



## Review Article

# Developing a Shared Language to Describe the Age-Friendly Ecosystem: Technical Meeting Report

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## Abstract

“Age-friendly” has become a common term that refers to systems and settings that uniquely address the concerns of older adults. The term, however, has several definitions and needs further clarity related to its meaning and use. Multiple sectors have identified and implemented strategies to promote age-friendly systems, but their efforts have advanced in siloes. Each has met goals specific to its constituents, however, the major transformations required to realize systemic inclusivity and well-being among diverse groups of older adults remains a challenge. Therefore, a set of experts was engaged across the five age-friendly sectors to review and define the characteristics of an age-friendly ecosystem that might encompass and be operationalized for use by all sectors. Our process was informed and guided by Kania and Kramer [1] who describe conditions to achieve substantial collective impact when coordinating efforts across sectors. The Age-Friendly Institute (AFI) conducted a review and analysis of relevant content associated with five age-friendly sectors. AFI convened 44 experts representing diverse age-friendly sectors to review and revise a set of proposed AFE shared characteristics presented here.

**Keywords:** Aging; Social and health equity; Diversity and inclusion; Psychosocial well-being; Collective impact

## Introduction

“Age-friendly” has become a common term that refers to systems and settings that uniquely address the concerns of older adults. The term, however, has several definitions and needs further clarity related to its meaning and use to reduce fragmentation and to build a shared language. The COVID-19 public health emergency has underscored our fragmented response to the needs of older adults globally [2] and created a sense of urgency to address the social and ecological issues affecting older adults in a coordinated way [3,4]. While multiple sectors—cities and communities, education, employment, healthcare, and public health—have identified and implemented strategies to promote

age-friendly systems, their efforts have, with a few exceptions [5] advanced in siloes. Each sector has made progress in meeting goals specific to its older constituents; however, the major societal changes required to realize coordinated, inclusive approaches for the well-being of all groups of older adults remain a challenge. To better understand the different ways that age-friendly approaches differ or are similar, the Age-Friendly Institute (AFI) engaged the known age-friendly sectors to examine their existing frameworks, and build on existing work, based on the premise that an Age-Friendly Ecosystem (AFE) is the best approach for the coordination of care and services across multiple sectors to achieve the best results. Inclusivity and well-being are affected not only by individual biology and personal choices, but also by what happens in relationships with others, in homes, neighborhoods, healthcare settings, and workplaces that need better coordination

[6]. AFI's approach was guided by Kania and Kramer [1] who describe five conditions to achieve substantial collective impact when coordinating efforts across sectors: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and a backbone agency to coordinate efforts. This paper describes the process AFI used for agenda setting and engagement, working with experts across those sectors, to gain consensus on what shared characteristics comprise an AFE.

### **Age-Friendly Frameworks**

Employers first used the term age-friendly in 2006 to encourage age-diversity in America's workplaces [7]. The World Health Organization [8] further popularized the term when using it to promote social inclusion of older adults in the world's cities: adapting "structures and services to be accessible to and inclusive of older people with varying needs and capacities" [8]. Since then, several other organizations have developed and led their own efforts to promote age-friendliness in communities, health systems, public health systems, universities, and workplaces. Each sector has developed its own set of principles and practices to define and advance age-friendliness.

Age-friendly cities and communities are engineered to reduce barriers to the well-being and participation of older people. The WHO Age-Friendly Cities framework proposes eight interconnected domains that define Age-Friendly Cities and Communities: accessible and affordable healthcare services; accessible, affordable, and safe public transit and driving options; a range of well-designed, affordable, and safe housing options that are connected to social services and the community; accessible and affordable leisure, social, cultural, and spiritual activities that also offer opportunities for intergenerational integration; clean, safe, and accessible green spaces and other outdoor environments; respect for and social inclusion of seniors; civic participation and employment opportunities; and appropriate and age-friendly distribution of information. The American Association of Retired Persons (AARP) has developed a Livability Index [9] that includes categories like those of the WHO.

Age-friendly health systems incorporate four, evidence-based elements of high-quality care for all older adults. These elements, known as the 4Ms [10]—What Matters, Medication, Mentation, and Mobility—are meant to drive decision-making in the care of older adults across multiple healthcare settings. Doing What Matters means implementing strategies that engage older adults in care decisions and knowing and aligning each older adult's specific health outcome goals and care preferences. Medication use, if necessary, should not interfere with What Matters to the older adult, their Mobility, or Mentation. Mentation strategies focus on preventing, identifying, treating, and managing dementia, depression, and delirium. Practices to address Mobility ensure that older adults move safely to maintain function and do What Matters.

Like Age-Friendly Cities and Communities, Age-friendly public health systems strive to create community-wide conditions to

improve the health and well-being of older adults [11]. To promote age-friendliness, public health practitioners play essential roles, in collaboration with aging services, to promote healthy aging. These roles, sometimes referenced as the 5Cs include the following [12]: connecting and convening sectors that provide supports, services, and infrastructure; coordinating services to avoid duplication of efforts, identify gaps, and increase access; collecting data to assess community health status and aging population needs; conducting, communicating, and disseminating research findings and best practices; and complementing and supplementing supports and services.

Age-friendly universities (AFU) include programs and practices that are age inclusive [13]. The AFU initiative helps universities and educational settings respond to the needs of the aging populations [14]. The initiative identified six pillars of institutional activity for characterizing age-friendly communities—teaching and learning, research and innovation, lifelong learning, intergenerational learning, encore careers and enterprise, and civic engagement—embodied in 10 AFU principles [15].

Age-friendly workplaces are those that show a commitment to employing individuals over the age of 50 and internally investigate employee complaints regarding age discrimination [16]. This commitment is reflected in workforce policies, organizational culture and employee relations, workforce planning and composition, employee retention and recruiting, management style and practices, workforce training and development, job content and process accommodations, work schedules and arrangements, compensation programs, and healthcare, savings, and retirement benefits.

### **The Age-Friendly Ecosystem**

Over the past decade, many scholars have begun to use the term "age-friendly" and we have learned it means different things to different people and organizations. According to Fulmer and colleagues [17,18], Age-Friendly shared characteristics should exist in an Age-Friendly Ecosystem (AFE), which is defined as a comprehensive, collectively built, set of effective policies and practices that improve quality of life for older adults around the world through enhanced, collaborative impact. This definition of the AFE draws on the social ecological model and the assumption that older adults' well-being is shaped by their relationships and immediate social networks, institutions that they visit or where they work, communities where they live or to which they belong, and the larger society of social or cultural norms and laws [19]. A social ecological approach also highlights the necessity of acting across multiple contexts to promote and sustain policies and practices likely to enhance older adult well-being.

While there has been progress in a variety of countries and settings, there has been limited work to date reviewing and aligning the multiple age-friendly frameworks to assess commonalities. The rationale for this cross-examination was to seed collective action in the AFE and engage leaders and adherents of each framework to consider the different approaches used in each. Through a

carefully structured process, those representing the known age-friendly sectors focused on establishing a set of characteristics that might define the AFE—a first step to achieving collective impact followed by goal setting, measurement, and action planning.

## Literature Review

To develop an initial list of shared characteristics, AFI reviewed goals and practices supported by each of the age-friendly sector frameworks. Specifically, reviews were completed for: WHO’s eight interconnected domains of urban life for age-friendly cities [20,21] eight domains of community livability; IHI’s four evidence-based elements of high-quality care to all older adults in the health system (or 4Ms) [22] ; Trust for America’s Health’s (TFAH) framework for an age-friendly public health system and five roles for public health’s engagement [5,16] certified-age friendly employers program’s 12 categories of best practices standards; and AFU Global Network’s 10 principles of an AFU [23].

An analysis of each review of the model stated goals and practices was undertaken, using peer-reviewed publications and webpage content. The initial characteristics found by AFI among the models included: responsiveness to the needs and voiced concerns of older adults; provision of social and health supports; promotion of equitable access to opportunity and services; encouragement of social engagement and participation in work, civic, and social life; and a movement-oriented approach.

## Methods

The Age-Friendly Institute (AFI) convened national and international (hereafter referred to as “the experts” (Table 1) from diverse perspectives in a consensus panel to review and revise a proposed set of AFE characteristics derived from a review of relevant literature associated with each of the age-friendly frameworks. On December 15, 2020, experts convened virtually for four hours to jointly review and comment on the above characteristics proposed by the AFI staff. AFI emailed invitations to a purposively generated sample of 52 leaders of organizations representing educational, employment, public health, healthcare, and urban and regional planning sectors to participate, including the leaders of influential private and corporate foundations, international and national non-governmental organizations, government agencies, academic institutions, and healthcare organizations. The email invitation informed leaders of the convening purpose and the level of commitment required of them. 44 (84.6%) agreed to participate. These experts reviewed the characteristics and supporting practices prior to the convening. A Delphi techniques, also known as Estimate-Talk-Estimate approach was used to reach saturation.

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**Table 1:** Expert Members of the Technical Meeting.

Experts were divided into four groups with representatives of different frameworks and/or sectors included in each of the four groups. Using a standard protocol, facilitators and note-takers participated in two training sessions in advance of the convening to ensure that small group sessions were structured alike. During the first small-group session, facilitators asked each group to



address three main questions: Are these six the best characteristics to describe an AFE? Why or why not? Tell us how you think the characteristics work across initiatives (your own work and that of others). Are there characteristics that we are missing? During the second small group session, experts described ways to move forward: identifying where we have the most in common to overcome separated approaches to our work; overcoming fears that an AFE will add an additional layer to our work; identifying foundation and government support to address payment barriers to achieving the work; encouraging additional major leadership from groups such as WHO, AARP, and others to tackle policy barriers; and demonstrating value, cost savings, and efficiency to overcome inertia. Sessions were audio-recorded and note takers documented major takeaways that group facilitators presented back to the larger group during the meeting for discussion, comment, and refinement.

AFI converted digital audio recordings to written transcripts; and, following the meeting, a single reviewer, an expert in coding transcripts, synthesized and then analyzed data content gathered in the small groups. Coding was done using pre-determined themes derived from: 1) the literature review including age-friendly frameworks (i.e., cities and communities, health systems, public health systems, universities, and workplaces) and age-friendly characteristics (i.e., responsiveness, support, equity, engagement, and mobility); and 2) question themes (i.e., positive response to characteristic, negative response to characteristic, application of characteristic, missing characteristic, and facilitating factors to AFE development). Given the limited number of transcripts (n=8), analytic software was not used. An overall meeting summary was then sent to the experts for their review and feedback.

## **Results**

Similar themes emerged when responses in small group sessions were summarized. Overall, experts indicated that improving one sector of the AFE such as better age-friendly healthcare, would not make a significant difference unless all parts of the ecosystem improve in unison. Training in essential competencies was also viewed as critical to realizing an age-friendly ecosystem. The ambitious mission named is the need to coordinate improvements across contexts and each sector of the AFE described below.

### **Public Health Systems (5Cs)**

The 5Cs of PH : Collecting and disseminating data to identify priorities for and programming needs of older adult subgroups defined by age, race/ethnicity, urban/rural, SES, sexual orientation, Coordinating existing supports and services (emergency preparedness); Communicating to increase awareness of health-related services and programs, Collecting and disseminating data to identify and address inequities by race/ethnicity, geography, SES, and sexual orientation among older adults, Connecting and convening multiple sector or professions, fostering collaboration, coordinating existing supports and services, Complementing and supplementing existing transportation and environmental supports and services, Communicating and educating to reframe aging as a

time of positive activity, continued growth, and optimism for the future.

### **Health Systems (4Ms)**

Knowing and aligning care with “what matters” to the older adult; Assessing the effects of race- and economic-related stress on older adults , Using medication that does not interfere with what matters, mentation or mobility; Prevent, identify, treat, and manage delirium across settings, Ensuring older adults of different incomes, races and ethnicities, and sexual orientation have equitable access to care, Engaging older adults (and caregivers) in shared decision making about care, Ensuring that older adults can move safely to maintain function and do what matters, Providing older adults with the information they need to make informed decisions about their healthcare; Educating health professionals on myths of aging.

### **Cities and Communities (8 Domains)**

Implementing initiatives that address the concerns of all older adults in the community, focusing policies and practices on health services and community supports tailored for older adults, enacting policies that promote equal access to housing, outdoor spaces & buildings, communication and information as well as promote social inclusion, implementing, evaluating, and scaling programs that promote social and civic participation & employment and effectively engage marginalized elders , developing and implementing transportation solutions that promote mobility and access to critical services and cultural activities, promoting and supporting intergenerational mentoring activities; zoning for intergenerational housing.

### **Employers (12 Best Practices)**

Employers include developing responsive work schedules and flexible arrangements with input from older employees, showcasing general commitment and workforce policies to support older adults health needs, providing job content and process accommodations; offering training and professional development opportunities; expanding supports diverse elders and for low-wage workers, demonstrating a commitment to workforce planning and composition, employee retention, and candidate recruiting, providing accommodations that promote workforce participation and mobility in the work environment, requiring workplace training on recognizing and addressing implicit bias based on age.

### **Universities (10 Principles)**

The AFU principles include: ensuring that research agendas are informed by the needs of an aging society; recognizing diverse educational needs of older adults, enhancing access for older adults to university health and wellness programs, widening access to online educational opportunities; promoting personal and career development, promoting intergenerational learning; engaging actively with the university’s own retired community; ensuring regular dialogue with organizations representing the interest of the aging population, enhancing access for older adults to university cultural and arts resources and events, promoting public discourse on the longevity dividend and the increasing complexity and

richness that aging brings to society.

### **The 6 Proposed Characteristics of an Age-Friendly Ecosystem and Contributions from the 5 Selected Sectors**

Based on the above content and robust discussion, the experts proposed the 6 characteristics of an AFE as being: responsive, healthful, equitable, engaging, active and respectful.

An age-friendly ecosystem is responsive to the values and preferences of older adults. Public health systems prioritize improved data collection methods that include national surveillance as well as more focused assessment via in-person or virtual interviews or focus groups to identify the needs of older adults. Other systems are responsive to different needs; employers to workforce preferences or reasons for wanting to remain in the workforce; universities to knowledge, self-fulfillment, stimulation, and transition [24,25]; and city and regional planners to accessibility, engagement, inclusivity, and safety needs [26]. Representatives of all sectors advocate for operationalizing responsiveness as the co-designing of programs and services with older adults.

An age-friendly ecosystem is healthful. It promotes the health, safety, and optimal functioning of older adults. A healthful, age-friendly ecosystem may include supports for older adults; however, it also includes opportunities for action and agency. For the public health sector this translates to creating “the conditions at the national, state, and community levels that older adults need to live safely, healthfully, and productively” [27]. Employers may offer health insurance and have paid sick leave policies that increase access to health care and healing. Universities provide older adult students with access to campus health services. Health care providers take their cues from older adults to prescribe medications that do not interfere with older adults’ optimal functioning. City and regional planners ensure that zoning supports health and social services that are accessible and available to all older adults through outreach and/or delivery via nontraditional settings.

An age-friendly ecosystem is equitable. It includes programs and services that meet the needs of and reach all older adults, no matter their social, economic, or health status or their geographic location. Equitable systems also address the power dynamics that create policies and practices that advantage one group over another. Equity currently is not an explicitly stated domain, element, or principle of existing age-friendly frameworks reviewed. However, practices implemented within these settings demonstrate a commitment to equity based on age, socioeconomic status, race/ethnicity, disability, and sexual orientation. For example, health systems address equity through improved access to care and health insurance and shared decision-making with older adults of diverse backgrounds; employers through recruitment and retention practices and implicit bias training; educators through online access to learning opportunities and financial aid; and public health through data collection to identify patterns of health disparities and policies and practices to address social and structural determinants contributing to these disparities.

An age-friendly ecosystem is engaging. It promotes inclusion and involvement in activities that are important to older adults and that sometimes benefit society. Employers are especially concerned with age-diversification, engaging older adults, and leveraging their unique talents in the workforce [28]. Potential ways to ensure that older workers stay engaged and maintain productivity, as desired, is to encourage access to and utilization of health insurance; support employer-sponsored health, wellness, and safety initiatives; and pay a living wage [29]. Other age-friendly frameworks promote engagement through practices and policies that focus on; shared health decision-making and goal-setting based on what matters to older adults; intergenerational learning; civic and social participation; and public health stakeholder involvement and collaboration.

An age-friendly ecosystem is active. This means that sectors implement programs, practices, and policies that optimize older adult mobility, sense of freedom, and independence. Research reveals those characteristics of the built environment—for example, traffic and pedestrian infrastructure, neighborhood attractiveness, and public transportation—influence activity among older adults [30]. Many cities have focused primarily on transportation and assuring older adults are able to get to where they need to go safely. Similarly, other age-friendly sectors are characterized as active or promoting independence because they implement, or promote the implementation of, the following types of programs, policies, and practices: physical therapy to maintain optimal mobility; assessments of home environments to reduce or remove fall risks; workplace accommodations (e.g., wheelchair accessible, augmented listening devices), free access to university-based cultural opportunities.

Finally, an age-friendly ecosystem is respectful. That is, individuals, institutions, and communities show how much they value older adults by affording opportunities for visibility and recognition of contributions large and small. Research points to the importance of being respected and valued by the health care system and society and the positive effects of this on older adult well-being [31]. Illness or diminished functional status can create a power imbalance in efforts to participate or to gain visibility and recognition. There is this fear that, once we require care or help, we will no longer be worthy of respect. These fears are valid as bias against older adults is pronounced in many countries [32]. Such bias has prompted efforts to redefine the narrative on aging away from stereotypes of the frail elder, or the “super senior” [33], because such characterizations ignore the challenges of and opportunities for a diverse older population.

## **Discussion**

The goal of the convening was to bring together experts representing age-friendly sectors and frameworks to agree on a set of characteristics that describe the AFE. Together, AFI and the experts were able to refine the original themes to better represent collective thinking in the field. Experts described many ways the six age-friendly characteristics apply to their work and

across age-friendly frameworks. Several ideas emerged, including the importance of assessing older adult needs across contexts; elevating agency and co-designing programming with older adults; viewing aging through a life-course lens; and providing training and education to ensure competencies of those who work in the AFE. Experts further discussed the importance of assessing older adults' needs by context—for example, social, healthcare, transportation, and housing—and how understanding these needs informs approaches to wellness.

## Limitations

First, the experts invited, while highly qualified, may not be representative of a larger body of international experts. However, the world-class experts recruited here come from the age-friendly influence sphere, ensuring representation from each of the five main sectors or frameworks of interest. Second, given the limited time in small group sessions, it is not clear that we reached data saturation in response to all questions, thereby limiting findings. We acknowledge there are more scholars who may have been omitted. All group notes and recordings were available to experts immediately afterward on the AFI website. Third, we intentionally included one reviewer for coding and conducting thematic analysis of transcript data, potentially introducing bias to how we prioritized and drew conclusions. However, all authors reviewed transcripts and notes as a check against the single coder, and to confirm the identification of themes and final characteristics. Further, we do not want such limitations to distract us from the fact that this work constitutes a starting point for a larger conversation related to the Age-Friendly Ecosystem.

## Conclusions

Our process demonstrates that representatives of age-friendly frameworks and diverse service sectors can work together to develop a common, shared language to describe an Age-Friendly Ecosystem. These characteristics, as described above, can be applied to the development of a shared set of goals and measures that can be used to advance policies across multiple sectors likely to affect the health and well-being of older adults of diverse backgrounds, abilities, and experiences. We intend to push forward with the understanding that there is a great deal that encompasses the term and measures for “age-friendly”.

## Author Contributions

KD, JS, TD, AB, LP, RS, TF, AD, SE prepared, edited, and reviewed the manuscript. All authors have read and agreed to the published version of the manuscript.

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