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California's Master Plan for Aging, Health Reimagined: A Case for Seniors to Age-In-Place

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**California's Master Plan for Aging, Health Reimagined:
A Case for Seniors to Age-In-Place**

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ILEX – H2: Master of Public Health, Integrated Learning Experience

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Aug. 1, 2021

Dedication

On December 4, 2020, Mildred Williams, a long-term California senior resident, a life-long educator, a proud single parent, and homeowner of 50 years, passed away at 79 years young. Her life expectancy *hairline* short of being classified as Medicare's "*oldest of old*" (Melnick et al., 2016). Mildred passed away spending the last 2 ½ years of her life, away from her home and her familiar community that she dearly loved and served. Family members, lacking public health research and public health education, thought it of "*no particular consequence*", that Mildred spend her final senior years, *against her wishes*, away from her personal possessions, away from her home, away from decades of close family and friends, separated from the familiar sounds and sights of her neighborhood and of her community. Within months of experiencing this *unexpected* separation from home and from community, Mildred's health went into a steady and rapid decline; she was shortly diagnosed with senior aged depression, she began exhibiting panic attacks, heightened confusion, a lack of personal confidence, significant sleep disorder and soon thereafter, a stroke(s). Mildred spent *countless* visits to local medical center emergency rooms. Prior to being removed from her home, Mildred lived an active, independent life; filled with laughter, old family stories, shopping, traveling, writing her monthly bills, and sending off birthday & holiday cards, engaged in local church programs, receiving open visits & phone calls from friends and from family, involved in civic expressions, watching, and discussing the local news and world events, talking to the neighbors while spending time in her garden, reading the daily paper and reading her Bible. As California's over-60 population and disabled adult population continues to rapidly increase, more families, caretakers and community members will be

faced with decisions of providing loving care and support to this aging population, without understanding *if* allowing the senior to remain in their homes and their familiar communities, *are of any importance or consequence*.

Mildred's passing came *far* too soon. . .As the mourning adult daughter of Mildred Williams, I can tell you *yes*, it does matter if we allow our aging family members the opportunity to age-in-place, *whenever possible*.

Abstract

In 2021 Worldwide, communities face a *singular yet common* challenge; and this is the *significant* aging of their senior adult populations. Current evidence from the literature suggests that older adults prefer to stay in their homes as they age. However, the facilitators and challenges older people encounter in realizing their aging goals have been inadequately addressed by the current body of literature given the projected increase in the number of older people in the United States preferring to age from their homes. Aging adults are vulnerable to daily frustration, which could negatively impact their aging process. However, knowledge of traditional medical services, socio-ecological factors, and support services needed to facilitate their aging process in the home remain limited. The United States is projected to have their senior population outpace that of its children's population, thus creating the need for increased and well-defined programs and services that support seniors to age-in-place. California's over-60 population is growing faster than any other age group, and is projected by the year 2030, to include a quarter of its residents (10.8 million) as older adults. California's rapidly changing and aging adult population increases the need for honoring the preference of older adults, who surveyed worldwide, 80% consistently wish to age-in-place, but face potential risk factors such as lack of health care access, chronic illness, clinical risk factors, socio-ecological risk factors, and socio-demographic risk factors. Through the literature, I learned that existing models of senior support programs and services, including the newly released January 2021 California's Master Plan for Aging, which can positively aid California seniors with aging-in-place, implicating possible areas for further improvement.

Keywords: seniors, elder, aged, geriatric, 65+ years, California, senior housing, aging in place, elder housing, geriatric housing, housing for the elderly, California aging in place, California master plan for aging

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Introduction

A fundamental component of successful aging is maintaining an individual's independence. One known approach to achieving this independence is for elderly adults, individuals aged 65 or older, to age-in-place (Foley & Luz, 2021). Scholars have broadly defined ageing-in-place within the current body of literature as the ability of an individual to stay in one's own home as the person ages (Blumenberg et al., 2019). Aged individuals consider as a primary goal to age-in-place (Blumenberg et al., 2019). Recent data released by the United States housing revealed that older adults are certainly achieving their old age goals, with at least 80% of older adults living independently in their own homes as they age (Blumenberg et al., 2019).

Several studies have previously examined the concept of age-in-place among seniors. For instance, Ornstein et al. (2017) conducted a study to explore the facilitators and barriers to ageing-in-place. Given their findings, Pettersson et al. (2020) found that emotional support was one of the key facilitators of age-in-place among elderly individuals in the home. However, Pettersson et al. (2020) recommended additional research focused on exploring the concept of age-in-place to understand the factors contributing to the success of age-in-place among seniors aging in their homes. Foley and Luz (2021) also conducted a qualitative study on the experiences of seniors in age-in-place and suggested the need for further research on facilitators of successful age-in-place for seniors aging in their homes given their unique environment that is different from clinical settings. Other studies on the topic include factors influencing the choice between staying at home or moving out for a different age-in-place (Golant, 2020), experiences of age in the United States, challenges to age in-home (Pettersson et al., 2020), the meaning

of aging in place for older people (Gettel et al., 2021), and enablers and barriers in the physical environment of care for older people in ordinary housing (Golant, 2020).

The problem to be addressed in this capstone / integrated learning experience (ILEX) project is that based on what is known in the observational research literature, it is still not known how the existing and effective healthcare programs and services are able to support seniors to have the ability to age-in-place in their homes and in their familiar communities in California. To address this gap and problem in current research, the purpose of this capstone project is to assess the existing and effective healthcare programs and services that are able to support seniors to have the ability to age-in-place in their homes and in their familiar communities in California, US. Factors influencing and contributing to age-in-place for older people in their homes are not new in California, United States (Pettersson et al., 2020).

However, because of the overwhelming number of older people preferring their homes as age-in-place, there are questions and concerns about the existing and effective healthcare programs and services that are able to support seniors to have the ability to age-in-place in their homes and in their familiar communities in California (Blumenberg et al., 2019). It is important to assess the existing and effective healthcare programs and services that can support seniors to have the ability to age-in-place in their homes and in their familiar communities in California to suggest possible strategies for addressing the age-in-place issues for senior individuals who choose their homes as age-in-place.

Background/Literature Review

The rapid increase of the aging of adult populations globally presents a set of concerns and issues, with the majority of nations facing many challenges in supporting

the wellbeing of their aging populations (Pettersson et al., 2020). As the number of older people increase, the prevalence of chronic health conditions increases, including diabetes, obesity, arthritis, kidney disease, hypertension, and heart disease (Ornstein et al., 2017). These increasing health concerns have a measurable impact on individuals and the societies in which they live (Pettersson et al., 2020). In the United States, the increase in adult population is expected to outnumber the youth population by 2035 (Ornstein et al., 2017), presenting serious issues about the health concerns of seniors to age-in-place. Among the key issues presented by the increasing aging population in the United States is the increased health care costs for seniors to age-in-place.

Researchers estimate that the cost of caring for older adults in the United States is expected to increase 58% by 2027, with nursing home cost and continuing care retirement communities (CCRC's) cost expected to reach \$414 billion by 2030 (Pettersson et al., 2020). Blumenberg et al. (2019) reported that over one-half (54%) of US older adults may not have enough savings or insurance coverage to pay for their health care expenses by 2029 (Pettersson et al., 2020). The US Medicare for individuals aged 80 years and older, known as the "*oldest old*," has been increasing since 2016 and is expected to continue growing in the next 20 years, with a 110% increase by 2036 (UC Davis Center for Healthcare, Policy and Research, 2021). In the United States, California's nearly 60% of the population is "diversifying and growing faster than any other age group." (UC Davis Center for Healthcare, Policy and Research, 2021). It is projected by the year 2030 to classify a quarter of its residents (10.8 million) as older adults (UC Davis Center for Healthcare, Policy and Research, 2021). California's population of adults aged 55 and older is projected to increase in 2021 by 20%, equalling

11.3 million of its current 45 million people. By 2050, the projected increase is 35%, equalling 15.4 million (UC Davis Center for Healthcare, Policy and Research. 2021). In addition, California's *oldest of old* population of people aged 85 and older, is expected to grow 65% in the next 10 years, representing 960,000 aging adults (Blumenberg et al., 2019). The oldest of old population is also expected to double in size from 8% to 16% (2.55 Million) by 2050. California's senior population increase is ten times the growth rate of other aged populations within the state (UC Davis Center for Healthcare, Policy and Research, 2021).

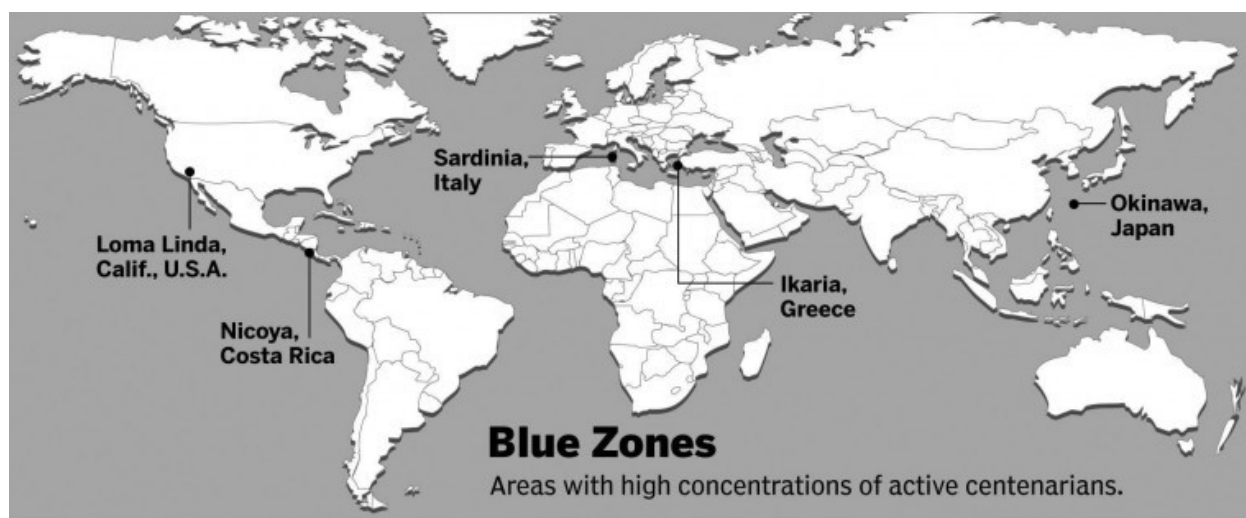
The University of California at Davis (UC Davis), Center for Healthcare, Policy, and Research recently released a study on Planning Healthy Aging Communities (2021) and stated that California's rapidly changing aging adult population increases the need for honoring the preference of older adults, who 80% surveyed worldwide, consistently wish to age-in-place in their homes and communities that are familiar to them, however, face a host of potential risk factors when doing so. The UC Davis Planning Healthy Aging Communities Study (2021) and the Icario (2021) stated that California adults aged 65 between the years of 2015–2019 were projected, on average, to live an additional 23.6 years and spend an average of 4.5 years with one or more health limitations during their lifespan. This includes lack of health care access, chronic illness, clinical risk factors, socio-ecological risk factors, and socio-demographic risk factors (Blumenberg et al., 2019). The UC Davis Planning Healthy Aging Communities study (2021, pp. 3) features a quote from the World Health Organization's Director-General, Dr. Tedros Adhanom Ghebreyesus, stating, "Humans now live longer in history. But adding more years to life

challenges ahead. California's Master Plan for Aging, Goal Two: Health Reimagined focuses on optimizing senior health and senior quality of life by creating comprehensive support programs and services that support seniors and the disabled adult populations to age-in-place.

National Geographic Fellow Dan Buettner sought to expand upon the work of Pes and Poulain and further explore Blue Zones aging communities for both their senior population longevity and sustained health. Buettner found common social-ecological themes within these global communities that centered around older seniors; being active naturally in their daily lives, having faith-based and social connections, having a sense of individual purpose and societal contribution, shifting down stress, and regularly consuming healthy foods of fresh vegetables and fruits (2021).

Figure 3

Global Blue Zones Map – Areas with high concentrations of active centenarians.



TH

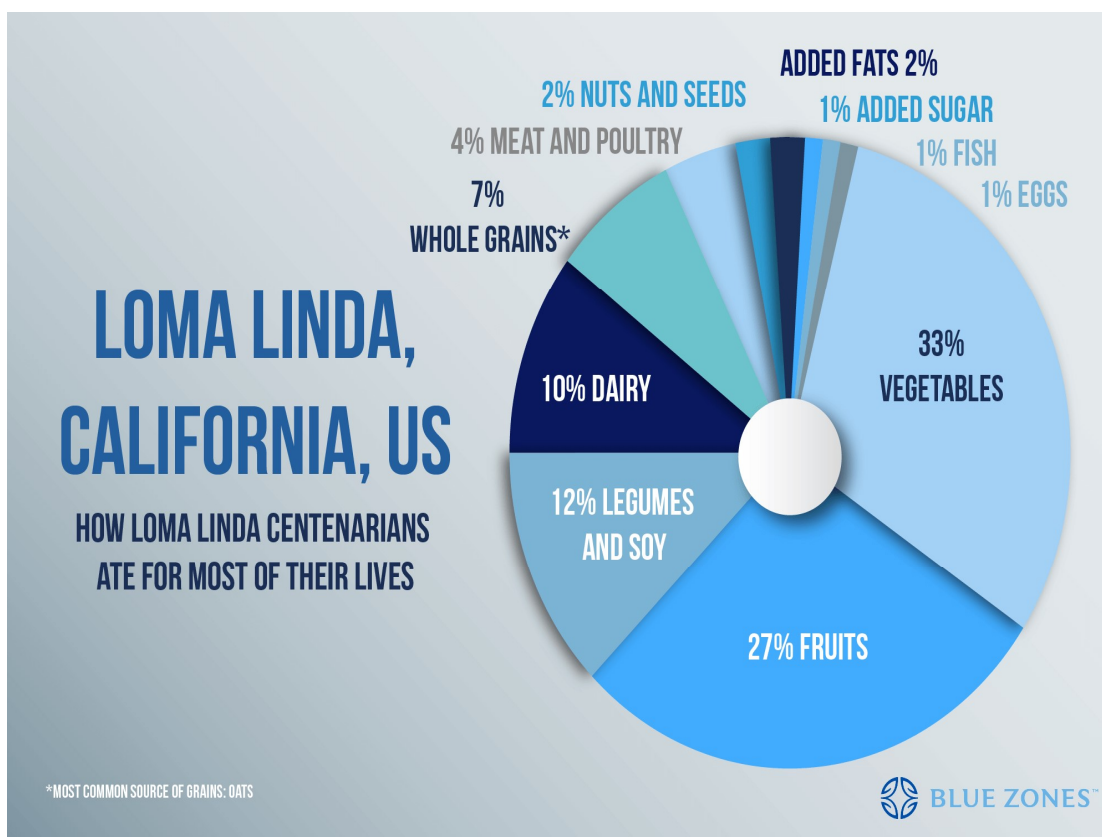
Loma Linda, California, one of the five global Blue Zones locations, is home to the faith-based organization founded in Southern California in the 1840s, called the Seventh-day Adventist church. The Seventh-day Adventist church members believe that fitness, science, and

religion work together and support an active and healthy lifestyle within their community. In the 21st Century, the Loma Linda, California, area has an existing 9,000+ Seventh-day Adventist church members who are the epicenter of the US Blue Zones region. Researchers who have studied the American Blue Zones area of Loma Linda, California, have found that its residents live as much as a decade more than the average US population, with; average US male lifespan of 78 and Loma Linda 89, Average US female lifespan 81 and Loma Linda 91.

Figure 4

Blue Zone Loma Linda, California, US – Loma Linda Centenarians Diet

Blue Zones researchers state that 50% of our lifespan is genetic, and the remainder 50%



is based on lifestyle choices. Researchers have found that much of the Seventh-day Adventist community members longevity is positively impacted by their vegetarianism diet, sustaining from smoking and alcohol consumption, maintaining a healthy body mass

index (BMI), finding a sanctuary of time (Saturday is community sabbath worship and day of rest), spending time with like-minded friends, drinking plenty of water, regularly consuming nuts and grains, eating meat in moderation, eating a light early dinner with a plant-rich diet, and maintaining a lifestyle of regular moderate to low exercise.

Researchers state that the Seventh-day Adventist community church members' lifestyle decisions help reduce; heart attack, low rates of cancer, diabetes, obesity, lower cholesterol, and cardiovascular disease, and promotes better sleep. Film producer Carl Canwell, in connection with the Loma Linda School of Public Health, created the short film Healthy People 2012, where Canwell interviewed 11 Loma Linda, California residents, between the ages 63-89, and was asked to share their outlook on their healthy lifestyle. The interviewed older aged community members answers include; weekly consumption of beans, reducing stress by maintaining calm approach to life, viewing their lives as meaningful with understanding that they are here to serve God and that is best accomplished by serving other people, regularly prepare their own meals, growing 50% of own food (fruit trees, vegetables and potatoes), vegetables, fruits, nuts, small portions of meat, grains, fish, gardening, regular individual praying, stress reduction by resting regularly, taking 10-12 minute power naps during the day, feel socially supported through community activities (aerobics, social networking, family, participating on senior committee for planning community seasonal events, keep brain growing by taking educational classes and utilizing weight machine at the local gym (89 year old male resident), utilize home treadmill while memorizing biblical scriptures, walking 2-3 miles 3-4 days per week, running, total body work out exercise classes, lap swimming, 1 hour daily combination of jogging and walking 3-4 miles, running marathons, playing tennis

1x per week, hiking and running the Loma Linda Hills, interest in spiritual things, belief that their religious faith and practices are the basis of everything, providing spiritual support and strength that positively affect their relationships with others, guides them through traumatic life events, and has an overall impact on their lifespan longevity.

The US older adult population faces several risk factors to aging-in-place, including clinical risk factors, social-ecological risk factors and social-demographic risk factors, with some clinical risk factors including; physical health, mental health, and depression (Blumenberg et al., 2019). Seniors within the US are also vulnerable to societal age segregation that can bring economic and cultural pressures to move from their homes and their familiar communities (Pettersson et al., 2020). California seniors also find themselves vulnerable to homelessness, due to California's prohibitive cost of living economy (Blumenberg et al., 2019).

Eighty percent of a person's health is attributable to environmental, social-ecological, and social-demographic factors (Blumenberg et al., 2019). Seniors may find themselves discouraged from continuing to live within their existing and familiar communities (Golant, 2020). Portacolone and Halpern (2016) questioned through qualitative data, whether the 21st Century society in the US is indeed an ethical and civil society, seeking to integrate intergenerational populations in our local communities and our lived environments, or is the US guilty of widespread age-segregation. Portacolone and Halpern (2016) examined reasons for community-dwelling older Americans to relocate into senior housing. Portacolone and Halpern (2016) conducted 47 interviews with older adults who lived alone. According to the study, half of the older adults lived in senior housing, the other half lived in conventional housing (Portacolone & Halpern, 2016). Qualitative data were obtained through; participant

observation and ethnographic interviews. Standard qualitative methods were utilized to analyze the data. Portacolone and Halpern (2016) found that seniors were enticed to move to senior housing due to lower costs, a sense of being safer and the opportunity for greater socializing versus staying in conventional housing. However, the study found that senior housing also may increase seniors' feelings of isolation, of exposure to crime and increased distress. Portacolone and Halpern (2016) also found that cultural, economic, and political factors influenced the individual's decision to relocate into age-segregated settings versus the seniors' true individual preference. Portacolone and Halpern (2016) advocate for increased societal awareness on the ethical implications of increasing community-dwelling living options by age. Portacolone and Halpern (2016) concluded that "age-segregation within the US society, is a highly understudied phenomenon" (p.20).

Research suggest effective existing models of senior support programs and services, including on the governmental policy level, the "newly released January 2021 California's Master Plan for Aging, that can positively aid California seniors with California's *first ever* comprehensive 10 year planning and commitment of governmental policy and funding, providing broad accessibility to existing programs, and encouraging entrepreneurial and innovative new programs and support services, that can successfully aid its senior population, when so desired, to age-in-place.

There are known existing effective models of support programs and services to aid California seniors desiring to age-in-place, versus having modern day societal pressures to move to senior housing facilities (Blumenberg et al., 2019). California policy should support the decision and desires of our aging seniors and not have them relocate away from their familiar homes and communities due to economic, cultural, and political factors

(Blumenberg et al., 2019). There are many diverse program and service models that include; policy and planning model solutions such as the US Government Affordable Care Act (ACA) of 2010, is a federal level legislation, that provides variety of program benefits that help seniors to age-in-place; reducing \$20.8 billion in Medicare prescription drug costs for at least 10.7 million seniors with Medicare, has helped to keep finances in seniors household budget, thus assisting in reducing financial pressure that can lead to senior housing insecurity (Ercia et al., 2021).

The ACA's provision of senior no costs annual wellness visits and other preventable medical care services, assist in maintaining the health of the senior to age-in-place, by having proper knowledge and treatment of health conditions, therefore, supporting the senior in maintaining safe, independent living (Ercia et al., 2021). The ACA also provides for the innovation in care services, such as utilizing care managers to coordinate the various care services for seniors that reduce the high cost of hospital readmissions (Ercia et al., 2021). The care managers assist in setting up a variety of home-based care services that are needed to manage the acute, rehabilitative, and chronic healthcare needs for seniors, outside of continued expensive emergency room visits.

The US State of California Master Plan for Aging is comprehensively structured to address the needs of the aging population, who are in 58 diverse urban & rural counties that are spread throughout the state (Figure 6). The California MPA Goal 2: Health Reimagined; provides a bridge between, traditional medical-facility centered health care, and patient-centered health care, which allows for seniors to receive home-based medical visits, home-based treatment, and home-based follow-up services. By placing the senior patients at the center of health care designed programs, the US state of California

reinforces its' commitment to assuring that medical care and medical services remain accessible and equitable to their senior population throughout the senior's lifespan.

California's MPA also includes a commitment to expanding geriatric care for senior patients, to innovate established nursing home services, to support lifelong healthy aging education, and to provide support for senior population research that focuses on dementia, all to support the states a senior population to effectively age-in-place.

Traditional Centered Healthcare and Patient Centered Healthcare Blended Model Solution. The traditional health care model is one that places the medical center and various providers of medical services, at the center of the patient experience. In 2021 effective health care solutions for seniors, place the patient at the center, and look to merge the health care experience between the medical facility and the senior's home environment (Ercia et al., 2021). Programs such as the following look to function in this senior patient focused manner.

House Calls: California program for homebound patients reduces monthly spending, delivers meaningful care (Southern California based). Melnick et al. (2016) published a Health Affairs report covering the House Calls Model, established in 2009 by the HealthCare Partners Affiliated Medical Group, in conjunction with Medicare, with the purpose to reduce senior's preventable expensive emergency room visits. The House Calls Model aims to support medically high-risk and frail seniors by providing a healthcare team of; physicians, nurse practitioners, social workers, and medical assistants, and coordinates with additional health professionals such as; psychologists, psychiatrists, podiatrists, and ophthalmologist, as needed for consultations. Melnick et al. (2016) report analyzed the House Calls Model's "data-over-time" and Medicare data that supports the

economic value of serving seniors at home. Melnick et al. (2016) affirmed House Calls support services that allow for senior populations to age-in-place.

Socio-Ecological and Socio-Demographic Centered Model Solutions. The World Health Organization (WHO) recognizes the global public health phenomena of aging populations and has created the WHO Global Network for Age-Friendly Cities and Communities (goal is more than 200 cities and communities), that commit to design targeted livability standards for the exponentially increasing aging populations around the world (Jeste et al., 2016). The US based senior advocacy and policy group AARP has announced in June 2021, that the US State of California has become the eighth state to join the AARP Network of US Age-Friendly States and Communities (AARP CA website). The following are additional examples of known effective socio-ecological patient-centered model solutions, which provide seniors with aging-in-place support.

Age-friendly communities (AFC) network global model. Jeste et al. (2016), publication, Age-Friendly Communities Initiative: Public Health Approach to Promoting Successful Aging, states emphatically that globally older adults consistently prefer aging-in-place. The researchers note the Age-Friendly Communities (AFC) global initiative proposed by the World Health Organization (WHO) to support seniors aging-in-place. The AFC Network already includes 287 global communities in 33 countries, and AARP's Network of AFCs has 77 communities in the US. The AFC Network mission is to support seniors by keeping them actively involved in their communities and by securing commitment from local governments to prioritize senior population needed services and infrastructure; i.e., affordable housing, safe outdoor spaces and built environments conducive to active living, inexpensive and convenient transportation options,

opportunities for social participation and community leadership, and accessible health and wellness services. The researchers identified that shifting to prevention-focused and community-based healthcare approaches would be more helpful than maintaining health care interventions at an individual level.

Senior Peer-to-Peer (P2P) Support Program Model. Jacobs et al. (2020) publication, *Evaluation of Peer-to-Peer Support and Health Care Utilization Among Community-Dwelling Older Adults*, share the analysis of a team of researchers, from various United States (US) universities, who conducted a 2015 and 2017 longitudinal cohort comparative effectiveness study, of seniors 65+ years in age. Jacobs et al. (2020) investigated why seniors are successful when aging in place in their communities. Jacobs et al. (2020) examined (from October 2018 thru May 2020) the comparative effectiveness of community-designed and community-implemented peer-to-peer (P2P) support programs vs standard community services (SCS) to promote health and wellness in at-risk older adults. Three communities in California, Florida, and New York, were community-based organizations delivered P2P services to older adults, were matched according to age, sex, and race/ethnicity. 12 months data were examined of; Rates of hospitalization, urgent care, emergency department and composite measure of health care utilization. Out of the studies 503 participants screened / 456 participants enrolled, P2P support was associated with seniors who had higher rates of hospitalization. The P2P support was provided by trained older adult volunteers in the same community. They provided support targeted at the needs of the older adult population, including transportation assistance, check-in calls, social activities, help with shopping, and trips to medical appointments.

The Villages “Consumer Direct” Model. Research by Graham and Kurtovich (2018) provides a variety of program and support services, designed to help older adults age-in-place. In the aid to prevent seniors relocating away from their homes and their familiar communities (against their wishes), the Village model provides a variety of senior support opportunities; social engagement through social events and classes, civic engagement through member-to-member volunteering, and a host of senior support services. Graham and Kurtovich (2018) took survey of 222 Village members at intake and performed a 12-month follow-up to look at the changes the seniors experience in: their aging-in-place confidence, health, and social connectedness. The survey results revealed that after 12 months, the seniors had their most positive increase in the domain of confidence, with significant increase in their confidence aging-in-place, perception of social support and less of an interest to relocate after being in the Village for 12 months (Graham & Kurtovich, 2018). When entering the Village, most seniors were in good health and well connected, with little improvement showing in these areas 12 months later.

Lehning and Davitt (2017) further address the Villages “Consumer Direct” Model in their article, Variations of the Village Model. Lehning and Davitt (2017) defined Villages as community-based initiatives that are designed to help older adults to age-in-place by providing a variety of support services, senior engagement opportunities and peer support programs. Lehning and Davitt (2017) stated that the Village model has rapidly expanded since their beginning development in the early 2000s. The authors examined a sample of Villages in the United States, noting their differences in characteristics. Research results determined that no uniform Village model existed that

could be readily “implemented and evaluated by policy makers, funders, service provider and researchers.” (p.34). Lehning and Davitt (2017) also noted a correlation between the methods of service provision, funding sources and that of member and consumer involvement, resulting in Villages functioning differently in various categories. The authors warrant a need for understanding how to best implement and sustain the growing use of Villages to address senior based aging-in-place initiatives.

Permanent Supportive Housing (PSH) Model. Henwood and Gilmer (2015) examined this program model that supports seriously mentally ill seniors who benefit from having permanent housing with supportive services provided. Henwood and Gilmer (2015) surveyed 3990 adults aged 35-39 and compared them with 3086 adults aged 50 years and older. Data was analyzed using quantitative and qualitative methods. Henwood and Gilmer (2015) established that both young and old mentally ill patients, benefited from living settings that provided permanent and supportive housing and had a positive effectiveness for ending homelessness among these special needs adult and senior aged populations.

Key senior program models of social-ecological & social-demographic issues: addressing senior loneliness and LGBT senior acceptance. United Kingdom (UK) researchers Victor and Pikhartova (2020) investigated the relationship between loneliness and place of residence desired to look beyond demographics and health factors and examined how the broader living environments of older adults effects their status of loneliness. Three dimensions of the lived environment were examined; geographical region, deprivation, and area classification (urban or rural). Researchers used a sample of 4663 core members, aged 50 and older 44% males from the English Longitudinal Study of Ageing (ELSA). Individual and area-based approaches were utilized to measure

loneliness among aging adults, with loneliness assessed utilizing a University of California Los Angeles (UCLA) scale, and a novel question asked of participants indicating their response on how often they felt lonely in their area of residence. The analysis included established relationship with loneliness, because of demographic factors, social engagement, and health. Victor and Pikhartova (2020) classified the lived environment in three different ways: the Index of Multiple Deprivation (IMD), Government Office Regions (GOR), and area classification (urban or rural). Victor and Pikhartova (2020) found that older adults in the most deprived areas, experienced a higher level of loneliness. Researchers' definition of loneliness; gap between the aspirations and reality of an individual's quality, quantity, and /or mode of social relationships, or some combination of these elements which is unwanted by the individual (Victor & Pikhartova, 2020). Loneliness is considered a public health issue because of the association with a range of negative outcomes including decreased well-being and quality of life, increased risk of deteriorating physical and mental health, and increased mortality alongside unhealthy behaviors and health and social care services utilization (Victor & Pikhartova, 2020).

Sullivan (2014) discussed how the social environment impact older Lesbian, Gay, Bisexual and Transgender (LGBT) adult's ability to have successful interactions with their surrounding communities and to successfully age-in-place. The study explored 3 retirement communities, in which focus groups were assembled. The residents of these existing Lesbian, Gay, Bisexual and Transgender (LGBT) senior living communities were asked to discuss their reasons for choosing to live in their selected senior community and to share if they feel there are benefits afforded to them. The researcher's

analysis discusses the phenomenon of LGBT senior housing. The key factor for LGBT seniors was acceptance and the expansion of their social networks (which runs contrary to socioemotional selectivity theory).

The background literature has indicated that the most common preference among seniors is to age-in-place in their familiar homes and neighborhoods (UC Davis, 2021). Honoring many seniors' preference for independent living through aging-in-place requires the implementation of supports to meet this population's diverse clinical, socio-demographic, and socio-ecological needs (Blumenberg et al., 2019; Icario, 2021; Ornstein et al., 2017). The cost of meeting seniors' needs, both to the seniors themselves and to society, must also be considered (Blumenberg et al., 2019; Pettersson et al., 2020).

The clinical needs of the aging population comprise health issues, including chronic health conditions such as diabetes, obesity, arthritis, kidney disease, hypertension, and heart disease (Ornstein et al., 2017). Clinical mental health conditions such as depression must also be addressed (Blumenberg et al., 2019). Seniors' socio-ecological and socio-demographic needs include being active naturally in their daily lives, having faith-based and social connections, having a sense of individual purpose and societal contribution, reducing stress, and regularly consuming healthy foods, including fresh vegetables and fruits (Buettner, 2021). Factors such as age segregation and traditional healthcare models that require seniors to make frequent visits to healthcare facilities may become barriers to seniors' meeting their clinical, socio-ecological, and socio-demographic needs in their familiar homes and communities, causing them to move into senior housing facilities against their wishes (Golant, 2020; Pettersson et al., 2020; Portacolone & Halpern, 2016). To identify service gaps that may limit seniors' ability to

age-in-place, the existing and effective healthcare programs and services in California must be assessed according to the clinical, socio-ecological, and socio-demographic needs of seniors which they address or leave unaddressed.

Under traditional healthcare models, seniors' clinical needs for physical and mental health care are met by transporting the senior to medical facilities (Ercia et al., 2021). However, seniors' ability to visit medical facilities may be limited by economic or health constraints that make driving or taking public transportation difficult. California seniors are expected to live for an average of 4.5 years with a chronic, clinical health condition (Icario, 2021; UC Davis, 2021). California seniors are therefore likely to need frequent access to medical providers and to have conditions that may limit their mobility outside their homes, making the problem of healthcare access for seniors particularly urgent.

Through ACA provisions, national legislators have allocated funding for seniors to obtain no-cost, in-home care, including acute, chronic, and rehabilitative care, which can assist in addressing seniors' clinical needs while supporting aging-in-place (Ercia et al., 2021). California's MPA includes the goal of blending the traditional, facility-centered healthcare model with a patient-centered model that includes in-home care, providing further support for seniors who wish to age-in-place. The House Calls Model is an example of a program that addresses the goals of the ACA provisions and the MPA in meeting the clinical needs of some California seniors. The House Calls Model has been successful in bringing cost-effective, coordinated mental and physical health care into seniors' homes (Melnick et al., 2016). However, the House Calls Model is limited to Southern California and to seniors with chronic or acute health conditions. Thus, the

service gap in relation to seniors' clinical needs in California might be addressed by expanding the House Calls Model to serve all seniors in all of California's counties.

Seniors' inability to meet their socio-ecological and socio-demographic needs in their familiar homes and neighborhoods may also drive them to move into senior housing facilities against their wishes (Pettersson et al., 2020; Portacolone & Halpern, 2016). Seniors' needs to be active naturally in their daily lives, have faith-based and social connections, have a sense of individual purpose and societal contribution, and reduce stress may be difficult to meet when seniors are isolated or have health conditions (Buettner, 2021; Pettersson et al., 2020). Senior loneliness is a particularly urgent concern, as it is associated with negative outcomes such as decreased well-being and quality of life, increased risk of deteriorating physical and mental health, increased mortality, unhealthy behaviors, and health- and social-care services utilization (Victor & Pikhartova, 2020). The Seventh-Day Adventist Church in Loma Linda, CA, may be an example of a program with demonstrated efficacy in meeting the socio-ecological and socio-demographic needs of seniors, but programs are needed to meet the needs of all California seniors, regardless of their faith or geographic location.

Community-based organizations that deliver P2P support may be effective in providing check-in calls and social activities to seniors (Jacobs et al., 2020). However, the efficacy of such programs in meeting the socio-ecological and socio-demographic needs of seniors who are aging-in-place has only been evaluated for a small group of seniors in one community in California. Broader evaluation is needed before the efficacy of P2P programs can be fully assessed. The Villages "Consumer Direct" Model may facilitate senior social engagement through social events and classes, as well as civic

engagement through member-to-member volunteering (Graham & Kurtovich, 2018). However, no standardized form of the Villages Model exists, and variations on the model have different effects on seniors in different outcome domains. A Further research is needed to identify best practices for the Villages Model in relation to different geographic locations and diverse groups of seniors. The PSH Model has been effective in reducing homelessness among mentally ill seniors by providing permanent housing and support services (Henwood & Gilmer, 2015). However, further evaluation is needed to consider state-level standards, education, training, and certification for PSH Model communities. Creating accepting communities for LGBT seniors can reduce loneliness among members of that population (Sullivan, 2014), but there remains an urgent need for programs that specifically target and address loneliness among all seniors (Victor & Pikhartova, 2020). Overall, existing service gaps may be attributed to the lack of a comprehensive program to facilitate social engagement and healthy lifestyle choices for all seniors in all California counties. To address service gaps, effective features of existing programs might be integrated into a more comprehensive, statewide suite of support services, including: (a) the use of trained senior volunteers to provide companionship and social activity for other seniors (Jacobs et al., 2020), (b) the creation of accepting communities for marginalized minorities (Sullivan, 2014), (c) permanent housing and support services for the mentally ill (Henwood & Gilmer, 2015), (d) intellectual stimulation through adult education classes (Graham & Kurtovich, 2018), and (e) the promotion of community engagement and purposeful living through the recruitment of seniors to perform socially beneficial volunteer activities (Graham & Kurtovich, 2018). While these program features remain available only through separate programs, rather than through an

integrated, holistic, statewide model to support seniors' aging-in-place, an additional service gap exists, in that seniors and their caregivers need a means of obtaining information about the wide range of discrete programs that may be available to offer support. These considerations will be addressed in more detail in the Recommendations section of this study.

Methods

The literature review was conducted to explore the rapid growth of the senior population within the US and how the State of California can better prepare to support its growing aging adult population by allowing seniors to age-in-place. California's rapidly changing *and* aging adult population makes it imperative that effective state evaluation, policy, and planning address the issue of identifying a variety of successful healthcare support programs, community services, and home-based services that will support California's senior adult population to age-in-place.

Peer-reviewed literature was obtained from PubMed and Google Scholar databases. Keyword search terms were used; PubMed Search seniors OR elder* OR aged OR geriatric with filter Aged: 65+ years, California (Title/Abstract) AND (senior housing OR aging in place OR elder* housing OR geriatric housing), apply subject search term MeSH "housing for the elderly: [MAJR] AND California, "housing for the elderly" [Mesh] AND California, California aging in place, California master plan for aging, date limits from; 2006 – 2021, 2013 – 2021, 2015 – 2021, 1977 – 2021.

Researchers utilized a variety of study methods; Cross sectional study, Sample from a longitudinal study, Longitudinal cohort comparative effectiveness study, Data

over time released *to show program effectiveness*, Focused group surveys, Longitudinal study, Sample from a program model, Qualitative data study, Stakeholder research teams, Town hall meetings, Zoom online meetings, survey, feedback and Narrative review, with years of publication range from 2014 to 2021. A review of websites and recent local university studies was also used to view senior data and to address different approaches to covering the rapid growth of the senior population within the US, and how the State of California is planning to better prepare for its growing aging adult population, by supporting seniors who wish, to age-in-place.

Scope of Work

Agency

The University of San Francisco's (USF) Master of Public Health fieldwork experience that I participated in occurred between the USF Spring Semester 2020 and USF Spring Semester 2021, with the Elder Care Alliance (ECA) organization based out of Alameda, California. The ECA was founded in 1907 by the Sisters of Mercy's opening of Mercy Retirement and Care Center in Oakland, California, serving older adults for almost 110 years. Dr. Erin Partridge, Ph.D., AFT-BC, *an experiential researcher in residence*, was my ECA fieldwork preceptor.

I conducted comprehensive research regarding the various senior housing programs and services that ECA provides within California. ECA's rich history in honoring the aging process of California's seniors and their families, provides living communities where seniors can flourish, maintain independence and dignity with support through all stages of the aging process and lifespan.



Elder Care Alliance Senior Housing Community – The Villa at San Mateo, *featuring*; independent living apartments for active seniors, charm, fabulous location, incredible amenities, care services, dining, and cool area attractions.

Elder Care Alliance operates five senior housing communities that offer different levels of service, depending on the senior's needs, in both Northern and Southern California; AlmaVia of Camarillo (Camarillo, CA), AlmaVia of San Francisco (San Francisco, CA), AlmaVia of San Rafael (San Rafael, CA), Mercy Retirement and Care Center (Oakland, CA), The Villa of San Mateo Apartments (San Mateo, CA).

Role

I observed and participated in an ECA and Alameda County collaborative Brown Bag project, which provides weekly food, *regardless of income*, to Alameda County's food insecure, at-risk aging senior and disabled adult populations, with the only qualifier being that they are Alameda County Residents. The ECA sorts, packs, and distributes groceries to 17 sites throughout Alameda County (California). I was provided a tour of the ECA food distribution operations at their Mercy Retirement and Care Center,

Oakland, CA. The ECA onsite manager, a University of San Francisco Master of Public Administration (MPA) Alumni, provided the following alarming statistics; Alameda County has a 65 and older age senior population of more than 250,000 seniors, with the population expected to continue increasing. Food insecurity is a trend of great concern within Alameda County, where half of seniors are unable to make ends meet. High rents in Alameda County, along with low senior incomes and poor health conditions and disabilities, cause Alameda County seniors to skip meals or choose between their lifesaving medications or food.

In 2020 60,000 Grocery Bags, stuffed with 1 million pounds of food, containing items such as fresh produce, healthy grains, canned goods, lean proteins, served nearly 5,000 hungry seniors by a team of 500 volunteers, who donated 21,000 hours of their time to sort, pack and distribute groceries. ECA also conducts ongoing innovative research around the topic of aging and has, for example, partnered with the Massachusetts Institute of Technology (M.I.T.) to integrate a social robot named “*Jibo*” into the lived environment of seniors within the various ECA senior living communities. I had the pleasure of meeting “*Jibo*” during my first visit and tour of the ECA corporate office environment.



Elder Care Alliance First Aging 2.0 event – Social Robots & Older Adults – a huge success, Blog Article November, 07, 2018

Jibo's large circle eye danced in interactive response, as he asked me how I was doing, answered questions I asked of him, and made interactive comments during my conversation with my new ECA preceptor. The various ECA living communities support all stages of the aging process, by providing; independent living housing communities, assisted living housing communities, and acute memory care housing communities and senior support.

Project Details

The Senior Decision-Making Tree, <https://stonly.com/sl/en/fbb2123d-9147-4956-92c9-23ab9cd1685e/Steps/-2,412920> (2021), was created to support seniors, their families, caregivers, and communities to have user-friendly, real-time, demand-ready information to assist seniors to age-in-place at their homes and their familiar communities. The Senior Decision-Making Tree is a Multiple-Choice Guide tool that supports seniors, disabled adults, and their families to locate appropriate medical and

social service providers that can aid the family at a specific “point of decision” based on the health condition or medical crises the senior is experiencing. The tool is programmed to provide multiple path solutions to the user, that is specific to their query, and to provide immediate provider information, with ease of real-time provider connections. The intent of the Senior Decision-Making Tree is to allow seniors access to local services that allow them to; stay mobile, maintain their independent lifestyle, modify their home environment, locate senior finance support services, have access to technology, have access to legal providers, access medical care providers, and service providers who support the seniors’ activities of daily living (ADL) needs.

Role

After studying the ECA organization structure, its’ mission, their goals, and organizational culture, I was able to conduct further research on senior services available in the broader San Francisco Bay area, that can provide support to seniors and their families to assist with seniors aging-in-place. After conducting extensive research, it was apparent that many of the senior programs were not well publicized or known by the surrounding senior community. This lack of education, lack of knowledge, *thus lack of access to services* was disturbing to me. I was able to create, with my preceptor’s guidance, the innovative decision-making tree tool that allow seniors and their families, when faced with “the point of decision”, to evaluate all of the available local California senior support programs, services, organizations and living communities options, that they can contact, and that are tailored and based on their specific health care challenge and/or social-ecological and social-demographic support care needs.

Public/Population Health Impact

Findings

Melnick et al. (2016) discussed the successful and cost savings utilization of senior healthcare managers, who effectively coordinated home-based support for acute health and chronic health condition hospitalized seniors. The Health Affairs report positively affirms the House Calls model support services that allow for senior populations to age-in-place. The Innovative Decision-Making Tree tool, providing an interactive multiple-choice guide, can effectively provide the solution of a one-stop-shop experience, allowing seniors, families, and caregivers, “at the point of decision”, to have the ability to immediately identify a clear path to targeted local health care support providers, services and program options, that meet the existing health care need(s), the social-ecological need(s), or the social-demographic need(s) that one is facing.

Recommendations

Literature suggests that limited expert guidance among geriatric care managers to support seniors in age-in-place (Ercia et al., 2021; Golant, 2020; Wagner, 2021). The project findings may offer insights to ensure Geriatric Care Managers are be provided, at no costs to the senior population, their families and caregivers, expert guidance and support that address the role of caregiving of seniors, addressing health care and home-based care support needs (Foley & Luz, 2021). Addressing safety concerns due to falls or injuries, advocacy, and intervention to work through family concern and find solutions (Foley & Luz, 2021), and are assigned to work with the senior patient primary care physician and medical care team to coordinate the seniors care needs to assure that the

senior receives all home-based care services and is connected to all community support programs that will allow seniors to age-in-place at their homes.

Top 5 Support Needs to Aid California Seniors for Aging-In-Place

SENIOR SUPPORT NEEDS

BENEFIT TO SENIORS

Senior Geriatric Care Managers	Free senior service that provides a Geriatric Care Manger who coordinates with senior's primary care physician, other medical health care service providers, family members and caretakers to assure seniors needs are being met.
Decision-Making Tree Tool	Multiple choice guide database tool for access to local healthcare medical support and home care support providers and services for seniors.
Home Based Medical Services Provided	Medical services are coordinated to have health check-up and chronic health managements services provided at the senior's home.
Healthcare & Daily Activities of Living (DALYs) Home Based Services Provided	Senior's home-based services are provided to support seniors daily living activities;
Access to Community Senior Social Activities	Transportation and enrollment for seniors in local community social activities of interest; i.e, walking, swimming, community center social activities, theater productions, music performances, dance classes, bible studies, art classes, etc.

The innovative Decision-Making Tree tool is an interactive multiple-choice guide that I created during my practicum field work with the Elder Care Alliance Organization (ECA). The purpose of creating the interactive tool, was to provide a one-stop-shop experience, that would allow seniors, families, and caregivers, "at the point of decision", to have the ability to immediately identify a clear path to specific local health care

support provider, service and program options, that meet the existing health care need(s), the social-ecological need(s), or the social-demographic need(s) that one is facing. The senior decision-making tree tool prototype is intended to serve as a one-stop-shop informational resource that would ideally scale to include all 50 US states, all counties, all cities, towns, and municipalities. The goal would be to later scale to a global public health usage that would tailor to health care services and providers for each local geographic country, state, county, and city.

The interactive senior decision-making tool database would have full provider brochure ready images, program and service descriptions of various services that include; seniors aging-in-place support services, access to geriatric care coordination manager consultations and home visits, support providers for seniors activities of daily living (DALYs) for meals, home chores, personal care, money management, local transportation support, local senior community activity connections, senior mental health care providers, senior loneliness talk line providers, access to senior VA services, etc. A 1-800 Help Line Senior Decision-Making Counselors would be available to discuss the senior's needs and provide local search query options to the seniors, families, and caregivers. The interactive senior decision-making tool also allows for service providers to make direct contact with the senior regarding their needs. The advantage of implementing the decision-making tree tool is that it would provide seniors and their caregivers with a user-friendly means of navigating through the fragmented system of elder care services in California to identify the most appropriate services, given the senior's individual needs. However, it should be noted that the decision-making tool serves primarily as a means of partly compensating for the fragmented nature of

California's elder care systems, and that it is not a substitute for a fully integrated, statewide program that would holistically address the needs of all of California's seniors to support aging-in-place. Additionally, the decision-making tool can only direct seniors and their caregivers to existing resources. Where service gaps exist, seniors and their caregivers may not be able to use the decision-making tool to find ways of meeting their needs. The remaining recommendations in this section are focused on meeting the existing service gaps.

First, it is recommended that home-based medical services be provided to all seniors in all California counties. An example of this service exists in the House Calls Model, but this service is limited to seniors with acute and chronic health conditions in Southern California. Expanding the service to assist in meeting the clinical needs of all seniors in all California counties will present significant logistical challenges, including funding and coordination. With regards to funding, the House Calls Model has not only proven cost-effective, but funding for implementing such a program throughout the State is available through ACA provisions (Ercia et al., 2021). By better enabling seniors to live independently in their familiar homes and neighborhoods, the House Calls Model can reduce costs to seniors, via the reduced need for transportation and senior living facilities, and to programs such as Medicare, via the delivery of effective, coordinated care services to prevent or treat seniors' health conditions. The problem of developing and coordinating an effective, statewide House Calls Model for all California seniors is mitigated by the existence of a successful, model program in Southern California, as well as by the alignment of the House Calls Model with the MPA goal of implementing more patient-centered care. Thus, the resources needed for implementing a statewide House

Calls program are available in part through the ACA, a model for program organization and operation already exists in a portion of the state, and broader implementation of the program would address a goal articulated in the State's MPA. Statewide implementation of a House Calls Model to address the clinical needs of seniors who are aging in place should therefore be regarded as feasible.

It is further recommended that Healthcare & Daily Activities of Living (DALYs) Home-Based Services be provided to all California seniors who choose to age-in-place. Seniors' socio-ecological needs include healthy lifestyle choices such as stress reduction and regularly consuming healthy foods, including fresh vegetables and fruits (Buettner, 2021). Seniors who are aging-in-place may also need assistance addressing safety concerns that increase the risk of falls or injuries, as well as advocacy and interventions to work through family concerns and find solutions (Foley & Luz, 2021). Family members may be unable to meet these needs, either because of time or traveling constraints, or because of conflicts with the senior. Making services designed to meet these needs home-based can enable providers to directly observe and address safety and other issues in the senior's immediate environment. Home-based services also resolve the problem of transportation, which may impede some seniors from seeking assistance with healthcare and daily activities of living at a medical facility. Home-based services have the potential to improve the health and prolong the lives of seniors by facilitating healthy lifestyle choices related to diet, exercise, and compliance with treatment for health conditions, and by remediating safety risks.

Lastly, it is recommended that seniors be assisted in gaining access to community senior social activities. Before this recommendation can be implemented, further research

may be needed to assess the efficacy of different models in meeting diverse seniors' needs, and it is recommended that this research be undertaken. Seniors' socio-ecological and socio-demographic needs include being active naturally in their daily lives, having faith-based and social connections, and having a sense of individual purpose and societal contribution (Buettner, 2021; Pettersson et al., 2020). Loneliness and lack of activity can have significant, negative impacts on the well-being of seniors who are aging-in-place outside of senior housing facilities (Victor & Pikhartova, 2020). Currently, there is no statewide program dedicated to mitigating loneliness, isolation, and social inactivity among seniors in California. However, meeting seniors' socio-demographic and socio-ecological needs is essential not only to supporting their aging-in-place, but to meeting their clinical needs, given the negative health effects of isolation and loneliness. Several programs exist with features that might be adopted into a more comprehensive, statewide suite of services. In the Villages Model, it may be seen that adult education classes can provide intellectual stimulation to seniors to maintain memory and cognitive functioning (Graham & Kurtovich, 2018). The Villages Model is also an example of a program in which engaging seniors in socially beneficial volunteer activities addresses the need for purpose and community engagement (Graham & Kurtovich, 2018). The positive effects on seniors of participation in the Seventh-Day Adventist Church in Loma Linda, CA, are further evidence of the potential efficacy of volunteering and community engagement in promoting seniors' well-being. Additional research is needed to identify best practices for a Villages Model (Lehning & Davitt, 2017), but existing indications that such a model can be successful in promoting civic engagement among seniors suggest that it is a promising area for further exploration (Graham & Kurtovich, 2018). A P2P model can

also be effective in promoting social activity and reducing isolation among seniors, as well as in meeting basic needs like transportation for medical services that cannot be performed in the home (Jacobs et al., 2020). The P2P Model dovetails to some degree with the Villages Model because it involves the recruitment of trained, senior volunteers to provide peer support for other seniors. Thus, the P2P Model has the potential to meet volunteering seniors' needs for purpose, community engagement, and social activity while addressing some of the social and practical needs of the seniors it directly serves. This potential of the P2P Model to support seniors' aging-in-place makes it worthy of further exploration to identify best practices for implementation.

Implications

The recommendations in the previous section have the potential to ensure that the clinical, socio-ecological, and socio-demographic needs of all California seniors are met more consistently and effectively. In this section, the research, policy, and program implications of the findings and recommendations in this study are presented.

Research Implications

Further research can evaluate the effectiveness of hospital-to-home and medical center-to-home based services that will aid in supporting seniors to age-in-place. Although promising models exist for meeting the socio-ecological and socio-demographic needs of California seniors who wish to age-in-place, further research is needed to identify and test specific practices to ensure that they will truly address seniors' needs. The P2P Model, which has the potential to meet some of seniors' social and practical needs, has been tested in only three communities, including only one in California (Jacobs et al., 2020). Further testing of the model in California is needed to

identify the optimal organization and operations of such a program for meeting the needs of California's diverse and growing population of seniors. Aspects of the Villages Model also merit further investigation, including the engagement of seniors in socially beneficial volunteer programs and the use of adult education classes to provide intellectual stimulation. Additionally, the creation of accepting communities for LGBT seniors has shown success in meeting the need for belonging in one marginalized group, so the creation of such communities for other groups of seniors should be explored (Sullivan, 2014). Further research into these promising models may be conducted by testing each of them with a generalizable sample of seniors in an experimental, quantitative study to measure program effects. Further refinement of the program can be achieved through qualitative research to facilitate open-ended exploration of participants' experiences and perceptions to identify potential areas for improvement.

Policy Implications

California can provide statewide at no cost accessible, equitable and available for all seniors, within California's 58 diverse counties, geriatric care managers who work with seniors' primary care physicians, families, and caregivers, to support senior's aging-in-place. As the state of California's Master Plan for Aging policy continues to unfold and support their Goal 2: Health Reimagined, keeping at the forefront support provisions and incentives to encourage innovative, entrepreneurial senior program design, will benefit California's aging senior adult population to age-in-place with increase ease and access to equitability programs and services available throughout their diverse 58 counties state.

California's MPA is a top-line document, focused on identifying broad goals for program development rather than on specific goals for implementation within specific programs. An implication of the findings in this study for the policies indicated in the MPA is that the MPA itself will need to be further developed to incorporate operationalizable goals and timelines to guide specific programs in meeting the broader goals already identified. For example, given the MPA goal of integrating a patient-centered care model to better meet seniors' clinical needs, a graduated series of goals may need to be established for expanding the House Calls Model beyond Southern California. The development of program-specific goals can assist in bridging gaps between policy and implementation. This development should begin at the level of policy rather than at the level of individual programs to ensure alignment with policy goals, to identify which programs should be involved or create new programs as needed, to ensure coordination across programs (e.g., to prevent conflicts and duplication of effort), and to coordinate research with policy goals to ensure that implementation is evidence-based.

Program Implications

The senior decision-making tool is in prototype mode and can expand in definition, form, and function, as programmers and developers build out the system, and remain flexible in offering additional interactive senior support information and selection paths for decision making. Further product design, user survey focused group feedback, program and database tool analysis is needed. Many more innovative programs and services can be designed that utilize the Geriatric Care Managers Model to coordinate more medical center-to-home based services, such as senior physical and speech therapy, senior testing, and senior wellness check-ups. The Geriatric Care Managers Model can

prove a valuable service that would prevent seniors from having to live in assisted living facilities and senior care homes that provide support services, if these same support services can be provided to the senior in their home environment, allowing seniors to age-in-place. Researchers can study the effectiveness and impact to seniors, families, caregivers, and their communities, by conducting period surveys and data analysis of the senior decision-making tree tools structure, data queries, response and follow-up, senior program, and service engagements. Information gathered from such a tool and its effectiveness, will aid in creating more innovative service and program services to aid seniors to age-in-place

Other models addressed in the recommendations in this study may also be considered as being in the prototype stage. The P2P Model, which has only been tested in one California community, will require significant expansion to facilitate additional research for evidence-based implementation. The Villages Model has not been standardized or widely tested, so bringing it under the purview of state-level policymakers may facilitate the coordination and stability needed for rigorous research to identify best practices. Overall, California's elder care programs are fragmented, making coordination to ensure optimal care more difficult and causing geographic and other inequities. The decision-making tool can help to ensure that seniors and their caregivers learn of and are able to access available programs, but consolidating those programs at the state level and expanding them as needed to ensure equity should be paramount goals.

Conclusion

As the worldwide senior population ages, seniors want to age-in-place. California seniors want to age-in-place. However, as seniors face risk factors of doing so such as lack

of family support. This research paper goal is to assess the existing and effective healthcare programs and services that are able to support seniors to have the ability to age-in-place in their homes and in their familiar communities. This research paper also sought to establish the practicality and need for the state of California's recently released, January 2021, *first ever* Master Plan for Aging, and understand further its' significance. Research indicates that there exist effective senior programs that can support California seniors to age-in-place. Lessons learned from the aging senior population in the California Blue Zones, Loma Linda, California, teaches us that the current programs and models can successfully support seniors to have the ability to age-in-place in their homes and in their familiar communities. The USF student practicum fieldwork project with the Elder Care Alliance Organization assesses the existing and effective healthcare programs and services that are able to support seniors to have the ability to age-in-place in their homes and in their familiar communities. The use of geriatric care managers to provide support to aging seniors who have challenges is likely to improve the seniors' well-being. The innovative senior decision-making tool that provides multiple support to seniors to age-in-place. California's aging seniors should fully enjoy their golden years of living; engaged in vibrant, healthy, and active options to socialize and integrate fully in their lived communities. California has the opportunity with its' Master Plan for Aging to standardize equitably throughout the state, proven evidenced-based, effective health programs and services, that support the rapidly aging senior population to age-in-place.

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Appendix

University of San Francisco Master of Public Health (MPH) Community and Public Health Practice General Competencies

Competency	USF MPH ILEX Activity	Competency Met? Y/N
Evidence-based Approaches to Public Health		
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	<p>The various activities involved in the researching and writing of my Master of Public Health Integrative Learning Experience (ILEX) paper, has engaged the epidemiologic techniques of both the descriptive and the analytic methods.</p> <p>I was able to utilize these two major epidemiologic techniques as I engaged in class gatherings and discussions with my fellow cohorts and course professor, as I read, studied, and took notes on my weekly course lectures and materials, and during my topic research activities.</p> <p>In addition, the active utilization of descriptive techniques was used, as I sought to understand the variety of research data reviewed, engaged with the University of San Francisco Public Health Librarian, and synthesized the various research findings in order to structure, write and edit my ILEX paper.</p> <p>Note: The three major epidemiologic techniques are; descriptive, analytic, and experimental.</p>	

Public Health & Health Care Systems	USF MPH ILEX Activity	Competency Met? Y/N
<p>2. Compare the organization, structure and function of health care, public health, and regulatory systems across national and international settings</p>	<p>This type of complex health care systems, programs, and data analysis was often described by our course professor, to our Master of Public Health cohort group, as the effective utilization of the Socio-Ecological Model.</p> <p>Throughout our multi-layered health care writing and analysis, our cohort team was encouraged to maintain a consistent structure in our descriptive analysis, where we would; start with global statistics and examples, then layer national data and examples, next local data and examples, and finally apply individual data and examples.</p> <p>Having my ILEX course professor emphasize the utilization of the Socio-Ecological Model in thinking through my research and thinking through how to best structure my Literature Review, I was able to deepen my understanding of the interrelations that exist between the various personal factors and environmental factors.</p>	
<p>3. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels</p>	<p>My Master of Public Health ILEX paper research topic examines the public health value, societal and financial cost benefits, of having California Seniors Age-In-Place.</p> <p>This literature review project has led me to an amazing array of global, federal, state and county research projects and findings, surprising data knowledge, innovative population specific programs and services, that have surfaced social inequities,</p>	

	<p>structural bias, aged population bias that “undermine health and create challenges to achieving health equity”.</p> <p>My Master of Public Health ILEX paper research has also led me to an exciting and new major California state level policy called the California Master Plan for Aging, recently released in January 2021. The US State of California seeks in its’ first ever Master Plan for Aging, to address the many structural bias issues and barriers that would negatively impact the significantly growing older adult population in their 10-year plan and funding goals.</p>	
Planning & Management to Promote Health	USF MPH ILEX Activity	Competency Met? Y/N
4. Assess population needs, assets and capacities that affect communities' health	<p>My Master of Public Health ILEX paper research topic examines the public health value, and societal and financial cost benefits, of having California Seniors Age-In-Place.</p> <p>The various literature reviewed during my research requires that I maintain an active analysis “lens” to assess how the literature addresses; the needs of the senior aging population and the capacities of the aging population to safely live, maintain functional health, remain as independent as possible and actively engaged, with overall vibrant living, as seniors age-in-place, within their familiar communities.</p>	
Policy in Public Health	USF MPH ILEX Activity	Competency Met? Y/N

5. Evaluate policies for their impact on public health and health equity	<p>My Master of Public Health ILEX paper research topic examines the public health value, societal and financial cost benefits, of having California Seniors Age-In-Place.</p> <p>The literature review research paper requires that I critique the literature, which includes various global, national, state, and local policies and programs that impact the public health and the health equity of seniors who are aging within their respective communities.</p>	
Communication	USF MPH ILEX Activity	Competen cy Met? Y/N
6. Select communication strategies for different audiences and sectors	<p>My Master of Public Health ILEX paper research topic examines the public health value, societal and financial cost benefits, of having California Seniors Age-In-Place.</p> <p>The public health academic research process of creating an effective literature review, requires that I apply the specific writing structure and formatting that is academically expected, that I utilize the proper outline for my writing, that I effectively describe the public health problem, that I include supportive epidemiological data, that I contextualize my public health problem by addressing current and possible future solutions on multiple levels of the ecological model, and that I learn to organize my literature review critique in a manner that “clearly” walks my reader through my thought process.</p>	

	<p>This Master of Public Health ILEX paper exercise has indeed been one of great interest, great independent struggle & growth, and “hopefully” soon, one of great academic triumph, for which I can remain forever proud.</p>	
<p>7. Communicate audience-appropriate public health content, both in writing and through oral presentation</p>	<p>My Master of Public Health ILEX paper research topic examines the public health value, societal and financial cost benefits, of having California Seniors Age-In-Place.</p> <p>Upon the completion of my comprehensive literature review paper, I will be required to create a simple, powerful, engaging, and impactful visual presentation, that will be delivered via a 10-minute oral presentation to my professor and/or an audience of others, to share my topic; California's Master Plan for Aging, Health Reimagined: A Case for Seniors to Age-In-Place</p> <p>Successful completion of my ILEX paper and the required presentation, by the University of San Francisco School of Nursing and Health Professions and Academic Faculty, is required to complete the Master of Public Health program of study.</p>	

Figure 1

California State Map



Figure 2
California Counties Map

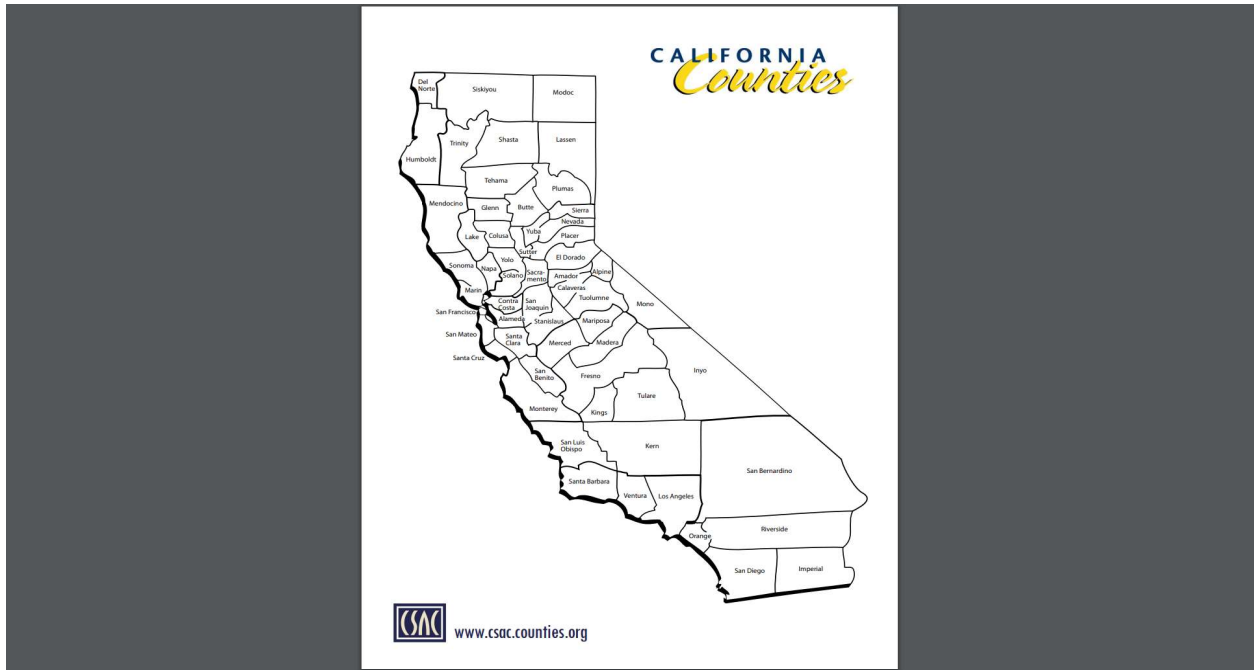


Figure 3

UC Davis study healthy aging: population needs and preferences

FIGURE 2A
Population Projection for California Adults Aged 55+ Years (2021-2050)

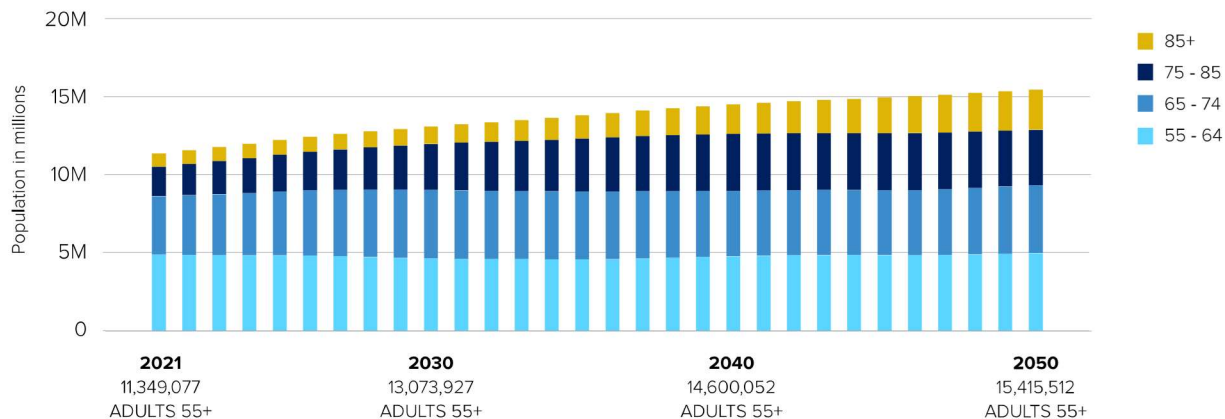


FIGURE 2B
Population Projection for Bay Area Region Adults Aged 55+ Years (2021-2050)

Bay Area Region: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Solano Counties

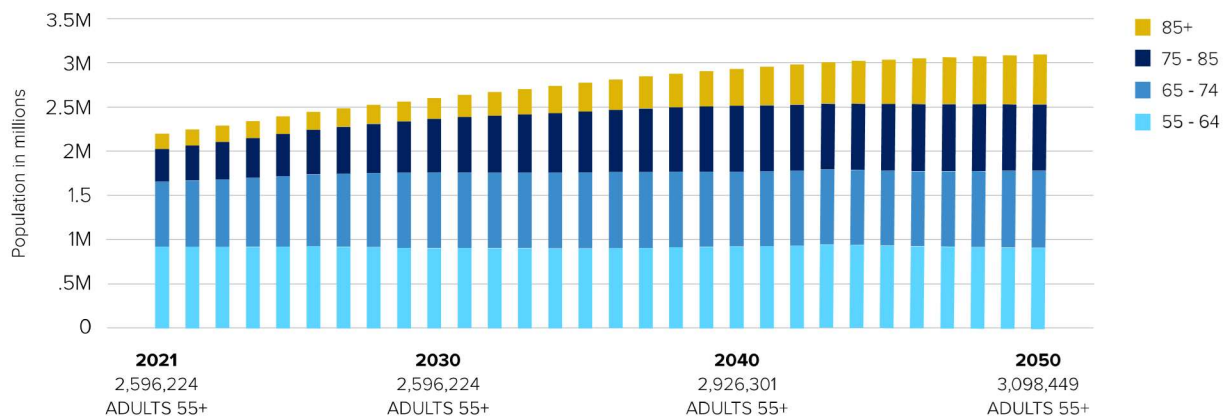
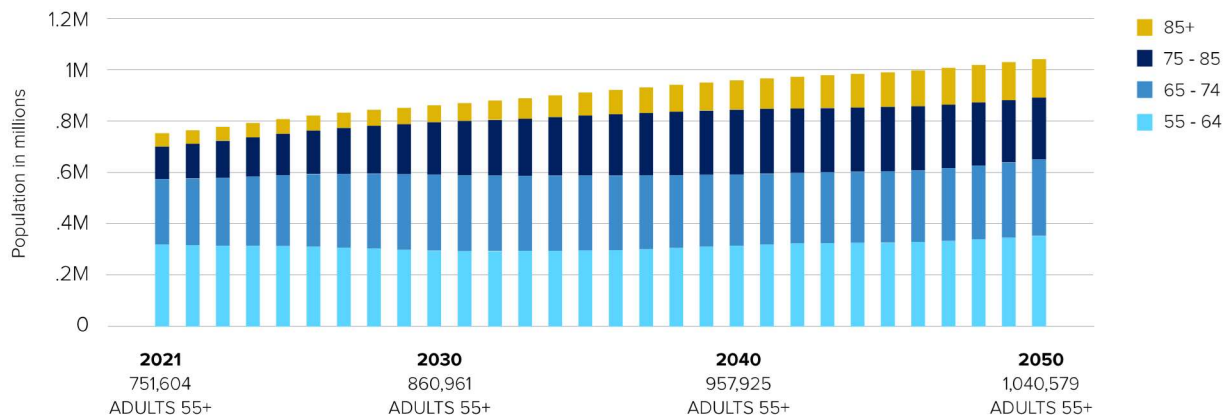


FIGURE 2C
Population Projection for Sacramento Region Adults Aged 55+ Years (2021-2050)

Sacramento Region: El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba Counties



Data source: California Department of Finance, 2021

Figure 4

California's Master Plan for Aging

JANUARY 2021

Master Plan

FOR AGING

