Sustainable Aging: Building an Age-Friendly Rural Community

Kim C. McCullough and Erin D. Bouldin

The practice of successful and sustainable aging recognizes that communities must be intentional in efforts to positively affect the lives of older people. The primary aim of this article is to present one approach to sustainability in aging: the concept of age-friendly communities, which focuses on optimizing opportunities for health, participation and security in order to enhance quality of life as people age. Features of age-friendly communities include accessible transportation, affordable appropriate housing options, inviting outdoor spaces, quality community and health services, employment and volunteer opportunities, and access to social activities and public events. This article reviews several principles of the age-friendly framework and discusses how this global initiative can be translated into rural communities. Examples of ongoing efforts in Watauga County, North Carolina that seek to leverage resources from community-based organizations and agencies and a university to build sustainable support for people as they age are provided. Building age-friendly practices in rural communities has the potential to sustain the health and well-being of older adults as well as the communities in which they live.

Introduction

Americans are aging rapidly. According to the US Census Bureau older adults are projected to outnumber children by the year 2034. And, life expectancy will increase from 79.7 years in 2017 to 85.6 years in 2060. Generally, most older people live in urban areas. However, older adults make up 17.5% of rural areas compared to 13.8% of urban areas. Nearly half of the older adult population (45.9%) lives in the rural south. And, the number of older adults in rural communities is increasing. In North Carolina, the 65 and older age group is projected to increase by 61% over the next two decades. As people age, they want to remain active and relevant in the communities where they live. However, growing old in rural areas provides different challenges than experienced large metropolitan areas. In order for rural communities to sustain their aging population they must intentionally evolve and expand to provide systems and opportunities for the health and wellness of older people.

Creating a community that prioritizes sustainable aging begins by understanding what older adults need from their communities. The term sustainability is a broad concept that focuses on improving the present quality of life without compromising future quality of life. The three domains of sustainability are economic, environmental, and social. Economic sustainability can be viewed as the ability of older adults to support themselves and meet the financial obligations for their healthcare needs. This paper will focus on the concept of social sustainability which combines design of physical and social environments. Sustainable aging can be considered as an important extension of the social sustainability concept. In fact, researchers have identified aspects related to physical and social environments that promote longer and healthy lives as people age. In 2004, Buettner and colleagues identified communities around the world where people reach age 100 at rates 10 times greater than in the United States. These communities were dubbed as “Blue Zone” communities and their citizens generally live longer and healthier lives than most areas throughout the world. Based on their observations, environmental and social factors were identified as key aspects that promote sustainable aging in these communities. These factors include the following: environments that promote natural movement, having a sense of purpose, being able to relax and minimize stress, eating a mainly plant-based diet, staying connected with family and friends, being physically active, and being involved in community activities.
based diet while avoiding overeating, spending time with family and active involvement in faith-based communities. Lastly, people in these communities surround themselves with people who support healthy behaviors. Using these key factors, recommendations were developed for other communities looking to improve the quality of life for their residents. These recommendations include creating an environment that makes being active a safe and easy option, increasing social networks by strategically bringing together individuals who are committed to healthy lifestyles, getting people involved in volunteering and encouraging them to define a sense of purpose.

Understanding that the physical and social environments in which one lives determines the health and well-being of an individual is an important first step. And, not surprisingly, the recommendations from the “Blue Zone” communities align with the social determinants of health for older adults. These are having access to community-based prevention resources, proper nutrition, transportation, and increased levels of social support systems. Older adults who have access to these resources often are at a lower risk for both physical and mental illness and are more likely to age well. The Centers for Disease Control and Prevention (CDC) recommends that community organizations work collaboratively to ensure that communities get active participation from many sectors of the community.

In order for any of the above recommendations to have a positive impact on sustainable aging, leaders within rural communities must actively work to change the way many people think about aging. Negative stereotypes related to aging such as deterioration and dependency are pervasive. This type of thinking serves to devalue the contributions that older adults provide to communities. The Gerontological Society of America (GSA) has implemented and created resources for a “Reframing Aging Initiative.” This initiative and others like it (e.g., AARP Disrupt Aging initiative) aim to change traditional attitudes about aging in the United States. Rather than viewing aging as a time of decline, these initiatives encourage communities to collectively view aging as an opportunity to capitalize on the experience and wisdom of older adults. The strengths and talents older adults bring can be channeled into new interests and opportunities that benefit the community as well as the older adult.

Identifying strategies to assist rural communities in planning and securing the necessary resources to implement and sustain practices that promote health and well-being is essential. Creating a community that is aging friendly requires leadership, planning, strategic partnerships and development of a supportive and sustainable infrastructure. The Age Friendly framework developed by the World Health Organization (WHO) provides recommendations for implementation. And, although several counties in North Carolina have created age-friendly plans, there is much work to be done.

What is Age Friendly?

Age-friendly communities recognize the different needs of all their residents over time. The concept of age-friendly cities grew out of WHO’s active aging framework, which focuses on maximizing quality of life as people age. Active aging is influenced by both personal factors and behaviors as well as economic and social determinants, the availability of health and social services, and the physical environment.

Eight Domains for Age-Friendly Communities

The domains that contribute to an age-friendly city were developed based on the scientific literature and on interviews with nearly 1,500 older adults (people age 60 years or older), 250 caregivers of older adults, and 515 service providers for older adults living in one of 33 cities around the world. Interviews focused on features of communities and systems that enabled older adults to participate, maintain their health and quality of life, and feel safe and secure. Participants also identified problems and barriers they encountered and suggested changes that might improve their environments. The following figure illustrates the 8 domains identified through this process: transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, community support and health services, and outdoor spaces and buildings.
In addition to identifying these domains, the WHO also developed checklists for each one based on the focus groups it conducted. We highlight four of these domains below as examples of actions that communities can take to make them more age-friendly. Note that some activities, while listed in a particular domain, could have effects in multiple domains since they are interrelated.

**Community Support and Health Services**

Health services, ranging from preventive services such as vaccines and physical and mental screening to tertiary care including surgical intervention and rehabilitation, are a vital component of supporting people as they age. Older adults, like younger adults, need access to high quality, affordable health services. Meeting this standard is particularly important for older adults who both utilize services more frequently and more often live on low- to moderate-incomes than their younger counterparts. In addition to formal health services delivered through clinics, hospitals, and other traditional clinical settings, supports for home- and community-based services (HCBS) should be available and accessible to older adults. HCBS encompass a broad range of programs and services, including in-home nursing or personal care assistance, meal delivery services, housekeeping, and respite care for family caregivers.

While the delivery systems for programs in clinical or community-based settings vary widely and are funded by multiple payers (federal, state, and local government, private sector, and non-profit or community-based organizations) in the US, WHO has identified three broad approaches that will better serve the needs of older populations:

1. Develop and ensure access to services that provide older-person-centered and integrated care;
2. Orient systems around intrinsic capacity;
3. Ensure there is a sustainable and appropriately trained health workforce.
## Age-friendly Checklist: Overview of Community Support and Health Services

### Accessible Services
- Health and social services are well-distributed throughout the community, are conveniently co-located, and can be reached readily by all means of transportation.
- Residential care facilities, such as retirement homes and nursing homes, are located close to services and residential areas so that residents remain integrated in the larger community.
- Service facilities are safely constructed and are fully accessible for people with disabilities.
- Clear and accessible information is provided about the health and social services for older people.
- Delivery of individual services is coordinated and with a minimum of bureaucracy.
- Administrative and service personnel treat older people with respect and sensitivity.
- Economic barriers impeding access to health and community support services are minimal.
- There is adequate access to designated burial sites.

### Range of services
- An adequate range of health and community support services is offered for promoting, maintaining, and restoring health.
- Home care services are offered that include health services, personal care and housekeeping.
- Health and social services offered address the needs and concerns of older people.
- Service professionals have appropriate skills and training to communicate with and effectively serve older people.

### Voluntary support
- Volunteers of all ages are encouraged and supported to assist older people in a wide range of health and community settings.

### Emergency planning and care
- Emergency planning includes older people, taking into account their needs and capacities in preparing for and responding to emergencies.

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A more comprehensive Age-friendly Checklist in regards to Community Support and Health Services includes the following:

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**Social Participation**

Being able to participate fully in one's community includes connecting with other members of the community in their homes and in public, being able to attend cultural and religious activities and events, and moving around the community for leisure. Greater social participation is connected to better health and quality of life outcomes across the lifespan,
including for older adults.\textsuperscript{16,17} The converse of social participation, social isolation, is increasingly being recognized as a risk factor for poor health outcomes, particularly among older adults.

Since social participation itself involves a multitude of activities, the checklist for this topic area is quite broad and overlaps with many of the other domains for age-friendly cities. For example, transportation to events or to others’ homes is a necessary component of ensuring social participation.

\textbf{Age-Friendly Checklist: Overview of Social Participation}\textsuperscript{11}

\textbf{Accessible events and activities}
\begin{itemize}
  \item The location is convenient to older people in their neighborhoods, with affordable, flexible transportation.
\end{itemize}

\textbf{Range of events and activities}
\begin{itemize}
  \item Community activities encourage the participation of people of different ages and cultural backgrounds.
\end{itemize}

\textbf{Event facilities and settings}
\begin{itemize}
  \item Facilities are accessible and equipped to enable participation by people with disabilities or by those who require care.
\end{itemize}

\textbf{Promotion and awareness of activities}
\begin{itemize}
  \item Activities and events are well-communicated to older people, including information about the activity, its accessibility, and transportation options.
\end{itemize}

\textbf{Addressing isolation}
\begin{itemize}
  \item Organizations make efforts to engage isolated seniors through, for example, personal visits or telephone calls.
\end{itemize}

\textbf{Fostering community integration}
\begin{itemize}
  \item Community facilities promote shared and multipurpose use by people of different ages and interests and foster interaction among user groups.
\end{itemize}

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\textbf{Accessible events and activities}
\begin{itemize}
  \item The location is convenient to older people in their neighborhoods, with affordable, flexible transportation.
  \item Older people have the option of participating with a friend or caregiver.
  \item Times of events are convenient for older people during the day.
\end{itemize}

\textbf{Affordable}
\begin{itemize}
  \item Admission to an event is open (e.g. no membership required) and admission is a quick, one-stop process that does not require older people to wait in line for a long time.
  \item Events and activities and local attractions are affordable for older participants, with no hidden or additional costs (such as transportation costs).
  \item Voluntary organizations are supported by the public and private sectors to keep the costs of activities for older people affordable.
\end{itemize}
Range of events and activities
• A wide variety of activities is available to appeal to a diverse population of older people, each of whom has many potential interests.
• Community activities encourage the participation of people of different ages and cultural backgrounds.

Event facilities and settings
• Gatherings occur in a variety of community locations, such as recreation centers, schools, libraries, community centers in residential neighborhoods, parks and gardens.
• Facilities are accessible and equipped to enable participation by people with disabilities or by those who require care.

Promotion and awareness of activities
• Activities and events are well-communicated to older people, including information about the activity, its accessibility, and transportation options.

Addressing isolation
• Personal invitations are sent to promote activities and encourage participation.
• Events are easy to attend, and no special skills (including literacy) are required.
• A club member who no longer attends activities is kept on the club's mailing and telephone lists unless the member asks to be taken off.
• Organizations make efforts to engage isolated seniors through, for example, personal visits or telephone calls.

Fostering community integration
• Community facilities promote shared and multipurpose use by people of different ages and interests and foster interaction among user groups.
• Local gathering places and activities promote familiarity and exchange among neighborhood residents.

Communication and Information
As noted in the preceding section, providing older adults a welcoming opportunity for participation is critical to their inclusion in civic life. Advances in communication via mobile devices, the Internet, and even in various in-person settings like community organizations have the potential to enhance communication and the dissemination of information. However, inattention to the details of familiarity with, access to, and use of these various technologies and spaces among older adults might result in their exclusion. Based on the World Health Organization's focus groups, older adults tended to value direct communication via in-person or telephone communication, especially through trusted informal networks. They also generally expressed support for information from organizations like community centers, libraries, and doctor's offices. Information may be provided at existing events where older people are likely to be, or events may be created with the intent to share information with key community members to increase the likelihood of dissemination to other older adults across the community. Regardless of setting, reaching older adults who are socially isolated and have small networks that are not connected to other groups is a challenge.

Information must be both timely and relevant to be most useful, so reaching older adults on both a regular basis and at critical time points—such as leading up to retirement, upon moving, at the time of diagnosis with a chronic health condition, or around the time of loss (e.g., of a partner or of function)—might be most useful. Dedicated helplines or printed columns in local newspapers can provide this information to older adults, and greater efforts can be implemented across organizations, service providers, and community members to consider and focus on the needs and potential interests of older adults when announcing events and programs.

Additional Resources
https://www.hsph.harvard.edu/nutritionsource/sustainability/
https://www.un.org/sustainabledevelopment/
https://www.ted.com/talks/michael_green_the_global_goals_we_ve_made_progress_on_and_the_ones_we_haven_t
https://www.youtube.com/watch?v=a5xR4Q81ADw
https://www.ted.com/talks/jude_wood_building_a_resilient_community
https://www.who.int/initiatives/decade-of-healthy-ageing
https://www.jeffsachs.org/
A more comprehensive Age-Friendly Checklist for Communication & Information\textsuperscript{11} includes the following:

**Providing Information**
- Assure a basic, universal communications system of written and broadcast media and telephone reaches every resident.
- Distribute information regularly and reliably.
- Disseminate information to reach older people close to their homes and where they conduct their usual activities of daily life.
- Coordinate an accessible community site for a one-stop information center.

**Oral Communication**
- Make accessible for older people, e.g., through public meetings, community centers, clubs and the broadcast media, and through individuals responsible for spreading the word one-to-one.
- People at risk of social isolation get information from trusted individuals with whom they may interact, such as volunteer callers and visitors, home support workers, hairdressers, doormen or caretakers.
- Individuals in public offices and businesses provide friendly, person-to-person service on request.

**Printed Information**
- Printed information – including official forms, television captions and text on visual displays – has large lettering and the main ideas are shown by clear headings and bold-face type.

**Plain Language**
- Print and spoken communication uses simple, familiar words in short, straightforward sentences.

**Automated Communication & Equipment**
- Telephone answering services give instructions slowly and clearly and tell callers how to repeat the message at any time.
- Users have the choice of speaking to a real person or of leaving a message for someone to call back.
- Electronic equipment, such as mobile telephones, radios, televisions, and bank and ticket machines, has large buttons and big lettering.

**Computers & the Internet**
- There is wide public access to computers and the Internet, at no or minimal charge, in public places such as government offices, community centers and libraries.
- Tailored instructions and individual assistance for users are readily available.
Respect & Social Inclusion

There are substantial differences in assumptions about aging and attitudes towards older adults across cultures. In some places, older adults are respected and revered as elders, while in others they are marginalized and assumed to be unable to contribute to society. In communities where older adults do not feel respected or feel excluded from social life, it is unlikely they will participate.

Social inclusion can be achieved by assuring that older adults are not segregated from younger members of the community. Intergenerational living and programming can help facilitate interactions between generations and create an atmosphere of inclusion while fostering respect.

Age-friendly Checklist: Respect and Social Inclusion

Respectful and inclusive services
- Older people are consulted by public, voluntary and commercial services on ways to serve them better.
- Public and commercial services provide services and products adapted to older people’s needs and preferences.
- Services have helpful and courteous staff trained to respond to older people.

Public images of ageing
- The media include older people in public imagery, depicting them positively and without stereotypes.

Intergenerational and family interactions
- Community-wide settings, activities and events attract people of all ages by accommodating age-specific needs and preferences.
- Older people are specifically included in community activities for “families”.
- Activities that bring generations together for mutual enjoyment and enrichment are regularly held.

Public education
- Learning about ageing and older people is included in primary and secondary school curricula.
- Older people are actively and regularly involved in local school activities with children and teachers.
- Older people are provided opportunities to share their knowledge, history and expertise with other generations.

Community inclusion
- Older people are included as full partners in community decision-making affecting them.
- Older people are recognized by the community for their past as well as their present contributions.
- Community action to strengthen neighborhood ties and support include older residents as key informants, advisers, actors and beneficiaries.
Economic inclusion
- Economically disadvantaged older people enjoy access to public, voluntary and private services and events.

**Implications for Rural Communities**

While WHO's age-friendly guidelines were developed based on input from people living in cities, we believe the concepts apply in rural areas as well. Generally speaking, rural communities that plan and implement sustainable aging practices have better community health outcomes for all citizens.18,19 Key sustainability factors specific to rural communities have been identified. These include creating accessible physical environments (e.g., housing, transportation) and engaging social environments,19 in line with the WHO guidelines described above. The impact on community health and well-being from other important variables such as income, education levels, and race varies from community to community. However, Zhang and colleagues argue that creating an inclusive and engaging social environment is a critical factor, the importance of which cannot be underestimated.19 Not only do older adults benefit from age-friendly communities they also benefit from the opportunity to be active and engaged participants in the process of planning and implementing sustainable aging initiatives. And, a community that works for older adults works for everyone.

In Western North Carolina, a number of efforts are underway to support people as they age in this largely rural region of Appalachia. We describe one broad example here to illustrate the connection to the WHO domains and checklists above and to suggest how to expand these opportunities throughout the region.

Although rural communities lag in healthcare infrastructure and services,18 they frequently engage in innovative strategies and partnerships to deliver services to older adults. One example of this type of practice is the Aging Well collaborative that includes partnerships between the High Country Area Agency on Aging, which serves a 7-county region, the Institute for Health and Human Services at Appalachian State University, High Country Caregivers, and senior centers. This collaborative is developing a suite of services for older adults, including screening examinations for mental and physical health (e.g., falls, grip strength, nutritional status, loneliness and isolation) and programming to promote health and support caregivers of older adults. This effort builds upon existing networks and programs offered by local agencies and organizations and provides additional resources in terms of clinic space, faculty expertise, and student work to make the exams and programming possible. We are seeking to offer a range of services that are accessible and that incorporate intergenerational contact and support, linking students, faculty and staff, and community members.

Our hope is that as the more health-services focused aspects of this collaborative develop so too will the opportunities to engage in work that supports other domains of age-friendly communities. For example, we expect that discussions around respect and social inclusion will expand to formal training for students and the broader community and that, together with older adults, we may develop additional strategies to promote this inclusion through methods suggested in the WHO document, including in public images and media coverage and by working towards greater inclusion of economically disadvantaged or isolated older adults. Likewise, while the initial activities of the collaborative are focused specifically on health, we expect that as the network grows and we build trust with older adults across the community that we may be able to offer or support community events and activities that promote well-being but are not directly perceived as being related to health care or health services.

Rural communities looking to embrace the age-friendly framework to improve the health and well-being of their citizens should be aware that these efforts require leadership, planning, strategic partnerships and development of a supportive and sustainable infrastructure. The AARP Network of Age-Friendly States and Communities (https://www.aarp.org/livable-communities/network-age-friendly-communities/) is an excellent resource for communities. This resource provides a framework as well as many of the resources required to begin the process for being recognized as an age-friendly community. Additionally, the AARP offers challenge grants to community leaders and organizations in order to support age-friendly initiatives.
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References


