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Growing Pains: A Needs-Based Assessment of Aging in Place in the Twin Cities

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Abstract

Background: As they age, older adults are often forced to change their living environments to accommodate their growing medical and personal needs. However, alternative living options are often less desired and present other challenges. Aging in place is the ability for individuals to choose where they live as they age, prioritizing the aging person's choice and providing resources to support it.

Purpose: The Twin Cities metropolitan area of Minnesota currently has a population of nearly 472,000 older individuals, and it is only continuing to rise. Although infrastructure exists that supports aging in place, not all older individuals get adequate services or any services at all. This needs-based assessment identifies the resources available for AIP in the Twin Cities metropolitan area and the major barriers this population faces.

Methods: A combination of a case study interview and non-systematic review of national and local resources was used to identify main themes of barriers for aging in place. This mixed approach was chosen to obtain specialized insight to the current resources and needs of the aging community in the Twin Cities metropolitan area while exploring the breadth of resources available at larger levels.

Conclusions: Between national and local resources, the Twin Cities metropolitan area offers a number of services that help with ADLs, housing, healthcare and mental health, and financial assistance. Despite these services, there are still challenges with aging in place that prevent many older adults in the area from aging where and how they want. Five major themes were identified as barriers in place: 1) the cost of healthcare and mental health services, 2) limited affordable housing options, 3) the combination of inadequate infrastructure for accessible living spaces and transportation, 4) lack of adequate financial support, and 5) absence of adequate culturally

specific services. These barriers are rooted in national systemic inequity and require a more equitable approach to address the challenges faced by older adults in the Twin Cities.

Keywords: aging in place, Twin Cities, Minnesota, resources, needs-based assessment, barriers

Introduction

As they age, older adults are often forced to change their living environments to accommodate their growing medical and personal needs. Decline in vision, strength, balance, hearing, and mobility can all require extra assistance that is not available in their homes or regular living spaces. However, alternative living options are often less desired and present other challenges such as relocating to unfamiliar surroundings, long waitlists, financial burden, decreased social interaction, and loss of autonomy. Most older individuals in the United States do not want to relocate but expect to regardless of their preference. According to the 2021 Home and Community Preference Survey, 77% of adults at least 50 years old stated they want to remain in their homes as they aged.[1] 18% stated that they expect to relocate to a different residence in their community and 29% expect to go to an entirely different community.[1] This discrepancy between where people want to age and where people often end up can be addressed through resources that help individuals age in place.

Aging in place (AIP) is the ability for individuals to choose where they live as they age. It is defined by the Centers for Disease Control and Prevention as "the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income, or ability level."[2] People often want to age in their home because it is a source of daily routine, social and personal connection, safety, and sense of identity through independence and autonomy.[3,4] However this process is not limited to people who own homes and can include the desire to downsize into a smaller space, move in with caretakers, live in an assisted living or nursing facility, or age in any other setting. The priority is the aging person's choice and providing resources to support it.

As the proportion of older adults in the United States continues to rise, there is a greater need for resources allocated towards AIP. According to the US Census Bureau, all baby boomers will be older than 65 years old starting in 2030, meaning one in every five Americans will be at retirement age.[5] The Twin Cities metropolitan area of Minnesota currently has a population of nearly 472,000 older individuals.[6] Although infrastructure exists that supports aging in place, not all older individuals get adequate services or any services at all. This needs-based assessment focuses on identifying the resources available for AIP in the Twin Cities metropolitan area and the major barriers this population faces. By better understanding these two components, we can identify opportunities for improving the aging process in the Twin Cities.

Methods

Study Design

This assessment combined qualitative data from a case study interview with additional data found through a non-systematic review of national and local resources. This mixed approach was chosen to obtain specialized insight to the current resources and needs of the aging community in the Twin Cities metropolitan area while exploring the breadth of resources available at larger levels. Synthesizing data sources enabled a more nuanced understanding of the barriers faced by this population. The assessment was approved by the Institutional Review Board of Augsburg University.

The participant was recruited due to their expertise and experience in the field of geriatrics and aging. They are an aging consultant actively working in the Twin Cities metropolitan area, where their role is connecting older individuals who are seeking assistance to age-related resources. The participant's name was removed to maintain confidentiality. No incentives were provided for participating.

Interview Process and Data Collection

The interview was conducted in-person at a public location. Prior to the start of the interview, the participant was briefed on the purpose of the assessment and informed consent was obtained. Hand-written notes were taken in lieu of recording the conversation. The interview was semi-structured and loosely followed a pre-written interview guide of open-ended questions. Questions included asking about current resources for older individuals in the Twin Cities, main barriers and challenges for aging in place, resources that are most helpful to clients, and changes that could be made to improve aging in place in the Twin Cities (Appendix A). The total interview took an hour and a half long.

Data Analysis and Additional Review

The interview data was transcribed and separated based on identified resources or barriers. Themes were derived from each category to further organize the data. To gain a deeper understanding of the identified resources, a non-systematic online review was then conducted utilizing several state resource databases and various federal and nonprofit sources. The review aimed to uncover any major types of assistance that were not previously discussed in the interview and to more broadly evaluate both resources and barriers on national and local levels. Due to the vast array of available information and the assessment's emphasis on aging resources in the Twin Cities, the review was not exhaustive, nor did it seek to identify the "best" resources. It mainly focused on local resources while providing a brief overview of national ones. Finally, review findings were integrated with the interview data for a culminating analysis.

Literature Review

What resources are required to age in place?

The required resources for AIP vary greatly because individual needs during the aging process differ. These resources can be broadly organized into three categories: activities of daily living, housing, and healthcare and mental health. All of these resources are crucial in directly or indirectly providing financial assistance for individuals to age in place.

Activities of Daily Living (ADLs)

Activities of daily living (ADLs) are everyday tasks required for independent living. The basic ADLs consist of ambulating, feeding, dressing, personal hygiene, continence, and toileting.[7] The advanced activities that require higher cognitive skill are known as instrumental ADLs.[7] Having help with ADLs can be especially important for older individuals as they are more likely to have chronic conditions that limit their physical and cognitive abilities. Studies show that one out of three older adults who experience a decline in independence may also need assistance with ADLs.[8] Assistance with instrumental ADLs, like cleaning and transportation, is an especially common need. One study that interviewed independently-living adults found that over one-third of difficult home maintenance tasks were classified as cleaning-related.[9] Additionally, the U.S. Department of Transportation estimated that in 2018, 11.2 million people 65 years and older had travel-limiting disabilities that made it difficult to leave home.[10] The amount of assistance that individuals need with ADLs varies widely, but there is a significant number of people who need help in some form. Resources that support ADLs can substantially enhance an individual's quality of life and day-to-day functionality.

Housing

Housing resources for AIP include assistance with provision of shelter, space modifications, repairs, and maintenance. Establishing stable shelter is often one of the first steps for individuals to age in place. Over 30% of the homeless population in the United States are

adults aged 50 and older; this number is projected to triple by 2030.[11,12] People experiencing homelessness are at higher risk for geriatric-related conditions, including cognitive impairment, difficulty with ADLs, and falls.[13] Lack of housing also increases the challenges of managing chronic disease, which is highly prevalent in the older population and increases the likelihood of higher medical expenses and the need for acute care. Providing stable shelter can help mitigate some of these risks.

Space modifications are frequently needed to improve the utility and safety of a living space for an aging person. Many older adults are homeowners; according to the AARP, 79% of older adults in the United States owned their own homes in 2021.[1] However, 34% also stated that they would likely need to make changes in order to continue living in their homes as they aged.[1] Many changes are made to reduce the risk of falls. They are the most common injury in older adults, with 27.5% of adults aged 65 years and older reporting at least one fall in the past year in 2018.[14] Falls present a significant health risk as they have a direct correlation to increased disability, which can result in costly medical bills or impede an individual's ability to live independently long-term, and mortality.[15] Fall prevention modifications include installing non-slip surfaces, ramps, step-free showers, improved lighting, and grab rails.[16,17,18] Other types of modifications can improve the accessibility, functionality, and/or safety of a living space, such as replacing knobs with handles for easier manipulation or installing easily accessible emergency alert systems. Ultimately, these types of changes adapt and enhance a chosen space to suit the needs of an individual.

Regardless of the type of space that a person is living in, repairs and general maintenance are inevitable and can be increasingly challenging to address with age. One study from 2011 interviewed independently-living older adults on the difficulty of home-related tasks and the

solutions they used.[9] It found that 16% of the difficult tasks were categorized as “home upkeep”, which included pest control, lightbulb changes, and detector maintenance. Study participants outsourced the difficult work over half the time, while others chose not to do the task at all. Both of these choices make it more challenging to age in place because outsourcing work becomes expensive over time and ignoring critical maintenance like changing smoke detector batteries can have fatal consequences. Resources that affordably assist older individuals with home maintenance can enable them to continue aging in place safely.

Healthcare and mental health

Resources for healthcare become increasingly necessary with age due to the increased likelihood of illness and disability. In 2020, there were an estimated 71.5 million adults in the United States aged 50 and older with at least one chronic disease.[19] This number is only expected to rise as adults continue to live longer. Healthcare services for AIP include personal care assistance, home health aides, home nursing, at-home therapies, and care coordination. These services are important because they provide regular physical assistance catered to individual needs. Alternatives like regular outpatient therapy may be challenging to access, while relocation may not be feasible or against what the individual wants. Additionally, health management services like care coordination can provide assistance with understanding medical information and liaison between providers and patients. One study found that the provision of long-term nurse care coordination for individuals aging at home reduced the overall monthly costs per person, percentage of rehospitalizations, and usage of the emergency department as compared to similar individuals receiving home care only.[20] It demonstrates that home healthcare services can go beyond helping specific individuals and impact the larger healthcare industry for the better.

Financial assistance

The exact cost of AIP is difficult to calculate because it varies depending on individual needs, location, and insurance coverage. Broadly speaking, in addition to the daily costs of living, aging-related expenses for someone who wants to age in their own home can include home modifications and maintenance, assistance with ADLs, and healthcare costs. For home modifications alone, the estimated average cost in 2021 according to Fixr, a home improvement website, ranged $3,000 to $15,000, with the majority paying $9,500 for bathroom modifications that included a walk-in shower, non-slip flooring, and grab bars.[21] The US Bureau of Labor Statistics calculated that all housing-related expenses for older adults in 2014 were an average of $16,200 annually (about $18,100 in 2021 or $20,700 today when adjusted for inflation).[22] These numbers were based off the national Consumer Expenditure Survey and included the cost of shelter, utilities, furnishings and equipment, and the cost of upkeep. For full-time homemaker services, which provide assistance with ADLs, the national median cost in 2021 was almost $59,500 annually.[23] For home health services, the median annual cost of a full-time home health aide was $61,800.[23] It is important to consider that some of these costs may be partially or fully covered by insurance and that some people do not require all of these services full-time. However, aging in place can be prohibitively expensive given the resources required and financial status of older adults in the United States.

Current statistics indicate that finances are a challenge for many older individuals in the United States. According to the US Census Bureau, one in three adults aged 65 and older had incomes at or less than $25,760 annually in 2021, which is 200% below the federal poverty level.[24] The Federal Reserve also estimated that only 60% of individuals aged 51 to 55 had any savings, and a majority of those had less than $100,000 saved.[25] Considering the number of resources that individuals often need as they age, financial assistance is critical.

What are the benefits to aging in place?

The benefits of AIP are multifaceted. Broadly, they can be broken down into three categories: social and psychological health, physical well-being, and economic benefit.

Social and Psychological Benefits

One of the most commonly cited benefits to AIP is that older adults are able to maintain independence and autonomy on their terms. Autonomy is associated with increased quality of life and improved well-being.[26] Empowering individuals to make choices about how and where they want to age supports their dignity and respects their right to choose. Several studies that interviewed older adults about AIP highlight the personal significance of independence. In one study, interviewees stated that remaining in their own homes granted them a sense of identity through independence while being pushed to reside in institutional residency, including nursing homes, was perceived as a loss of autonomy.[4] In another study, older women who had physical limitations emphasized how important being a "strong independent woman" was to their self-identity and how aging at home enabled them to live as such.[27] Supporting physical and personal independence throughout the aging process can help individuals maintain connection with their own identities and with their desired communities.

Maintaining connection with a community while aging contributes to a sense of belonging. In the Wiles et al study, interviewees emphasized the strong personal relationships they had with neighbors and the areas they had lived in for years.[4] They stated that staying in their homes allowed them to continue engaging with their community through day-to-day activities and volunteering.[4] In turn, their communities served as a resource for their needs, providing the safety and comfort of a familiar environment. Connection can also be fostered through shared language. A study that interviewed older Chinese immigrants living in the New

York Chinatown neighborhood found that language within the neighborhood was an important aspect.[3] In addition to having cultural significance, shared language enabled residents to complete their daily tasks and participate in community activities in an area that they felt safety and emotional attachment.[3] The significance of aging in a familiar community goes beyond the physical location. By supporting individuals in communities they want to live in, AIP cultivates social connection and well-being.

Social connection and community spaces play an important role in addressing mental disorders. This is particularly important among older individuals who are more susceptible to poorer mental health, especially depression. The susceptibility is partly influenced by factors such as reduced social networks, increased functional limitations, and increased likelihood of disability.[28,29] In 2009, it was estimated that nearly 11.2% of older Americans had symptoms of depression.[30] While traditional therapies, counseling, and medication are critical resources to address mental health needs, studies suggest that social support and age-friendly spaces for physical activity can be supplements to reduce the risk of depression and improve quality of life.[31,32,33] These findings underscore the significance of aging in a comfortable community setting.

In addition to addressing mental health disorders, it is equally important to address the impact of loneliness and social isolation on the overall well-being and mortality of older adults. According to the National Academies of Sciences, Engineering, and Medicine, almost 25% of adults aged 65 and older are considered to be socially isolated while almost 33% reported feeling lonely.[34] Both loneliness and social isolation are known risk factors for poor mental and physical health.[28] Studies have found an association of loneliness with higher rates of depression, anxiety, suicide, heart disease and stroke, while social isolation is associated with increased risk of

dementia and premature death.[34] Although it is not a complete solution to mental health problems, aging resources that incorporate regular companionship or community connectedness can help address this issue.[35]

Physical Health Benefits

The psychological and social benefits of AIP extend to benefits for physical health. Positive psychological well-being, which includes happiness, sense of purpose, and mindfulness, has been associated with decreased cardiovascular risk.[36] On the other hand, depression has been identified in various studies as a predictor for the onset and progression of physical disabilities, including the risk of cardiovascular disease, stroke, heart attack, and diabetes.[29,33,36] By prioritizing psychological health, AIP can play a role in supporting overall physical well-being.

Economic Benefits

Assessing the personal financial benefits of AIP is challenging due to the diverse range of aging needs and the multifaceted factors involved in deciding where and how to age. From a purely economic standpoint, the average cost of services suggests that AIP and related home care can be more cost-effective than institutionalized alternatives, assuming an individual wants to age in place at home (which some do not or cannot) and does not require full-time care. According to Genworth, a long-term care insurance provider, the average annual cost for an assisted living facility in 2021 was $54,000 and a semi-private nursing home room was almost $94,900.[23] In comparison, the average annual cost for full-time homemaker/household services (44 hours per the industry standard) was almost $5,000 while a full-time home health aide cost about $5,150.[23] This suggests that for a similar cost to an assisted living facility, an individual could have a 40-hour homemaker/household service or 38-hour home health aide while aging in place at home. However, this rough comparison is very limited and does not encompass

additional housing-related expenses or other costs associated with either living situation, nor does it account for the emotional and social needs for aging in place as discussed in the previous sections. Nevertheless, it does highlight the possibility that within a certain range, the base cost of AIP may be less than that of assisted living or nursing homes on a dollar-for-dollar basis.

The scarcity of literature on the personal financial benefits of AIP adds to the challenges of conducting an individual financial evaluation. One systematic review in 2014 indicated that age-related home and environmental modifications generally incurred lower upfront costs, although more targeted economic comparisons were needed.[37] Additionally, data from the U.S. Department of Housing and Urban Development found that the median monthly payment for noninstitutional long-term care between 2004 and 2007 was significantly more affordable than nursing home care, with out-of-pocket spending being almost twice as much for the latter.[38] These findings lightly suggest the potential individual benefits of AIP, although further research is needed to fully understand its cost-effectiveness at the microeconomic level.

There is more data that supports the economic advantages of AIP on a macroeconomics level. A significant portion of long-term care costs, including nursing home and home health, is covered by Medicaid through its home and community-based services. In 2009, Medicaid paid for 62% of these costs, while Medicare covered 4%, out-of-pocket accounted for 23%, and private insurance covered 11%.[38] Additionally, research has shown that social isolation contributes to increased healthcare costs, resulting in Medicare spending an additional $6.7 billion in 2017.[39] AIP's emphasis on fostering connections within the community and offering community-based assistance programs helps mitigate social isolation and, in turn, potentially reduces some of these costs.

Studies have found a more nuanced perspective in evaluating the financial implications of AIP through comparing the cost of aging at home to that of assisted living facilities and nursing home care. One study assessed the cost of an aging in place community in Missouri called TigerPlace.[40] The community provided ongoing care coordination by registered nurses and health services in age-friendly apartments, supporting residents' independence and enabling them to stay as long as they desired. Despite being costlier than traditional assisted living facilities, TigerPlace was still over $15,000 cheaper annually when compared to nursing home costs.[40] Another study comparing the combined Medicare and Medicaid cost of AIP to that of nursing homes found that AIP was almost $1,600 less each month over a 12-month period.[41] The study suggested that there could be potential savings of almost $9 billion if 10% of older adults needing long-term care had access to AIP-type resources.[41] Although these studies assume that an individual is aging in their home, these findings further highlight the cost-effectiveness and benefits of AIP as a long-term care option.

How is aging in place relevant to the Twin Cities?

As of 2022, approximately 20% of Minnesota's residents are over the age of 60, almost half of whom live in the Twin Cities metropolitan area.[42] The Twin Cities metropolitan area includes a population of over 3 million throughout the seven counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington. These figures are projected to increase, with census data indicating that one in five Minnesotans will be over 65 years old by 2030.[6] The growing number of older individuals residing in the Twin Cities area indicates a continuing and significant need for AIP resources.

Results

Resources for Aging in Place

Resources for aging in place in the Twin Cities metropolitan area have been broadly divided into national or local resources. National resources are primarily federally funded and are available in most states across the United States, including Minnesota. Local resources are generally either state-funded or nonprofit-funded, and/or are more specific to the Twin Cities metropolitan area. Each category is further divided into three main classifications: 1) ADLs, 2) housing, and 3) healthcare and mental health. Although financial assistance is a critical resource for AIP, it was not included as a separate category because most resources indirectly contribute to financial well-being. However, there are a couple resources that offer direct financial assistance; these are listed under the fourth classification of miscellaneous resources that support aging in place but do not directly assist with the other categories. Major national and local associations and directories/databases, which enable individuals to search through multiple types of assistance provided by different organizations, were included for thoroughness.

<table>
<tr><th colspan="2">National</th></tr>
<tr><td colspan="2">Major Associations
● National Council on Aging (NCOA) - nonprofit that lobbies for health improvement and economic security for older adults
● National Association of Area Agencies on Aging (N4a) - association that represents all Area Agencies across the United States
● American Association of Retired Persons (AARP) - advocacy group and resource for older adults

Directories/Databases
● Eldercare Locator - nationwide service run by the U.S. Administration on Aging. Connects older adults to local support resources.</td></tr>
<tr><th>ADLs</th><th>Housing</th></tr>
<tr><td>● Meals on Wheels America (Twin Cities has its own chapter) - home-delivered low-cost meals with financial assistance available
● *Medicaid - can include long-term care services, such as assistance with ADLs</td><td>● Rebuilding Together (MN has its own branch) - free home repair, safety/fall prevention modification for low-income older adults. Also has a community revitalization program for low-income areas.

Directly Provides Housing for Older Adults</td></tr>
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- Housing Choice Voucher (Section 8) - rent vouchers for low-income individuals
- Project-based Section 8 Housing - privately-owned low-income housing through subsidies
- Public Housing program - publicly-owned low-income housing through subsidies. Managed by the local housing authority.

Indirectly Supports Housing for Older Adults

- Older Adult Homes Modification Program - funds organizations and local governments to assist with home modifications for older low-income homeowners
- Section 202 (Supportive Housing for the Elderly) Program - funds private nonprofits to increase independent-living opportunities for older adults but increasing availability of affordable housing with supportive services

</td></tr>
<tr><td>Healthcare/mental care</td><td>Miscellaneous</td></tr>
<tr><td>

- Medicare - health benefits primarily for older adults (≥65) or those with certain conditions. Generally for acute short-term care.
- *Medicaid (called Medical Assistance in MN) - health benefits. Broader eligibility than Medicare, includes older adults. Can provide long-term care services.
  - Elderly Waiver (EW) Program - federal waiver program for low-income individuals who need nursing-level care
  - Alternative Care (AC) Program - federal waiver program

</td><td>

- Supplemental Security Income (SSI) - monthly payments to eligible individuals, including older adults
- Tax Credit for the Elderly or the Disabled - IRS tax credit for individuals ≥65

Food Benefits

- Supplemental Nutrition Assistance Program (SNAP) - food benefits to low-income individuals
- Senior Farmers' Market Nutrition Program (SFMNP) - coupons to low-income older adults for specific goods at community farms, farmers' markets, and stands
- Commodity Supplemental Food Program (CSFP) - monthly food packages to low-income older adults

</td></tr>
<tr><td colspan="2">Local</td></tr>
<tr><td colspan="2">

Major Associations/Governing Bodies

- Minnesota Board on Aging - governor-appointed board that oversees implementation of the Older Americans Act
- Minnesota Area Agencies on Aging (AAAs) - regional divisions that provide age-related services. The Twin Cities metropolitan area is served by Trellis

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Directories/Databases

- Mnhelp.info - online directory of local services for caregivers, older adults, and individuals with disabilities
- Senior LinkAge Line - statewide telephone hotline services based in St. Paul and provided by the Minnesota Board on Aging.

ADLs	**Housing**
Provide a combination of ADL-related services ● Help at Your Door - grocery shopping assistance, home support, and transportation. Sliding scale fee available for some services. ● Senior Community Services - services for technology support, household and outdoor maintenance, caregiver support, and senior outreach. Sliding scale fee. ● Lutheran Social Service of Minnesota - transportation and simple household task assistance. For fee. ● DARTS - for seniors primarily in Dakota County. Caregiver services, transportation, home services, and assisted grocery shopping for a fee. ● *Living at Home Network - services for transportation to medical appointments. Also includes a volunteer network of companion services and chore/shopping services. *Transportation only* ● Metro Mobility - door-to-door shared ride transportation service. Serves individuals with disabilities who are unable to use regular fixed-route buses. <$5 each way. ● Transit Link - curb-to curb shared ride service for areas where regular transit is infrequent or unavailable. <$5 each way. ● Private services - rideshares, taxis *Meal programs* ● Open Arms MN - home-delivered meals. Free for eligible individuals. ● *Jewish Family Service of St. Paul (JFS) - Kosher Meals on Wheels program	*Directly Supports Housing for Older Adults* ● Hearts and Hammers - free exterior painting and home improvement assistance to low-income older adults. ● Age Well at Home - aging in place program by Habitat for Humanity. Provides guidance and home modification services for a fee. *Indirectly Supports Housing for Older Adults* ● Energy Assistance Program - financial assistance for energy and water bills for low-income individuals
Healthcare/mental care	**Miscellaneous**

• Living at Home Network - network of hyperlocal neighborhood groups (Living at Home/Block Nurse Programs) that connects older adults with a variety of services. Can include in-home care, fall prevention, vision assessment, and foot care. *Care coordination and planning* • Jewish Family Service of St. Paul (JFS)- care planning or coordination, caregiver coaching, and advanced care planning options. Sliding scale fee. • Minnesota Long-Term Care Consultation (LTCC) Program - free face-to-face consultation on long-term care options and services, or for individuals moving out of nursing homes *Mental health/social needs* • Friends and Co - provides companionship services (in-person visits, phone talks) to older adults in the greater Twin Cities area. • *Lutheran Social Service of Minnesota - companionship services *Insurance and Coverage-Related* • MinnesotaCare - federally funded health benefits program for low-income individuals who do not qualify for Medicaid. One of two of its kind in the United States • Minnesota Senior Health Options (MSHO) - healthcare program that combines Medicare and Medicaid into one plan with extra benefits, including a care coordinator	• Age-Friendly Minnesota Community grants - given to local entities to support long-term services for older adults • Live Well at Home grants - given to local entities to support long-term services for older adults • Consumer Support Grant (CSG) Program - enables qualified individuals to receive cash grants instead of in-home care services. The grants can be used for other non-care type support
*denotes being listed twice due to overlap in types of services provided	

National Resources

The statute that is considered the initial legislation for older individuals is called the Older Americans Act, which was passed in Congress in 1965 due to the lack of community social services for older individuals in the United States.[43] Its purpose was to provide funding for

age-related community planning and social services, research, and personnel training. It also established the National Aging Network to implement these changes, which includes the federal Administration on Aging, State Units on Aging, and local Area Agencies on Aging. This structure is responsible for creating and implementing the national resources that support older individuals as they age.

ADLs

On a nationwide scale, there are few organizations that directly offer assistance with ADLs as most ADL-focused resources are organized at the state level. Meals on Wheels America stands out as a widely known organization operating in numerous states. Its mission is to provide home-delivered meals at a low cost for any individuals in need, including older individuals who are unable to cook or those who have difficulty getting access to groceries. The Twin Cities metropolitan area is served by multiple different chapters of Meals on Wheels. Another program, Medicaid, assists with more basic ADLs. Although it is a federal program primarily known for providing health benefits coverage (described in more detail later), Medicaid can include provision of long-term care services associated with home care.

Housing

The United States Department of Housing and Urban Development oversees federal housing and community development. There are numerous federal programs that indirectly provide housing for older adults, including the Older Adult Homes Modification (OAHM) program and Section 202 (Supportive Housing for the Elderly) program.[44,45] These types of initiatives fund local governments or organizations to increase independent-living opportunities for older low-income adults. The OAHM program specifically focuses on assistance with home modifications while the Section 202 program funds provision of affordable housing with support

services. Despite the presence of these initiatives within the Twin Cities metropolitan area, they are not readily apparent as they do not provide direct housing services.

There are three major national housing programs that directly assist in providing affordable housing for older adults. One is known as Housing Choice Vouchers or Section 8, which offers rent vouchers to low-income individuals, regardless of age. The second program is project-based Section 8 housing, which subsidizes privately-owned housing options to ensure affordability for individuals with lower income. Similarly, the third program, the Public Housing Program, is managed by local housing authorities and provides subsidies for publicly owned housing options. All of these initiatives can help older adults with limited financial resources pay for living spaces.

Beyond the financial support for housing, organizations like Rebuilding Together help provide accessible and affordable living spaces for aging individuals. Rebuilding Together is a nationwide organization that provides free home repair and fall prevention modifications for low-income older adults. It also has a community revitalization program for low-income areas, which focuses on building supportive housing facilities and outdoor community spaces. The organization is supported by volunteers and has a branch in Minnesota, helping provide homes that are safe and conducive to aging in place.

Healthcare/mental health

Medicare and Medicaid are two of the largest national health benefits coverage programs. Although they provide similar types of services, they have different sources of funding, eligibility requirements, and coverages. Medicare is federally funded and covers individuals who are at least 65 years old or younger individuals with certain conditions, while Medicaid is both federally and state funded with broader income-based eligibility guidelines.[46] In terms of

coverage, Medicare generally covers acute short-term care, such as intensive care hospitalizations or short rehabilitation stays at skilled nursing facilities, but not any type of long-term care. Depending on the state, Medicaid may cover long-term care services, such as assistance with ADLs, home health, or assisted living.

In Minnesota, Medicaid is known as the Medical Assistance program. In addition to providing regular health coverage, it includes two programs targeted at older adults: the Elderly Waiver (EW) program and Alternative Care (AC) program.[47] Both programs fund home and community-based services for individuals aged 65 years and older. These services can include non-medical transport, personal care assistance, home-delivered meals, and home health aides. However, EW and AC have different eligibility requirements. In order to qualify for EW, individuals must qualify for Medicaid and have a maximum of $3,000 worth of assets (though this amount can vary for certain individuals).[47] In comparison, AC provides services for those who do not qualify for Medicaid but are still low income. The income and asset criteria are more flexible than EW, as the individual's combined income and assets must be less than the cost of 135 days of nursing home care.[47] Both these programs are specifically designed to help older adults secure age-related health resources and services.

Miscellaneous

There are several national programs aimed specifically at income and tax support that can help individuals afford to age in place. Supplemental Security Income is available to individuals at least 65 years and older who meet the financial qualifications. Eligible individuals receive monthly payments that can help supplement their income. Additionally, the IRS has a tax credit for individuals at least 65 years and older called the Tax Credit for the Elderly or the Disabled. The credit is limited based on adjusted gross income and the amount of nontaxable social

security and other nontaxable assets and can range between $3,750 and $7,500.[48] Both programs offer more focused financial assistance than other national resources to reduce the cost burden of aging.

Other major national initiatives focus on providing grocery benefits for those in need. The Supplemental Nutrition Assistance Program (SNAP), also known as food stamps, provides assistance for any eligible low-income individuals. Participants can purchase groceries or meals at locations that accept SNAP using a prepaid EBT card. In addition to SNAP, two specialized programs, the Senior Farmers' Market Nutrition Program (SFMNP) and the Commodity Supplemental Food Program (CSFP), specifically target food assistance for older adults at least 60 years old with incomes at or below the 185% federal poverty level.[49] The SFMNP provides coupons that can be used for specific goods at community farms, farmers' markets, and roadside stands, while CSFP sends monthly grocery packages with a variety of goods. All of these programs support the financial well-being and food security of older adults.

Local Resources

In Minnesota, the State Unit is called the Minnesota Board on Aging. The Board is responsible for documenting and overseeing state assistance for age-related resources that are required per the Older Americans Act. This is carried out through the seven Area Agencies on Aging that Minnesota is divided into. The Twin Cities 7-county metropolitan area is served by Trellis, formerly known as the Metropolitan Area Agency on Aging.[50]

ADLs

This assessment identified five major services in the Twin Cities metropolitan area that provide a combination of ADL-related services. These include Help at Your Door, Senior Community Services, Lutheran Social Service of Minnesota, DARTS, and Living at Home

Network. These programs address a wide range of day-to-day needs such as basic ADL assistance, meal delivery, grocery shopping, transportation, and household maintenance. In addition, the Senior Community Services program uniquely offers technology support.[51] Most of the programs offer coverage throughout the Twin Cities metropolitan area, although some coverage depends on availability of volunteers. DARTS is an area-specific service that provides assistance for seniors primarily in Dakota County. All of these resources have an associated fee; however, Help at Your Door and Senior Community Services specifically mention a sliding scale fee for some services on their websites to increase affordability.[51,52]

There are several local options that assist specifically with transportation needs. Metro Mobility and Transit Link are both widely available to older individuals and provide low-cost door-to-door shared ride services. Metro Mobility serves individuals with disabilities who have significant difficulties using regular fixed-route buses. In contrast, Transit Link operates in areas with limited or no regular transit options. Private services like rideshares and taxis are alternatives with less restrictions, but they are more costly.

Similar to Meals on Wheels, local organizations like Open Arms MN and JFS aim to provide accessible home-delivered meals at low to no cost for eligible individuals. JFS is also one of the few services in the Twin Cities metropolitan area that specifically provides Kosher meals. These initiatives help alleviate the challenges related to cooking, nutrition, and accessing groceries for older adults.

Housing

The Twin Cities metropolitan area has multiple major housing resources that support AIP through home modification and repair services. Hearts and Hammers is similar to the national Rebuilding Together organization and provides free exterior painting and home improvement

assistance to low-income older adults. Another program, Age Well at Home, is a specialized aging in place program created by Habitat for Humanity. Its website has a free guide and other resources to help individuals plan for the aging process within their homes. Age Well at Home also offers home modification services for a fee.

In addition to these direct housing resources, Minnesota's Energy Assistance program indirectly addresses the affordability of aging in place. This program provides financial assistance to renters and homeowners by directly covering energy and water bills. Assistance is based on income and household size with initial benefits averaging to around $500 per household and a maximum benefit cap of $1,400.[53] This type of support can help alleviate the financial burden of aging in place in one's home.

Healthcare/mental care

In addition to the standard healthcare benefit options of Medicaid (Medical Assistance) and Medicare, Minnesota offers its residents other choices that provide increased flexibility and affordability. Among these options is MinnesotaCare, which operates as the state's Basic Health Program (BHP). These types of programs are federally funded and can be implemented across the country, although currently only two states, Minnesota and New York, offer them. The purpose of a BHP is to extend coverage to individuals who do not qualify for Medicaid but have incomes at or below 200% of the federal poverty guidelines.[54] While MinnesotaCare can require a monthly premium, it serves as a bridge for individuals not covered by Medicaid, as Medicaid only covers individuals with incomes at or below 133% the federal poverty guidelines.[55]

Another coverage option for older adults in Minnesota is the Minnesota Senior Health Options (MSHO). This program combines Medicare and Medicaid into one plan and includes

extra benefits, including a care coordinator. Its purpose is to simplify older adults' insurance without increasing the cost and provide additional health resources that are relevant to aging.

Outside of healthcare insurance, the Twin Cities metropolitan area offers local services to address health prevention and basic in-home healthcare needs. The Living at Home Network is a system of neighborhood groups known as Living at Home/Block Nurse Programs that connect older adults with a variety of services. Assistance often includes basic volunteer nursing care, including fall prevention assessments, vision assessments, and foot care. Additionally, some neighborhoods extend their offerings to include volunteer assistance with basic chores and tasks at home. This framework fosters community engagement while making healthcare more accessible to older individuals.

Organizations like the Jewish Family Service of St. Paul (JFS) and Minnesota Long-Term Care Consultation (LTCC) Program focus on long-term care coordination through care planning consults. JFS offers such services with a sliding scale fee and places a strong emphasis on cultural sensitivity. The Minnesota LTCC Program can be a valuable option for individuals seeking to transition out of nursing homes. Other organizations in the Twin Cities metropolitan aim to reduce social isolation and loneliness in older adults. These include Friends and Co and Lutheran Social Service of Minnesota, both of which provide companionship services through in-person visits and phone talk options. These services help foster social connections throughout the community and enhance the general well-being of older adults.

Miscellaneous

Minnesota has taken additional steps to support aging individuals as a member of the AARP Network of Age-Friendly States and Communities since 2022.[56] This commitment is evident through the distribution of Age-Friendly Minnesota Community grants and Live Well At

Home grants to local communities in order to fund various long-term services for older adults. These grants secondarily contribute to increasing the availability of resources that facilitate aging in place.

Lastly, Minnesota has local resources that provide greater financial flexibility for older individuals. For example, the Consumer Support Grant Program allows qualified individuals who are not using the Elderly Waiver or Alternative Care programs to receive cash grants instead of in-home care services. The grants can be used for other non-care type support, such as transportation or meal delivery, thus empowering older individuals with more control over the resources they can access.

Barriers for Aging in Place in the Twin Cities

Barriers for aging in place were identified from the case-study interview and literature review processes, considering both national and local factors. They were preliminarily divided into the same classifications used to organize the resources.

ADLs	**Housing**
● Availability of caregivers *Transportation* ● Limited options - usually either private pay or require significant medical need ○ Having to schedule rides in advance, vs using reliable transit or walking ● Lack of resources within walking distance that would reduce reliance on transportation ● Lack of infrastructure that supports walking (well-lit smoothly paved pedestrian pathways, parks, etc)	● Availability of affordable living options ○ Long wait lists ○ Not existing in communities people want to age in ○ High cost ● Lack of housing with age-friendly layouts ● Inadequate safety and services within neighborhoods ● Inability to downsize when desired ● Cost of home modifications and repairs ● Property tax costs, even after individuals own the home ● Affordability of utilities
Healthcare/mental care	**Miscellaneous**
● Availability of caregivers, both professional and familial	● Lack of culturally specific agencies

○ Insurance provides limited time with clients ○ High demand for caregivers ○ Caregiver burnout ● Cost of medications ● Cost of healthcare expenses despite insurance ● Lack of certain services being covered, especially for mental health disorders (counseling, therapy, etc) ● Lack of age-friendly social spaces	● Distrust of resources, especially those tied to the government ● Lack of the public knowing that resources exist ● Food deserts hindering lack of access to food

Discussion

The Twin Cities metropolitan area has a significant number of resources available to assist with aging in place. These resources benefit from the backing of national and local legislation and associations, which oversee and advocate for age-friendly initiatives. The assistance provided primarily focuses on areas related to ADLs (including transportation), housing, and healthcare and mental health services. Many of these resources also indirectly address financial assistance, offering no to low-cost services for eligible individuals to make aging in place more economically feasible. In order to help individuals connect with the appropriate age-related support, national and local directories and databases are available.

Despite the availability of these resources, older residents in the Twin Cities metropolitan area still face challenges with aging in place. Based on the findings from the case-study interview and literature review, five themes were identified as barriers to aging in place.

High cost of healthcare/mental health services

One of the most significant barriers to aging in place in the Twin Cities area is the affordability of services, which extends across the various resource categories of ADLs, housing, and healthcare and mental care. The need to seek external assistance for tasks such as meal preparation, transportation, housework, home repair, and home healthcare while simultaneously

managing basic healthcare costs and costs associated with one's living space can be an overwhelming financial challenge. The cost of healthcare/mental health services and long-term care options are among the highest expenditures for older adults.[22]

Healthcare costs in the United States are widely recognized as being cost prohibitive and continuously increasing. According to the U.S. Department of Health and Human Services, in 2019, older adults had an average of $6,883 in out-of-pocket healthcare costs.[57] This amount reflects a 41% increase compared to the same costs a decade prior.[57] More recently, the 2021 International Health Policy Survey of Older Adults estimated that one-fifth of older Americans spent more than $2,000 on out-of-pocket healthcare costs in the past year.[58] Despite support from government funding, Medicare households spent an average of 15% of their total household spending on out-of-pocket expenses – twice the amount paid by non-Medicare households. This discrepancy is partially due to the limitations in Medicare's coverage as certain services like routine physical exams, hearing aids, vision, and dental care are not covered.[59] All of these figures indicate how costly and financially burdensome healthcare is for many older adults in the United States.

The cost of healthcare for older adults in Minnesota, while comparatively lower than the national average, remains a financial burden. In 2020, the Minnesota Department of Health estimated an average out-of-pocket healthcare expense of $1,130 across the state, with older adults likely facing higher costs due to increased healthcare needs.[60,61] In comparison, older adults nationwide paid significantly more out-of-pocket costs that averaged $6,883 in 2019 (slightly more when adjusted for inflation).[57] This difference may be partially due to programs in Minnesota, such as MinnesotaCare and the Minnesota Senior Health Options program, that help cover gaps in healthcare coverage. MinnesotaCare offers benefits for those who are low-income

but do not qualify for Medicaid, while the Minnesota Senior Health Options program offers a combined Medicare-Medicaid program to older adults with extra benefits. These programs aim to increase flexibility and access to health benefits for older individuals, potentially reducing out-of-pocket expenses. However, challenges persist as these types of programs do not cover everyone, leaving a nontrivial portion of older Minnesotans facing financial hardships. Almost one-third of Minnesotans aged 65 and older make less than $35,000 annually, with 8.5% living below the federal poverty guidelines.[42,62] Even though this means that more than 90% are living above the federal poverty line, it still indicates that there is room for improvement in decreasing the financial burden of healthcare costs.

Lack of affordable housing

While there are subsidized and lower-cost housing options available in the Twin Cities, their limited availability presents a significant challenge for those in need, especially older adults. As of 2018, about 10% of the estimated homeless population in Minnesota (equivalent to 1,050 people) were at least 55 years old.[63] These estimates were based off a single-night count and considering the upward trend in homelessness among older adults over the past ten years, it is likely that the current number is even higher.

There are a number of federal resources that aim to increase the availability of affordable housing for older adults, including Housing Choice Vouchers, public housing programs, and the Section 202 program. However, the prevalence of long waitlists for these housing options indicates growing demand and an inadequate supply. In 2018, over 50% of older adults experiencing homelessness in Minnesota reported being on a waitlist for subsidized housing.[63] Moreover, 48% of them reported not becoming homeless until they were at least 50 years old and 39% indicated that the loss of their last permanent housing was due to an inability to afford rent.

These findings emphasize the challenges of obtaining and keeping affordable housing that prevent older individuals from aging in a stable location.

Limited infrastructure for accessible living spaces and transportation

Apart from relying on assistance from family or friends, individuals in the Twin Cities metropolitan area who are unable to drive or walk themselves have limited transportation options. These include general public transit, Metro Mobility, Transit Link, and smaller local resources, each with its own strengths and limitations that could be improved. Although general public transit is available for some, many areas within the Twin Cities metro lack reliable or accessible service, and some may feel unsafe using it. Transit Link aims to provide service in areas where regular transit is infrequent or unavailable, but it requires scheduling rides ahead of time and still takes more time to commute as compared to a car. Metro Mobility is the other major state-run resource and is limited to providing service for individuals with disabilities who cannot use regular fixed-route buses. Those who do not qualify for either state service are left to rely on smaller local resources that may depend on volunteers and can be costly. For example, DARTS rides originating in Dakota County cost at minimum $28 for one way with an additional $2.50 per mile, making it a burdensome and less convenient option for some.[64] Rideshares or taxis are alternatives but can be costly over time and may not be suitable for those with mobility issues. Despite several transportation resources in the Twin Cities metro, their limitations further exacerbate the challenges of accessible and convenient mobility for older individuals.

Limited infrastructure for accessible living spaces further presents challenges to the mobility and independence of people aging in place. In a case study focused on AIP in the Minneapolis metropolitan area, older individuals emphasized the importance of accessible transportation and mobility.[65] Specifically, the downtown area of Minneapolis was cited by an

older blind woman as an exemplary accessible living space due to its interconnected skyways.[65] The all-indoor network enabled her and her wheelchair-bound neighbor to access the nearby residential and commercial buildings easily.[65] Conversely, lack of infrastructure that supports mobility, such as well-lit areas, smoothly-paved pathways, services within walkable distance, and smooth curb ramps increases reliance on alternative means of transportation if individuals are unable to drive. Older residents in Eden Prairie, a southwestern suburb of Minneapolis, stated that they "wouldn't even know where to start" if they were unable to drive due to the lack of services within walkable distance.[65] Improving infrastructure to be more age-friendly would reduce the need for outsourcing transportation, enabling older adults to maintain their regular activities independently or incurring additional costs.

Lack of adequate financial support

Without adequate financial support, older individuals are unable to pay for any cost of services. Many older Minnesotans have insufficient funds to cover age-related expenses despite the presence of national and local resources that provide no to low-cost services. In Minnesota, 32% of older adults have an income less than $35,000, with 8.5% living below the federal poverty guidelines.[66] While there are some programs that offer direct financial assistance, such as SSI, they often fall short of fully meeting the needs of older adults, who often have limited to no savings [67,68] For instance, 2.3 million older adults received SSI in 2022 but received an average of only $511 per month, an amount that is often insufficient considering the expenses associated with aging in place.[68] This underscores the ongoing challenges faced by older individuals in accessing sufficient financial support, which ultimately impedes their ability to age in place.

Lack of culturally specific services

There are numerous organizations in the Twin Cities area that provide services, but there is a noticeable gap of aging services that are culturally specific. The Jewish Family Service of St. Paul organization stands out for its efforts in providing culturally specific services, such as offering Kosher Meals on Wheels and bilingual care coordinators. However, most other identified services do not provide such specific support. In Minnesota, about 7% of older adults identify as a person of color, and 3.1% speak English less than "very well."[42] The Finlay et al. study highlighted comments from racially diverse older residents who disliked the available food options in subsidized housing and meal delivery programs due to their unfamiliarity and of poor quality.[65] There was also an emphasis for more culturally appropriate African American stores within service-depleted neighborhoods.[65] The absence of services that cater to all individual needs in the Twin Cities metro area hinders equitable aging in place.

Culturally specific resources encompass not only the services provided but also critical aspects including representation within staff, emphasis on voices from underserved and marginalized groups, and a recognition of privilege. In a needs assessment conducted by the Minnesota Leadership Council on Aging in 2019, culturally diverse aging healthcare service providers discussed barriers to medical care.[69] They explained that one barrier was the distrust of their communities toward predominantly white institutions. As one African American service provider stated, "[What] we have to recognize with the elders is that because of the historical and current trauma that people are experiencing, there are low levels of trust of traditional -I'll say white- agencies and services."[69] Additionally, a Latina provider discussed the fear prevalent in her community, regardless of immigration status, due to rhetoric around immigration.[69] It is essential for all resources to proactively ensure that their services are accessible and accommodating to the needs of all aging individuals.

Assessment Limitations

This needs assessment cannot fully cover all specific needs due to the diverse nature of the populations involved. Specific resources for underserved groups, such as aging individuals who are undocumented or disenfranchised, those with dependents or caregiver responsibilities, and individuals requiring memory care or specialized care, are not fully addressed here. The topic of assistive technology and its role in aging in place is not addressed either. Moreover, logistics and care related to end-of-life and dying, which are important components to aging, warrant further exploration.

Conclusion

Aging in place empowers individuals to age on their own terms, fostering independence and overall well-being of older adults. Between national and local resources, the Twin Cities metropolitan area offers a number of services that help with ADLs, housing, healthcare and mental health, and financial assistance. However, despite these services, there are still challenges with aging in place that prevent many older adults in the area from aging where and how they want.

Five major themes were identified as barriers to aging in place in the Twin Cities metropolitan area. The cost of healthcare and mental health services is prohibitively expensive despite federal health benefits programs and financial assistance. Moreover, limited affordable housing options create challenges in securing stable living spaces to age. The combination of inadequate infrastructure for accessible living spaces and transportation further restricts the mobility and independence of older adults. Additionally, the lack of adequate financial support leaves many older Minnesotans with insufficient funds to cover the costs of any essential

services. Finally, the absence of adequate culturally specific services hinders equitable access to aging in place.

The barriers identified are not exclusive to Minnesota, as they are rooted in national systemic inequity. However, it is clear that the growing population of older individuals in the Twin Cities metropolitan area are underserved and require more comprehensive access to aging in place resources. This assessment does not present a definitive solution to the issue; rather, it is intended as an overview of the available resources and an indicator of existing gaps. Although national and local resources currently provide valuable services, a more equitable approach is needed to address the challenges faced by older adults in the Twin Cities. By acknowledging and addressing the systemic inequities around aging, we can work towards ensuring that those who are aging in the Twin Cities metropolitan area not only live, but also thrive.

Appendix A

Interview Guide

- What is your role in terms of providing resources or assisting with aging in place (AIP)?
- What are the demographics of the clients you usually serve?
- Is there a specific framework that you/your group use to address aging in place?
- How well do current resources in the Twin Cities serve older individuals (and what are those resources)?
- What do you think are the main barriers for AIP in the Twin Cities?
- What comorbidities (e.g., specific health issues) or additional challenges to AIP are prevalent in the Twin Cities?
- What areas/populations in the Twin Cities need the most assistance with AIP?
- What resources are the most helpful/important for your clients?
- What changes do you think should be made in terms of improving AIP in the Twin Cities?

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