalachian region by deploying local Community Health Workers (CHWs) for chronic care management

(Crespo, Christiansen, Tieman, & Wittberg, 2020). Combining the flexibility of mobile health clinic model and availability of the CHW workforce will enable state's to better serve rural patients with primary care and prevention while abating the cost of staffing mobile units.

2.5.3 Productivity and Engagement, Cohesion: Low-Performing Rural States (WV, KY, LA, AR, MS)

2.5.3.1 Senior Companion/Community/Workforce Engagement

Title III Section 307. (a)(23) of the Older Americans Act requires SAPs, "...provide assurances that demonstrable efforts will be made— to coordinate services provided under this Act with other State services that benefit older individuals; and to provide multigenerational activities, such as opportunities for older individuals to serve as mentors or advisers in childcare, youth day care, educational assistance, at-risk youth intervention, juvenile delinquency treatment, and family support programs" (United States, 2020). As a result, every state maintains senior companion programs (SCPs) and community or workforce engagement programs (C/WEPs) that work to integrate seniors into the community, reducing isolation and encouraging utility. Senior companion and community engagement programs are beneficial for elders of all physical, even cognitive, ability and provide a uniquely rich opportunity to reinvigorate social networks that deteriorate with age. WEPs are less feasible for those with impairments and disabilities, even with employer accommodations. Physically and mentally capable seniors benefit by earning an income, supplementing their health benefits, and socializing with coworkers and customers outside the home. All of the selected states have these programs in existence and face the same hurdles as even high achieving states – recruitment and retention of both participants and volunteers. A study conducted by researchers at Arkansas Tech University explored SCP experiences and researched

recruitment and retention practices. The study found that volunteers and participants alike realized numerous benefits from this program and were primarily recruited informally through existing social networks (Ulsperger, McElroy, Robertson, & Ulsperger, 2015). Bolstering formal promotion channels through local news broadcasts, neighborhood canvassing, and dissemination of advertisement materials at churches, grocery stores, doctor's offices, etc will attract more candidates for the program. Further, targeting soon-to-be-retirees of more altruistic vocations (nurses, teachers, firefighters, etc.) for volunteer recruitment will enable them to continue rewarding work without the physical demands of formal occupation (Ulsperger et al., 2015). Enabling volunteers and participants to determine their commitment level and matching companions based on personality and interest establishes deeper connections and greater retention (Serrat, Villar, & Celdrán, 2018).

2.5.3.2 Non-Emergency Transportation Program

Transportation is an essential component of living within a society, particularly within rural areas. Driving represents more than the ability to get from Point A to Point B, it is a representation of self-sufficiency and a practice of independence. For most seniors this pillar of autonomy becomes a danger for oneself and others as the compounding factors of aging – impaired senses, delayed reaction times, and myriad medications – accumulate. In 2019, 8,033 motor vehicle traffic deaths occurred among 65+ year old drivers (Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2019). Many seniors have difficulty coming to terms with the reality of driving performance decline, as older drivers often perceive their skills as better than their peers and younger drivers. For some, the suggestion to restrict or cease driving is seen as a threat to independence (Freund, Colgrove, Burke, & McLeod, 2005). Reluctant seniors may continue driving even after an accident or intervention from family, friends, or partners.

Involuntary restriction of driving privileges, key or vehicle confiscation, can create hostility between the senior and loved ones. Beyond the dangers of mature driving, some seniors simply do not have access to their own vehicle, yet still require transportation to essential and recreational locations. Much like senior companion and engagement programs, Non-Emergency Transportation (NEMT) programs already exist in these example states. The major challenge is promoting awareness and utilization, particularly among an elderly, rural populace with low levels of internet access. Improvements to these programs can be made by borrowing from informal transportation practices, partnering with private transportation services, and implementing a cost-sharing model. Partnering with religious organizations and nonprofits to organize and promote multimodal community transportation programs, enables seniors to access the places, people, and events inherent to community integration (Foreman, Tucker, Flynn, & West, 2003). This collaborative project reinforces focus towards community engagement and social capital investment. Availability of different modes of transportation such as on-demand versus scheduled and single passenger versus large capacity gives users more options to utilize the service that best suits them. Public transit services are criticized for cost and inefficiency, especially in rural areas. Indeed, these programs are certainly more costly than urban counterparts; however, they are the most cost-effective option to serve a rural region (Litman, 2021). The Minnesota Department of Transportation developed a framework tool that identifies, describes, and classifies the potential benefits of transit services in specific communities (Mattson, Peterson, Hough, Godavarthy, & Kack, 2020). This tool enabled MnDOT to create more equitable, efficient, cost-effective transportation programs in rural communities and can be applied to exemplary low-achieving states to reassess their own rural transit programs.

2.5.4 Security: Low-Performing States (WV, KY, LA, AR, MS)

2.5.4.1 Long-Term Care Fund

Retarding the costs of long-term care and delaying the need for intense caregiving through home modification or other mild support services is essential to maintaining financial security of elders. Washington has utilized a unique, novel program to safeguard the wellbeing of retirees. The newly enacted Washington Cares Fund is a bold action to make long-term care affordable (Washington State Department of Social and Health Services, n.d.) (Hovde, 2022). This act establishes a mandatory long-term care insurance benefit that enables older adults to access funds for preventative health measures as they need them. Rather than delaying the purchase of a stairlift and risking injury from a fall, seniors can utilize these funds to purchase home modifications, compensate caregivers, and or evaluate the safety of their home. Washingtonians pay 0.58% of their earnings into the Fund. With no eligibility requirements, all workers who pay into this fund will have a \$36,000 lifelong LTC benefit (House Appropriations, 2022). A financial benefit of this size is a substantial resource to implement early Healthy Aging supports. Compared to the costs associated with intense or moderate LTSS needs, this benefit will very likely be a worthwhile investment. This state-wide program is the first of its kind and appears to be gaining traction in other states but has seen some road bumps and opponents – it is the least politically feasible example program. The prevailing ideological beliefs in rugged individualism within the low-performing regions could deter the current workforce from supporting this type of policy, despite the potential to improve the overall economy. Broad support for this policy – investment in the elderly – may be clouded by hostility towards the immediate wage loses that would support the program (Meyer, 2022). In theory, absence of evidence from a brand-new policy, this program would benefit individual workers immensely – not just the collective.

2.5.5 Equity: Low-Performing States (WV, KY, LA, AR, MS)

2.5.5.1 SCAN Master Plan for Aging

By law, all states are required to develop Plans for Aging to serve as an outline for constituents and bureaucrats alike. A Master Plan for Aging, as opposed to this generic Plan for Aging, is a tool designed by the SCAN foundation to assist states in their goal of defining and achieving priorities to address aging. According to the AARP, a commonality among high-achieving states is a comprehensive strategy with clearly outlined goals and metrics for assessment. Some of the most high-achieving states have improved through the implementation of the SCAN criteria into their Master Plans for Aging including Colorado, Massachusetts, California, Minnesota, and Texas, with many others developing their own plans.

SCAN state blueprints are characterized by planning length (10 or more years), governor leadership, and prioritization of state and local programs and funding for Healthy Aging. The SCAN Masterplan brings transparency to the public, identifies goals, objectives, and strategies, and applies metrics to ensure progress. States with these plans are often successful because proper execution requires devotion of resources and funding to thoughtfully develop and engage stakeholders. Colorado's H.B. 15-1033 established Comprehensive Strategic Action Plan on Aging (Citation). The hallmark of Colorado's plan was extensive stakeholder engagement that enabled the state to define 12 major recommendations addressing challenges such as COVID-19 and transportation. According to the Millbank Quarterly, Colorado is among the most improved states for all-around aging, in part due to the effort coordinated by the SCAN Master Plan (Rehkopf et al., 2021). None of the low-performing states are in the process of developing a Master Plan, nor have elements of the blueprint. The focus and thoughtful process develop a SCAN Master Plan requires the requires comprehensive stakeholder engagement. This enables states to apply an

equity lens to the entire framework as well as devote attention to equity shortcomings in their Healthy Aging infrastructure.

3.0 Recommendations

It is politically and financially unfeasible to amalgamate the programs and policies of these exemplary states into a one-size-fits-all approach to Healthy Aging. In fact, it would be foolish. States vary demographically, geographically, politically, and have access to different resources, facilities. The following recommendations are tailored to improve the Healthy Aging landscape within low-achieving states. The goal of these recommendations is to provide state executives and legislators with examples to model new programs or bolster existing ones. This analysis should complement the elected officials' tactful understanding of their states cultural context and allow them to maintain their own political and economic agency while empowering the elderly population of their state.

- The Appalachians (WV, KY): Well-Being, Security
 - Implement or enhance a State Prescription Assistance Program to reduce prescription drug costs
 - Establish a sliding-scale Home Modification Program for non-Medicaid elders
- Low-Performing Rural States (WV, KY, LA, AR, MS): Well-Being, Security
 - Establish a sliding-scale Adult Foster Care and Supportive Services for non-Medicaid elders
 - Establish and/or partner with Mobile Health Clinics to provide primary care and prevention for blue-collar workers and rural inhabitants, employing Community Health Workers to staff mobile clinics
- Low-Performing Rural States (WV, KY, LA, AR, MS): Productivity and Engagement, Cohesion

- Reevaluate Senior Companion/Community/Workforce Engagement Programs and employ targeted recruiting and retention techniques
- Reevaluate Non-Emergency Transportation Programs with the MnDOT User Tool to assess equity, cost-effectiveness, and user satisfaction
- Low-Performing States (WV, KY, LA, AR, MS): Security
 - Research the feasibility and effectiveness of establishing a Long-Term Care Fund for workers
- Low-Performing States (WV, KY, LA, AR, MS): Equity
 - Implement the SCAN Master Plan Blueprint as a tool to focus the state plan for aging, engaging with stakeholders in continuously through plan development and program evaluation
- Partner with state universities to maintain evaluation metrics for cost-effectiveness, stakeholder satisfaction, and sustainability of Health Aging Best Practices
- Support and advocate for the enactment of S. 56: Alzheimer’s Caregiver Support Act
- Support and advocate for the enactment of S. 410: Strengthening Social Connections Act of 2021

4.0 Stakeholder Analysis & Strategy Implementation

Small investment in Healthy Aging goes a long way in both caring for the physical, social, and financial health of seniors, their families and communities, and instilling a culture that values the elderly. Elders, their advocates and all working-class adults, that support a reassessment and strengthening of Healthy Aging infrastructure should appeal to elected officials. Policymakers must take the steps to establish the task forces to begin engaging stakeholders, defining goals, conceiving objectives and strategies, and determining evaluation measures. The SCAN Foundation's Master Plan for Aging blueprint provides the necessary framework for states to ensure equitable focus and sustainable planning. Low-achieving states need to address the identifiable, self-admitted weaknesses by borrowing successful programs from similar, successful states and tailoring them to fit their resource network. Targeting the most threatened population, the non-Medicaid poor, with resources and services will enable greater utility into old age and prevent resource depletion and more intense burden on caregivers, the healthcare system, the economy. Advocates and leaders must garner public support by demonstrating the economic and community value in Healthy Aging. Partnering with community organizations will not only broaden the capacity of new programs but will also attract greater response from residents who are familiar with said organizations. Healthy Aging policies and programs should achieve much more than ensuring the physical and mental health of aging adults – they should work to reframe the perception of aging and value of older adults within their role of society. These programs should support solidarity between workers and retirees, and establish social connections peers, working adults, and youths within the community. There is no doubt that this a policy undertaking and will require substantial effort to execute and implement. However, opponents of Healthy Aging

programs must see the value of investment. Investment not only in the elders, but caregivers, the youth, and the economic wellbeing of the wider public. The volatility of the healthcare system will only become more dire as the wave of Baby Boomers retire and settle into dangerous aging behaviors that worsen chronic conditions, delay preventative care, accelerates social isolation.

5.0 Conclusion

As Americans are living healthier into older ages, they are facing delayed physical and mental limitations as a result of aging, that minorly hinder activities of daily living (ADL). It is estimated that 70% of Americans over 65 will need long-term services and supports (LTSS) at some point in their lives (Super, 2020). Most individuals receiving care outside of a nursing home are receiving care and support from friends or family. This comparative policy analysis provided a basic overview of the trends, implications, and potential threats to Healthy Aging in the coming years. West Virginia, Kentucky, Louisiana, Arkansas, and Mississippi have continued to trail the rest of the US in Healthy Aging. By crafting a SCAN Master Plan and mimicking model programs from more successful states, the aforementioned states can improve the holistic wellbeing of their seniors and become an exemplar for Healthy Aging. The plans, policies, and programs recommended to these states are tailored with political practicality in mind and align with the explicitly intentional goals of these states. The predominate limitations and qualms to these propositions are summarized as financial feasibility. However, the data clearly predicts that without investment in the growing elder population, future generations will experience resultant burden to a far greater extent. The immediate and long-term benefits of creating a sustainable approach to aging far outweigh the investment cost. Healthy Aging programs will enable older Americans to age with dignity, protect the integrity of our economy, and preserve public health before the crash of the Baby Boomer Age Wave.

Bibliography

- 116th Congress (2019-2020). (2020). Supporting Older Workers Act (H.R. 5531).
- AARP. (2019). Longevity Economy Outlook - Interactive Report. Retrieved March 16, 2022, from <https://longevityeconomy.aarp.org/>
- AARP Family Caregiving. (2020). Caregiving in the U.S. (Research Report). National Alliance for Caregiving.
- Abeliansky, A. L., Erel, D., & Strulik, H. (2021). Social vulnerability and aging of elderly people in the United States. *SSM - population health*, 16, 100924.
- American Senior Communities. (2017, October 13). Top 10 Health Concerns for Seniors. Retrieved January 21, 2022, from <https://www.asccare.com/health-concerns-for-seniors/>
- Anderson, L. A., Goodman, R. A., Holtzman, D., Posner, S. F., & Northridge, M. E. (2012). Aging in the United States: opportunities and challenges for public health. *American Journal of Public Health*, 102(3), 393–395.
- Andrew, M. K., & Keefe, J. M. (2014). Social vulnerability from a social ecology perspective: a cohort study of older adults from the National Population Health Survey of Canada. *BMC Geriatrics*, 14, 90.
- Andrew, M. K., Mitnitski, A. B., & Rockwood, K. (2008). Social Vulnerability, Frailty and Mortality in Elderly People. *Plos One*, 3(5), e2232.
- Appalachian Regional Commission. (n.d.). About the Appalachian Region. Retrieved March 16, 2022, from <https://www.arc.gov/about-the-appalachian-region/>
- Baker, A. (2021, April). Politics in Appalachia: Contributions of Appalachian Women Post 2020 Presidential Election (Master thesis).
- Bauer, B. (2021, December 22). How to Avoid the Medicare Part D Donut Hole. National Council on Aging. Retrieved March 16, 2022, from <https://www.ncoa.org/article/how-to-avoid-the-medicare-part-d-donut-hole/>
- Beach, S. R., Schulz, R., Williamson, G. M., Miller, L. S., Weiner, M. F., & Lance, C. E. (2005). Risk factors for potentially harmful informal caregiver behavior. *Journal of the American Geriatrics Society*, 53(2), 255–261.
- Bean, M. (2021, November 17). States ranked by primary care shortage areas. Becker's Hospital Review. Retrieved March 16, 2022, from <https://www.beckershospitalreview.com/rankings-and-ratings/states-ranked-by-primary-care-shortage-areas.html>

- Belbase, A., Chen, A., Hubbard, P., & Munnell, A. (2021). Who Will Have Unmet Long-Term Care Needs and How Much Does Medicaid Help? (Brief No. 21–18). Center for Retirement Research at Boston College.
- Belbase, A., Chen, A., & Munnell, A. (2021a). What Level of Long-Term Services and Supports Do Retirees Need? (Brief No. 21–10). Center for Retirement Research at Boston College.
- Belbase, A., Chen, A., & Munnell, A. (2021b). What Resources Do Retirees Have for Long-Term Services & Supports (Brief No. 21–16). Center for Retirement Research at Boston College.
- Beshear, A. (2021). State Plan 2022-2024 (State Plan on Aging). Frankfort, Kentucky: Cabinet for Health and Family Services: Department of Aging and Independent Living.
- Beyer, S. (2019, October 30). The Struggles of West Virginia. Catalyst. Retrieved March 16, 2022, from <https://catalyst.independent.org/2019/10/30/the-struggles-of-west-virginia/>
- Bryant, P. (2018). State Plan on Aging: FFY 2019-2022 (State Plan on Aging). Jackson, Mississippi: Mississippi Department of Human Services Division of Aging and Adult Services Phil Bryant Governor of Mississippi.
- Carnemolla, P., & Bridge, C. (2018). A scoping review of home modification interventions – Mapping the evidence base. *Indoor and Built Environment*, 1420326X1876111.
- Center for Medicare Advocacy. (2019, July 18). Study Finds Home and Community-Based Services Access Disparities. Retrieved March 16, 2022, from <https://medicareadvocacy.org/study-finds-home-and-community-based-services-access-disparities/>
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2019). Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, GA: CDC.
- Colorado Department of Health Care Policy & Financing. (n.d.). Old Age Pension Health and Medical Care Program (OAP). Retrieved February 2, 2022, from <https://hcpf.colorado.gov/old-age-pension-health-and-medical-care-program-oap>
- Commission on Long-Term Care. (2013). Commission on Long-Term Care Report to the Congress.
- Couto, R. (1977). Political Silence and Appalachia on JSTOR. *Appalachian journal*, 5(1), 116–124.
- Crespo, R., Christiansen, M., Tieman, K., & Wittberg, R. (2020). An Emerging Model for Community Health Worker-Based Chronic Care Management for Patients with High Health Care Costs in Rural Appalachia. *Preventing Chronic Disease*, 17, E13.

- Edemekong, P. F., Bomgaars, D. L., Sukumaran, S., & Levy, S. B. (2022). *Activities of daily living*. StatPearls. Treasure Island (FL): StatPearls Publishing.
- Edwards, J. B. (2019). *Louisiana State Plan on Aging (State Plan on Aging)*. Baton Rouge, Louisiana: Office of Elderly Affairs.
- Family and Social Services Administration. (n.d.). *Community and Home Options to Institutional Care for the Elderly and Disabled (CHOICE)*. Retrieved March 16, 2022, from <https://www.in.gov/fssa/da/community-and-home-options-to-institutional-care-for-the-elderly-and-disabled/>
- Family Caregiver Alliance. (n.d.). *Caregiver Health*. Retrieved January 21, 2022, from <https://www.caregiver.org/resource/caregiver-health/>
- Foreman, C., Tucker, L., Flynn, J., & West, M. (2003). *Senior Transportation Alternatives: Why Are They Important and What Makes Them Work?* Tampa, FL: National Center for Transit Research.
- Freedman, V. A., Carr, D., Cornman, J. C., & Lucas, R. E. (2017). Aging, mobility impairments and subjective wellbeing. *Disability and health journal*, 10(4), 525–531.
- Freund, B., Colgrove, L. A., Burke, B. L., & McLeod, R. (2005). Self-rated driving performance among elderly drivers referred for driving evaluation. *Accident Analysis and Prevention*, 37(4), 613–618.
- Fulmer, T., Reuben, D. B., Auerbach, J., Fick, D. M., Galambos, C., & Johnson, K. S. (2021). Actualizing better health and health care for older adults. *Health Affairs (Project Hope)*, 40(2), 219–225.
- Funders' Efforts: Aging and Health, COVID-19. (2020). *Health Affairs (Project Hope)*, 39(6), 1092–1093.
- Garfield, R., Ortega, K., & Damico, A. (2021, January 21). *The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid*. Kaiser Family Fund. Retrieved March 16, 2022, from <https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/>
- Genworth. (2022, January 21). *Cost of Long-Term Care by State. Cost of Care Survey*. Retrieved January 21, 2022, from <https://www.genworth.com/aging-and-you/finances/cost-of-care.html>
- Gonzales, E., Matz-Costa, C., & Morrow-Howell, N. (2015). Increasing opportunities for the productive engagement of older adults: a response to population aging. *The Gerontologist*, 55(2), 252–261.
- Gonzales, E., Shen, H.-W., Perry, T. E., & Wang, Y. (2019). Intersections of home, health, and social engagement in old age: formal volunteering as a protective factor to health after relocation. *Research on aging*, 41(1), 31–53.

- Gonzales, E., Shen, H.-W., Wang, Y., Martinez, L. S., & Norstrand, J. (2016). Race and Place: Exploring the Intersection of Inequity and Volunteerism Among Older Black and White Adults. *Journal of gerontological social work*, 59(5), 381–400.
- Gorges, R. J., Sanghavi, P., & Konetzka, R. T. (2019). A National Examination of Long-Term Care Setting, Outcomes, And Disparities Among Elderly Dual Eligibles. *Health Affairs (Project Hope)*, 38(7), 1110–1118.
- Grossman, D. (2021, December 9). Arkansas Town Works to Reform Its Racist History. *Newsy*. Retrieved March 16, 2022, from <https://www.newsy.com/stories/arkansas-town-works-to-reform-its-racist-history/>
- Hannon, K. (2016, July 20). Washington: The Ideal Place to Grow Older. *New York Times*.
- Harvard T.H. Chan School of Public Health. (n.d.). Health disparities between blacks and whites run deep. *News*. Retrieved March 16, 2022, from <https://www.hsph.harvard.edu/news/hsph-in-the-news/health-disparities-between-blacks-and-whites-run-deep/>
- Health and Aging Policy. (n.d.). Shaping a healthy and productive future for older Americans. Health and Aging Policy Fellows Program. Retrieved January 30, 2022, from <https://www.healthandagingpolicy.org/health-and-aging-policy/policy-overview/>
- Heller, E., Enlund, S., & Blackman, K. (2017). Improving Access to Care in Rural and Underserved Communities: State Workforce Strategies (Health Policy Report). National Conference of State Legislators.
- Home modifications: My home is fine and I am fine. I don't need them. (n.d.). *Age In Place*. Retrieved January 21, 2022, from <https://ageinplace.com/your-home-better/i-dont-need-home-modifications/>
- House Appropriations. (2022). H.B. 1732. Retrieved March 16, 2022, from <https://lawfilesexternal.wa.gov/biennium/2021-22/Pdf/Bills/House%20Bills/1732.pdf?q=20220316162227>
- Hovde, E. (2022, March 14). Update on the long-term-care payroll tax. *Washington Policy Center*. Retrieved March 16, 2022, from <https://www.washingtonpolicy.org/publications/detail/update-on-the-long-term-care-payroll-tax>
- Huntsberry-Lett, A. (2021, October 28). Caregiver Statistics: Facts About Family Caregivers. *Aging Care*. Retrieved January 12, 2022, from <https://www.agingcare.com/articles/who-are-family-caregivers-459287.htm>
- Hutchinson, A. (2019). Arkansas State Plan on Aging: FFY 2020-2022 (State Plan on Aging). Little Rock, Arkansas: Arkansas Department of Human Services: Division of Aging, Adult and Behavioral Health Services.

- Iriondo, J., & Jordan, J. (2018, March 13). Older People Projected to Outnumber Children. The United States Census Bureau. Retrieved January 21, 2022, from <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>
- Jackson, B. E., Oates, G. R., Singh, K. P., Shikany, J. M., Fouad, M. N., Partridge, E. E., & Bae, S. (2017). Disparities in chronic medical conditions in the Mid-South. *Ethnicity & health, 22*(2), 196–208.
- Justice, J. (2021). West Virginia Bureau of Senior Services State Plan on Aging (State Plan on Aging). Charleston, West Virginia: West Virginia Bureau of Senior Services.
- Kaiser Family Fund. (2021, September 30). Mental Health Care Health Professional Shortage Areas (HPSAs). State Health Facts. Retrieved March 16, 2022, from <https://www.kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
- Kaiser Family Fund. (n.d.). Medicaid Coverage Rates for the Nonelderly by Race/Ethnicity. State Health Facts. Retrieved March 16, 2022a, from <https://www.kff.org/medicaid/state-indicator/nonelderly-medicaid-rate-by-raceethnicity/?dataView=0¤tTimeframe=0&sortModel=%7B%22colId%22:%22Black%22,%22sort%22:%22desc%22%7D>
- Kaiser Family Fund. (n.d.). Dual Eligibles as a Percent of Total Medicare Beneficiaries. State Health Facts. Retrieved March 16, 2022b, from <https://www.kff.org/medicaid/state-indicator/duals-as-a-of-medicare-beneficiaries/?currentTimeframe=0&selectedDistributions=duals-as-a-percent-of-medicare-beneficiaries&sortModel=%7B%22colId%22:%22Duals%20as%20a%20Percent%20of%20Medicare%20Beneficiaries%22,%22sort%22:%22desc%22%7D>
- Kaiser Family Fund. (n.d.). Health Insurance Coverage of the Total Population. State Health Facts. Retrieved March 16, 2022c, from <https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Medicare%22,%22sort%22:%22desc%22%7D>
- Kaiser Family Fund. (n.d.). Adult Self-Reported Health Status. State Health Facts. Retrieved March 15, 2022d, from <https://www.kff.org/other/state-indicator/adult-self-reported-health-status/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Fair%22,%22sort%22:%22desc%22%7D>
- Kaiser Family Fund. (n.d.). Total Number of Residents in Certified Nursing Facilities. State Health Facts. Retrieved March 16, 2022e, from <https://www.kff.org/other/state-indicator/number-of-nursing-facility-residents/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

- Kaiser Family Fund. (n.d.). Number of Medicare Certified Rural Health Clinics. State Health Facts. Retrieved March 15, 2022f, from <https://www.kff.org/other/state-indicator/total-rural-health-clinics/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Total%20Rural%20Health%20Clinics%22,%22sort%22:%22desc%22%7D>
- Knickman, J. R., & Snell, E. K. (2002). The 2030 problem: Caring for aging baby boomers. *Health Services Research*, 37(4), 849–884.
- LaPick, M. (2021, October 28). Best and Worst States for Elderly Healthcare. MedicareGuide. Retrieved January 20, 2022, from <https://medicareguide.com/best-states-for-elderly-healthcare-340840>
- Leistner, D. L., & Steiner, R. L. (2017). Uber for Seniors?: Exploring Transportation Options for the Future. *Transportation Research Record: The Journal of the Transportation Research Board*, 2660(1), 22–29.
- Lewis, C., & Buffel, T. (2020). Aging in place and the places of aging: A longitudinal study. *Journal of aging studies*, 54, 100870.
- Litman, T. (2021). Rural Multi-Modal Planning Why and How to Improve Travel Options in Small Towns and Rural Communities. Victoria, Canada: Victoria Transport Policy Institute.
- Marks, N. F., Lambert, J. D., & Choi, H. (2002). Transitions to Caregiving, Gender, and Psychological Well-Being: A Prospective U.S. National Study. *Journal of Marriage and Family*, 64(3), 657–667.
- Mattson, J., Peterson, D., Hough, J., Godavarthy, R., & Kack, D. (2020). Measuring the Economic Benefits of Rural and Small Urban Transit Services in Greater Minnesota. St. Paul, Minnesota: Minnesota Department of Transportation: Office of Research & Innovation.
- Meyer, M. (2022, February 11). Will the “Long-Term Care Tax” be Coming to Your State Soon? Nasdaq. Retrieved March 14, 2022, from <https://www.nasdaq.com/articles/will-the-long-term-care-tax-be-coming-to-your-state-soon>
- Michener, J. (2020). Race, politics, and the affordable care act. *Journal of health politics, policy and law*, 45(4), 547–566.
- National Council of State Legislators. (n.d.). Comprehensive Policy Approaches to Support the Aging Population. Retrieved January 12, 2022, from <https://www.ncsl.org/research/health/comprehensive-policy-approaches-to-support-the-aging-population.aspx>
- National Council on Aging. (n.d.). Governor’s Golden Mountaineer Discount Card Program. Benefits Check Up. Retrieved March 16, 2022a, from https://www.benefitscheckup.org/fact-sheets/factsheet_rxgov_wv_governors_golden_disc/#/

- National Council on Aging. (n.d.). Pharmaceutical Assistance Contract for the Elderly (PACENET). Benefits Check Up. Retrieved March 16, 2022b, from https://benefitscheckup.org/fact-sheets/factsheet_rxgov_pa_pacenet/#/
- National Council on Aging. (n.d.). Prescription Help from States and Drug Manufacturers. Prescription Assistance for Older Adults. Retrieved March 16, 2022c, from <https://www.ncoa.org/article/prescription-help-from-states-and-drug-manufacturers>
- National Institute on Aging. (2017, May 17). Promoting Wellness in Older Patients. Health Information. Retrieved February 1, 2022, from <https://www.nia.nih.gov/health/promoting-wellness-older-patients>
- PA Department of Aging. (2018). OPTIONS Program.
- PA Media. (2022, February 23). Department of Aging: 100,000 Older Adults Now Eligible to Apply for Prescription Assistance. Pennsylvania Pressroom. Retrieved March 16, 2022, from https://www.media.pa.gov/Pages/aging_details.aspx?newsid=338
- Paying for Senior Care. (2020a, September 6). Colorado's Old Age Pension (OAP): Eligibility & Benefits. Assisted Living. Retrieved February 1, 2022, from <https://www.payingforseniorcare.com/colorado/oldage-pension>
- Paying for Senior Care. (2020b, October 25). Kansas Senior Care Act Program: Eligibility and Benefits. Assisted Living. Retrieved March 16, 2022, from <https://www.payingforseniorcare.com/kansas/seniorcareact>
- Paying for Senior Care. (2020c, September 3). Pennsylvania Domiciliary Care Program: Eligibility & Benefits. Assisted Living. Retrieved March 16, 2022, from <https://www.payingforseniorcare.com/pennsylvania/dom-care>
- Paying for Senior Care. (2020d). Ohio Elderly Services Program: Benefits, Eligibility & Locations. Assisted Living. Retrieved March 15, 2022, from <https://www.payingforseniorcare.com/ohio/elderly-services-program>
- Paying for Senior Care. (2020e, July 18). Colorado Adult Foster Care Program: Eligibility & Benefits. Retrieved March 16, 2022, from <https://www.payingforseniorcare.com/colorado/adult-foster-care>
- Paying for Senior Care. (n.d.). Paying for Assisted Living & Home Care in Colorado. Retrieved February 2, 2022, from <https://www.payingforseniorcare.com/colorado>
- Pennsylvania Department of Aging. (n.d.). PACE - Prescription Assistance. Retrieved March 15, 2022, from <https://www.aging.pa.gov/aging-services/prescriptions/Pages/default.aspx>
- Prior, D. (2019, July 12). Poor Whites in the Antebellum U.S. South. H Net: Humanities and Social Sciences Online. Online Discussion Forum, . Retrieved March 16, 2022, from <https://networks.h-net.org/node/11465/discussions/4297558/poor-whites-antebellum-us-south-topical-guide>

- Ramlagan, N. (2021, May 27). Report More WV Seniors Isolated Face Poverty Lack of Support. Public News Service. Retrieved March 16, 2022, from <https://www.publicnewsservice.org/2021-05-27/senior/report-more-wv-seniors-isolated-face-poverty-lack-of-support/a74432-1>
- Rehkopf, D. H., Furstenberg, F. F., Elser, H., Jackson, C., Levy, N., Rowe, J. W., & AGING SOCIETY RESEARCH NETWORK. (2021). A US state index of successful aging: differences between states and over time. *The Milbank Quarterly*.
- Reinhard, S. C., Feinberg, L. F., Houser, A., Choula, R., & Evans, M. (2019). Valuing the invaluable: understanding the contributions of family caregivers: infographic. Washington, DC: AARP.
- Rural Health Information Hub. (n.d.). Map of Health Professional Shortage Areas: Primary Care, by County, 2022. Rural Health Data Visualization. Retrieved March 16, 2022a, from <https://www.ruralhealthinfo.org/charts/5>
- Rural Health Information Hub. (n.d.). Mobile Clinics. Rural Transportation Toolkit. Retrieved March 16, 2022b, from <https://www.ruralhealthinfo.org/toolkits/transportation/2/models-to-overcome-barriers/mobile-clinics>
- Sadana, R., Blas, E., Budhwani, S., Koller, T., & Paraje, G. (2016). Healthy ageing: raising awareness of inequalities, determinants, and what could be done to improve health equity. *The Gerontologist*, 56 Suppl 2, S178-93.
- Schulz, R., Newsom, J., Mittelmark, M., Burton, L., Hirsch, C., & Jackson, S. (1997). Health effects of caregiving: the caregiver health effects study: an ancillary study of the Cardiovascular Health Study. *Annals of Behavioral Medicine*, 19(2), 110–116.
- Serrat, R., Villar, F., & Celdrán, M. (2018). Encouraging older people to continue participating in civil society organizations: A systematic review and conceptual framework. In M. Coetzee, I. L. Potgieter, & N. Ferreira (Eds.), *Psychology of retention: theory, research and practice* (pp. 263–281). Cham: Springer International Publishing.
- Shah, K., & Adolphe, J. (2019, August 16). 400 years since slavery: a timeline of American history. *The Guardian*. Retrieved March 16, 2022, from <https://www.theguardian.com/news/2019/aug/15/400-years-since-slavery-timeline>
- Simpson, A. (2021, November 5). In the rural South, poor health tied to systemic racism and legacy of slavery. *The Center for Public Integrity*.
- Smalligan, J., & Boyens, C. (2020). Policies for an Aging Labor Force: Keeping Older Workers with Health Conditions Employed. Urban Institute Income and Benefits Policy Center.
- Span, P. (2021, October 2). Tallying the Cost of Growing Older. *The New York Times*.
- Special Committee on Aging. (2017). *America’s Aging Workforce: Opportunities and Challenges*. United States Senate.

- Stark, S., Keglovits, M., Arbesman, M., & Lieberman, D. (2017). Effect of Home Modification Interventions on the Participation of Community-Dwelling Adults With Health Conditions: A Systematic Review. *The American Journal of Occupational Therapy*, 71(2), 7102290010p1-7102290010p11.
- Stark, S., Landsbaum, A., Palmer, J. L., Somerville, E. K., & Morris, J. C. (2009). Client-centred home modifications improve daily activity performance of older adults. *Canadian journal of occupational therapy. Revue canadienne d'ergotherapie*, 76 Spec No, 235–245.
- Stebbins, S. (2021, October 17). How Income Inequality in Louisiana Compares to Other States. *The Center Square*.
- Super, N. (2020). Three Trends Shaping the Politics of Aging in America. *Public Policy & Aging Report*, 30(2), 39–45.
- Taylor, J. (2019, December 19). Racism, Inequality, and Health Care for African Americans. *The Century Foundation*. Retrieved March 16, 2022, from <https://tcf.org/content/report/racism-inequality-health-care-african-americans/?session=1>
- The Health Wagon. (n.d.). About Us. Retrieved March 16, 2022, from <https://thehealthwagon.org/about/#About-Us>
- The National Council on Aging. (2021, March 31). Get the Facts on Economic Security for Seniors. *Economic Security for Advocates*. Retrieved January 26, 2022, from <https://www.ncoa.org/article/get-the-facts-on-economic-security-for-seniors>
- The Office of the Assistant Secretary for Planning and Evaluation. (2014, March 31). An Analysis of the 2011 National Study of Caregiving. *Informal Caregiving for Older Americans*. Retrieved January 21, 2022, from <https://aspe.hhs.gov/reports/informal-caregiving-older-americans-analysis-2011-national-study-caregiving>
- Tichy, E. M., Hoffman, J. M., Suda, K. J., Rim, M. H., Tadrous, M., Cuellar, S., Clark, J. S., et al. (2021). National trends in prescription drug expenditures and projections for 2021. *American Journal of Health-System Pharmacy*, 78(14), 1294–1308.
- Ulsperger, J., McElroy, J., Robertson, H., & Ulsperger, K. (2015). Senior companion program volunteers: exploring experiences, transformative rituals, and recruitment/retention issues. *The Qualitative Report*.
- United States. (2020). *Older Americans Act Of 1965 as amended*. Washington, D.C.
- US Census Bureau. (n.d.). Rural America. Retrieved March 16, 2022, from <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6>
- Ward, B. W., & Black, L. I. (2016). State and Regional Prevalence of Diagnosed Multiple Chronic Conditions Among Adults Aged ≥ 18 Years - United States, 2014. *MMWR. Morbidity and Mortality Weekly Report*, 65(29), 735–738.

- Washington State Department of Social and Health Services. (n.d.). WA Cares Fund. Retrieved March 16, 2022, from <https://wacaresfund.wa.gov/>
- West Virginia Public Broadcatsing. (2019, March 12). Aging in Appalachia: Caregiving in Isolation. Appalachia Health News. Retrieved March 16, 2022, from <https://www.wvpublic.org/news/2019-03-12/aging-in-appalachia-caregiving-in-isolation>
- White, S. (2014). Appalachia and American Public Opinion.
- Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. S. (2012). The meaning of “aging in place” to older people. *The Gerontologist*, 52(3), 357–366.
- Wilson, N., Kvizhinadze, G., Pega, F., Nair, N., & Blakely, T. (2017). Home modification to reduce falls at a health district level: Modeling health gain, health inequalities and health costs. *Plos One*, 12(9), e0184538.
- Wong, M., McNamara, T., Shulkin, S., Lettieri, C., & Careiro, V. (2008a). Mississippi Indicators: Aging & Work. State Profile Series. The Center on Aging & Work State Perspectives at Boston College.
- Wong, M., McNamara, T., Shulkin, S., Lettieri, C., & Careiro, V. (2008b). Louisiana Indicators: Aging & Work. State Profile Series. The Center on Aging & Work State Perspectives at Boston College.
- Wong, M., McNamara, T., Shulkin, S., Lettieri, C., & Careiro, V. (2008c). West Virginia Indicators: Aging & Work. State Profile Series. The Center on Aging & Work State Perspectives at Boston College.
- Wong, M., McNamara, T., Shulkin, S., Lettieri, C., & Careiro, V. (2008d). Kentucky Indicators: Aging & Work. State Profile Series. The Center on Aging & Work State Perspectives at Boston College.
- Young, S. (2020, June 22). Why Personalized Medicine Has the Power and Potential To Extend Your Life. *Forbes*. Retrieved January 21, 2022, from <https://www.forbes.com/sites/forbestechcouncil/2020/06/22/why-personalized-medicine-has-the-power-and-potential-to-extend-your-life/?sh=3a21787529df>
- Zedlewski, S., & Schaner, S. (2006). Older Adults Engaged as Volunteers. *The Retirement Project*, (5).