

Age-Friendly Communities Initiative: Public Health Approach to Promoting Successful Aging

**Dilip V. Jeste, M.D., Dan G. Blazer II, M.D., Ph.D., M.P.H.,
Kathleen C. Buckwalter, Ph.D., R.N., F.A.N., Keri-Leigh K. Cassidy, M.D., F.R.C.P.C.,
Len Fishman, J.D., Lisa P. Gwyther, M.S.W., L.C.S.W., Saul M. Levin, M.D., M.P.A.,
Christopher Phillipson, Ph.D., Ramesh R. Rao, Ph.D., Ellen Schmeding, M.S., M.F.T.,
William A. Vega, Ph.D., Julie A. Avanzino, B.A., Danielle K. Glorioso, M.S.W., L.C.S.W.,
John Feather, Ph.D.**

Older adults consistently prefer aging in place, which requires a high level of community support and services that are currently lacking. With a rapidly aging population, the present infrastructure for healthcare will prove even more inadequate to meet seniors' physical and mental health needs. A paradigm shift away from the sole focus on delivery of interventions at an individual level to more prevention-focused, community-based approaches will become essential. Recent initiatives have been proposed to promote healthy lifestyles and preventive care to enable older adults to age in place. Prominent among these are the World Health Organization's Global Age-Friendly Communities (AFC) Network, with 287 communities in 33 countries, and AARP's Network of AFCs with 77 communities in the United States. In an AFC, older adults are actively involved, valued, and supported with necessary infrastructure and services. Specific criteria include affordable housing, safe outdoor spaces and built environments conducive to active living, inexpensive and convenient transportation options, opportunities for social participation and community leadership, and accessible health and wellness services. Active, culture-based approaches, supported and developed by local communities, and including an intergenerational component are important. This article provides

Received May 13, 2016; revised July 26, 2016; accepted July 27, 2016. From the Departments of Psychiatry (DVJ, JAA, DKG); Electrical and Computer Engineering (RRR); Division of the California Institute for Telecommunications and Information Technology (RRR); Sam and Rose Stein Institute for Research on Aging (DVJ, JAA, DKG), University of California, San Diego, CA; Department of Psychiatry and Behavioral Sciences (DGB, LPG), Duke University, Durham, NC; College of Nursing (KCB), University of Iowa, Iowa City, IA; College of Nursing (KCB), University of Oklahoma Health Sciences Center, Oklahoma City, OK; Department of Psychiatry (K-LKC), Dalhousie University, Halifax, Nova Scotia, Canada; Gerontology Institute (LF), University of Massachusetts, Boston, MA; The American Psychiatric Association (SML), Arlington, VA; Manchester Institute for Collaborative Research into Ageing (CP), University of Manchester, Manchester, UK; San Diego Aging and Independence Services (ES), San Diego, CA; Department of Preventative Medicine (WAV), Department of Psychiatry and Behavioral Sciences, Department of Family Medicine, School of Gerontology, School of Social Work, USC Edward R. Roybal Institute on Aging, University of Southern California, Los Angeles, CA; and Grantmakers in Aging (JF), Arlington, VA. Send correspondence and reprint requests to Dr. Dilip V. Jeste, Department of Psychiatry, Sam and Rose Stein Institute for Research on Aging, University of California, San Diego, 9500 Gilman Drive #0664, La Jolla, CA 92023-0664. e-mail: djeste@ucsd.edu

© 2016 American Association for Geriatric Psychiatry. Published by Elsevier Inc. All rights reserved.

<http://dx.doi.org/10.1016/j.jagp.2016.07.021>

a brief historical background, discusses the conceptualization of the AFC, offers a list of criteria, narrates case studies of AFCs in various stages of development, and suggests solutions to common challenges to becoming age-friendly. Academic geriatric psychiatry needs to play a major role in the evolving AFC movement to ensure that mental healthcare is considered and delivered on par with physical care. (Am J Geriatr Psychiatry 2016; 24:1158-1170)

Key Words: Age-friendly communities, mental health, housing, leadership, social engagement

During the coming years, the United States will experience a dramatic growth in the population over age 65, from the current 49 million to a projected 84 million seniors by 2050.¹ The rapid increase in the aging population is overwhelming the national infrastructure for physical and mental healthcare.² Limitations of the present geriatric healthcare system include inconsistent and often poor availability, access, and affordability of the necessary physical and mental health services along with a worsening shortage of geriatric healthcare providers.³ Consequently, a rethinking of policies at national and local levels is underway. Emphasis will need to shift from the current costly and unsustainable methods in which healthcare-related services are provided to efficiency and preventive care. This will involve a paradigm shift for geriatrics and geriatric psychiatry, away from the sole focus on delivery of interventions at individual level to more prevention-focused, community-based approaches.

American Association of Retired Persons (AARP) surveys show that most seniors want to stay in their own homes instead of moving to an assisted living or nursing facility, even when they are disabled.⁴ This would require creating conditions that are necessary to enable aging-in-place, including formal and informal support systems in the community.⁵ In recent years, several age-friendly community (AFC) initiatives have been launched, with the aim of promoting physical and psychosocial well-being of older residents and improving the quality of life of the entire community. The AFCs¹ incorporate all aspects of the natural, built, and social environment and are “places where older people

are actively involved, valued, and supported with infrastructure and services that effectively accommodate their needs.”⁶ (p.4)

However, until recently the field of geriatric psychiatry has not been involved to a significant extent in the development of AFCs. It is critical that mental healthcare be considered and delivered on par with physical healthcare for promoting healthy aging. The goal of this article is to inform geriatric psychiatry practitioners about AFCs and also push the field into new territory, that is, enhancing conversation and collaboration between the people developing AFCs and mental healthcare providers. Presently, the community development system and the mental healthcare system occupy different “silos.” AFC development provides opportunities for breaking these silos and synergizing those systems to benefit seniors. The transformative shift for geriatric psychiatry will involve rethinking how care is delivered and also how the specialty can become a driving force toward the formation of AFCs. This can aid in translating the science of psychosocial resilience, well-being, and healthy aging into a new and evolving “positive psychiatry” of aging⁷⁻¹⁰ on a public health scale. Positive mental health outcomes are associated with longer life, better health, and greater productivity,¹¹⁻¹⁴ and AFCs seek the same goals at the community level. This article provides a brief historical background, discusses the conceptualization of the AFC, offers a list of criteria of an AFC, narrates case studies of AFCs in various stages of development, summarizes challenges to becoming age-friendly that communities commonly face, and suggests solutions to those problems.

¹The terms “cities” and “communities” are often used interchangeably in the context of AFCs.

HISTORICAL BACKGROUND OF AFCS

The concept of AFCs can possibly be traced to the Ecology Theory of Aging proposed by Lawton and Nahemow four decades ago.^{15,16} Its basic notion is that aging represents a complex blending of physiologic, behavioral, social, and environmental changes that occur at both the individual and community levels. An ecological model provides a comprehensive framework for understanding the relationship between the competencies of the individual and the characteristics of her or his surrounding environment.^{16,17} In the current conceptualization of AFCs, emphasis is placed equally on the importance of the social environment and the physical environment as determinants of the health, well-being, and ability of adults to age successfully and contribute to their communities. The AFC movement could also be seen as a population-based extension of the home and community-based services movement—a public health approach to help older adults age in place.

Several locally developed AFC movements with varying degrees of emphasis on social and physical environments have developed over the years, including the naturally occurring retirement community and the Village movements. Naturally occurring retirement communities were first described in the 1980s as communities that are unplanned or not intentionally organized for older adults, can be age-integrated, but providing few, if any, services.¹⁸ Since then, naturally occurring retirement community supportive social services programs have been developed, such as health and social services, community building, and volunteer and recreational activities for groups of older adults living in proximity to one another.¹⁹

The Village movement, which started 15 years ago, focuses on the needs and preferences of its local members. Villages are membership organizations, run by volunteers and paid staff, that coordinate access to supportive and community services including transportation, home repairs, health and wellness programs, and social activities, keeping older adults active in their communities.^{19–21} Seniors are actively involved in organizational development and oversight²² and are provided opportunities to give services in addition to receiving help when needed, resulting in a type of “barter system.”²³ In 2012, the Village to Village Network was launched to help communities establish and manage

their own Villages.¹⁹ As of 2015, there were 190 operating Villages and 185 Villages in development.²⁴

CRITERIA FOR AGE-FRIENDLINESS OF A COMMUNITY

The much larger AFC initiatives include the World Health Organization (WHO) Age-Friendly Cities Project, the WHO Global Network of Age-Friendly Cities and Communities, the AARP’s Livable Communities, the National Association of Area Agencies on Aging–sponsored Livable Communities Initiative, Visiting Nurse Service of New York’s AdvantAge Initiative, and Grantmakers In Aging’s Community AGenda: Improving America for All Ages.^{19,25–34} Although each of these initiatives has its own unique definition of an AFC, most of them emphasize making improvements to aspects of the physical environment such as safe, accessible, and affordable housing; pleasant and clean environments; and outdoor spaces providing opportunities for physical, psychosocial, and cultural activities, along with affordable and reliable transportation options. Equally important, they stress aspects of the social environment such as respect for and inclusion of seniors in community-related decisions, community support and encouragement for making available work and volunteer opportunities for older adults, health promotion, and access to a wide range of health services including preventive, physical, and mental healthcare. In [Table 1](#), we sought to integrate various sets of criteria defining the AFC into a cohesive list. The important role of geriatric psychiatry is highlighted under “Health and wellness services.”

CASE STUDIES OF AFCS

Although the basic principles are similar across AFCs, there are also some differences in approaches, given the diversity among the individual communities served.^{35–41} Typically, there is active involvement “across stakeholders from multiple sectors within a defined and typically local geographic area to make social and/or physical environments more conducive to older adults’ health, well-being, and ability to age in place and in the community.” (Greenfield et al. 2015, page 192).³² Community planning for AFCs ranges on a continuum of governance approaches from

TABLE 1. Common components among different definitions of an age-friendly community or AFC

Component	Criteria
<p>Housing</p> 	<p>Housing options with accessible and affordable housing (including assisted living) in locations with access to retail, transportation, and social services; safety at home and in the neighborhood; and appropriate design, modifications, maintenance, and family interactions.</p>
<p>Outdoor spaces and built environment</p> 	<p>Pleasant and clean environment, green spaces, place to rest, age-friendly pavements, safe pedestrian crossings, accessibility, walkability, cycle paths, age-friendly buildings, adequate public toilets, features for older customers. Active recreation and leisure opportunities to be physically and mentally active, including parks and other outdoor exercise venues, senior centers, libraries, theater and sports, museums, art galleries, and accessible shops.</p>
<p>Transportation</p> 	<p>A range of options for people to get where they need and want to go, including availability, affordability, reliability, frequency, travel stops, age-friendly vehicles, specialized services for older people, priority seating and passenger courtesy, trained drivers, safety and comfort, taxis, information, driving conditions for and courtesy toward older drivers, parking, variation in types of public transit, and community transportation.</p>
<p>Social environment</p> 	<p>Respectful behavior, age-friendly services, intergenerational interactions and collaboration, no economic exclusion. Fosters meaningful connection with family, neighbors, and friends. Engages seniors when soliciting community feedback and guidance. Widespread distribution, the right information at the right time, age-friendly formats and design, and information technology.</p>
<p>Community support</p> 	<p>Encouraging active engagement in community life and civic leadership; better options and opportunities for volunteering and employment for seniors; flexibility to accommodate older workers and volunteers (temporary-work, consulting); entrepreneurial opportunities; opportunities for learning and acquiring new skills to be used in the workforce.</p>

(continued on next page)

Table 1 (continued)

Component	Criteria
<p>Health and wellness services</p> 	<p>Accessible care: proximity and access to a wide range of health services including preventive, medical, and mental healthcare, palliative care, home care, assisted living facilities, a network of community services. Promoting positive health behaviors, including individuals' social connection; lifelong learning; physical activity, such as structured exercise like tai chi or aerobics; everyday activities like gardening; access to quality foods in the neighborhood; and usable information about available services. Geriatric psychiatry for leading evidence-based health and wellness promotion and illness prevention programs and offering the necessary academic leadership to translate the science of healthy psychosocial aging and to develop programs that promote health behavior change. Cognitive behavioral tools, not simply to treat common late-life mental illnesses but also to challenge negative age stereotypes, promote health behavior change, and support healthy aging on an individual and a public health scale.</p>

top-down approaches, in which efforts are organized by local governments or advocacy organizations (e.g., AARP), to bottom-up approaches, which focus on facilitating older adults' empowerment and collaboration to enhance their own communities in becoming more age-friendly.^{32,34,42} Differences in geographic locations and in socioeconomic and political systems influence the steps required to become age-friendly.^{16,33,35}

The four stages in the development of an AFC are planning, implementation, continual improvement, and evaluation of progress. Below we present case examples of cities and communities in the United Kingdom, Canada, and the United States that are in various stages of becoming age-friendly and are diverse in terms of size, demographics, urban versus rural setting, specific local strengths and challenges, and degree of involvement of academic geriatric psychiatry. All of them can benefit from further contributions by geriatric mental health clinicians, researchers, and educators.

Manchester, United Kingdom

The City of Manchester has a population of about 500,000, and nearly 10% of its residents

are over age 65. Manchester has the second lowest male life expectancy in the United Kingdom and has high levels of pensioner poverty, ill health, and disability.³⁶ Work related to healthy aging in Manchester has primarily taken place at the local level. In 1998 the Better Government for Older People group was established in Manchester, and in 2003 the Valuing Older People partnership was launched to coordinate collaborations between older adults and community organizations.³⁵ Thereby, seniors were engaged in leadership with the formation of a board, listening groups, and a community development program. The workgroup grew to include local government, the National Health Service, a housing trust, an arts agency, a national charity, and a local university. An important component of creating an age-friendly Manchester was the Manchester Ageing Study, in which older people were trained as researchers, conducting focus groups and a community audit to determine the age-friendliness of specific neighborhoods.⁴³ A range of healthy aging initiatives were developed from this springboard, and in 2010 Manchester became the first U.K. city to join the WHO Global Network of AFCs.³⁵

Halifax, Nova Scotia, Canada

The province of Nova Scotia is leading the “age wave” in Canada, with 19.5% of its population over age 65. Halifax, the capital of Nova Scotia, has a population of about 390,000,^{44,45} of whom 15% are over 65.⁴⁵ Halifax was one of the first Canadian cities to join the WHO AFC Initiative. In 2005, Nova Scotia put together Positive Aging Strategy, covering housing, transportation, and health. In 2007, Halifax conducted listening sessions with the public to determine the needs of its older residents. A notable feature of the Halifax AFC work has been the strong role played by mental health leaders at national and local levels. The Mental Health Commission of Canada has advocated mental health promotion as a way to enhance the quality of life of all Canadians. The national AFC Canada Hub, an online open-access database, promotes exchange of knowledge, connections, and networking and helps generate new research, practice, and policy initiatives.

The Fountain of Health (FoH) Initiative for Optimal Aging⁴⁶ is an innovative national effort targeting health-care providers and the public about resilience and healthy aging. Developed at Dalhousie University, Halifax, the FoH is an example of “positive psychiatry” of late life in action. Using cognitive behavioral principles, clinicians learn how to change patients’ negative views on aging and support older adults to set and meet health behavior change goals that facilitate healthy aging. The FoH, in partnership with University of California San Diego’s Center for Healthy Aging (see below) and leading Canadian research and health organizations serving seniors, hosted the first international Think Tank on Optimal Aging in June 2016.

Johnson County, Iowa

Johnson County has a population of approximately 130,000.⁴⁷ Nearly 9% of the residents are over age 65. The Johnson County Livable Community (JCLC) initiative grew out of extant groups: the Consortium for Successful Aging, the Johnson County Task Force on Aging, and, in 2005, the University of Iowa Center on Aging. In 2009, the county’s Board of Supervisors approved a JCLC-created AARP-promoted Replicable Community Model. The JCLC serves as a unifying structure to foster collaboration, communication, and education that will build and sustain a livable community for successful aging. The University of Iowa’s

geriatric mental health nursing program plays an important role in the JCLC.

The JCLC offers many services for seniors, including a centralized website and a quarterly newsletter containing information for successful aging and quick links to in-home services; education and cultural events; health and medical resources; housing and transportation information; community safety programs, including a driving program providing information regarding defensive driving techniques, new traffic laws, and the effects of medications on driving capability; a community-based fall prevention program; a free tax preparation assistance service; and a free 24/7 emergency hotline available in over 220 languages. The JCLC has a Policy Board, along with Action Teams composed of partnerships with businesses, organizations, professionals, and volunteers, for example, Aging in Place Action Team, Fall Prevention Action Team, and Transportation Action Team. To track its progress, the JCLC regularly surveys its older residents with help from the University of Iowa Center on Aging.

Boston, Massachusetts

Boston has a population of about 620,000⁴⁸ and has a rapidly growing aging population. One in seven persons is currently over age 60, and by 2030 one in five will be over age 60.⁴⁹ This increase is occurring almost entirely among seniors of color. The number of Hispanics over age 60 grew 85% from 2000 to 2010 and that of black residents by 37%.⁵⁰ Therefore, accommodations such as adaptations to programs and services to meet the cultural and linguistic needs and preferences of older residents will be imperative to Boston’s success as an AFC. The Age-Friendly Boston Initiative is in relatively nascent stages. It is spearheaded by the mayor and the senior city commissioner and involves collaboration with four primary partners: AARP Massachusetts, City of Boston Commission for Affairs of the Elderly, University of Massachusetts, and Tufts Health Plan Foundation.

In 2014, Boston joined the WHO Global Network and AARP Network of AFCs. The Gerontology Institute at University of Massachusetts, Boston, led the way in conducting needs assessments, including 25 listening sessions (including 3 sessions in Chinese, Spanish, and Haitian Creole). Results from listening sessions and surveys are being analyzed and an action plan is being developed. Recently, the University of Massachusetts

Age-Friendly Communities Initiative

released the report “Becoming an Age-Friendly Boston: Practices and Principles.”

Washington, DC

Washington, DC has a population of approximately 660,000.⁵¹ Eleven percent of the city’s population is over age 65, and 15% of seniors live below the poverty line.⁵¹ It is a majority-minority district, with a population of 51% black, 35% white, and 9% Hispanic.⁵² The city has taken multiple steps toward becoming age-friendly during the past decade. In 2012, the city council officially committed to becoming a part of the WHO Global Network and AARP’s Network of AFCs. The Age-Friendly DC Task Force developed a concrete plan of action in response to the needs of community seniors and publicly posted the action plan.⁴⁰ This Task Force has had several successful strategic initiatives: It improved access to, as well as the quality of, in-home care through a “no-wrong-door” approach to long-term services and supports, enabling older adults and their families to learn about and have a full range of access to services, regardless of which health agency was contacted initially. The office of the CEO/Medical Director of the American Psychiatric Association, located in the DC area, is playing an important role in this AFC movement. Strategies to improve mental health outcomes include introducing and expanding primary care and mental healthcare screening programs for seniors, providing training on behavioral health for counselors and aides working in hospitals and home-based care units, and expanding the number of peer counseling and support programs, along with the number of older adult peer counselors.

San Diego, California

San Diego is the second largest city in California, with approximately 1.3 million residents, of whom 11% are over age 65.^{50,53} The city will have experienced a 56% increase in adults over 65 from 2012 to 2050.⁵⁴ The precursor of the San Diego AFC Initiative was Live Well San Diego,⁵⁵ which began in 2010 as a public health strategy and has since evolved to improve the health, safety, and well-being of all San Diego residents. Initiated by the county government, it includes partnerships with schools, municipal governments, community-based organizations, and businesses.

The nonprofit San Diego Foundation, in partnership with County government’s Aging & Independence Services (AIS), AARP, and UC San Diego Center for Healthy Aging, is taking key steps in the AFC movement. In March 2016, the County Board of Supervisors officially approved the application to AARP to include San Diego as an AFC. The AIS has developed a 4-year area plan that includes paper and electronic surveys, forums, listening sessions, and other activities to identify the needs of older adults and gaps in necessary services and will be followed by a 2-year planning process to become a formal AFC. The AIS currently offers in-home services focusing on healthy aging, such as Feeling Fit Clubs, Tai Chi, Silver Age Yoga, Matter of Balance, Health Promotion Committee, and Chronic Disease/Diabetes Self-management. Programs focusing on civic engagement are also offered, for example, intergenerational programs and volunteering opportunities such as Senior Volunteers in Action.^{56,57} Outreach to older adults includes the biannual Aging Summit, hosted by AIS, to bring together about 2,000 community seniors. The 2016 Summit focused on AFC development.

The UC San Diego Center for Healthy Aging is one of the few academic aging centers in the country with a focus on well-being of the local community, seeking to promote “positive psychiatry” of aging.⁸ It also has a national Think Tank, which meets semiannually to foster an interdisciplinary dialogue on geriatric mental healthcare, technology, housing, lifestyle, and AFCs.

COMMON CHALLENGES TO BECOMING AGE-FRIENDLY AND PROPOSED SOLUTIONS

Below are some challenges commonly experienced by communities seeking to become age-friendly, along with proposed solutions for addressing them.

Providing Unifying Structure: National Hub for Coordinating Strategies

There is considerable diversity among different communities’ needs for specific strategies to become age-friendly. Each approach needs to be rooted in the expressed needs of its own residents, both older and younger. Developing an AFC requires a roadmap for translating locally derived ideas into specific initia-

tives in the regional context. It is hoped that coherent models will eventually save money while improving health outcomes.^{32,58} However, many communities lack the necessary expertise in planning a successful AFC. A national hub can help individual communities in the development of a framework for transforming aging-in-place lifestyles toward active, culture-based approaches, modified and supported by their respective constituents. A Canadian Age-Friendly Hub includes various relevant domains of the strategy to connect people, ideas, and resources. Establishment of a national hub in the United States (perhaps in partnership with the AARP) and a direct collaboration between the U.S. and Canadian hubs could allow for knowledge exchange and synergy in AFCs within North America.

Overcoming Ageism

A major barrier to AFC development is pervasive ageism. Negative beliefs about aging within communities are almost universal and tend to become self-fulfilling prophecies, with worse health outcomes and reduced longevity,⁵⁹ whereas positive attitudes are associated with improved outcomes.^{60,61} For AFCs to thrive, entrenched negative age stereotypes will need to be replaced with positive (but realistic) expectations, both at individual and societal levels. Pessimistic views about aging among relatively healthy individuals can be changed using cognitive behavioral therapy techniques, paving the way for increased engagement in physical, cognitive, and social activities.⁶² For persons with depressive or anxiety disorders, enhanced cognitive behavioral therapy, specifically modified to meet needs of older adults and address negative thoughts on aging,⁶³ and strengths-based cognitive behavioral therapy to promote resilience⁶⁴ are promising approaches. Reducing societal ageism will require a multitier strategy involving governmental agencies, professional organizations, academic institutions, foundations, media, and industry.

Facilitating Collaboration among Relevant Stakeholders

Promoting collaboration across various sectors, such as housing and transportation, can be difficult. Bringing together politicians, city planners, providers of public transportation and public housing, private de-

velopers, and the business community and sustaining these relationships over time are essential for allowing smart neighborhood design.¹⁹ Universities and academic centers can play an important role in facilitating such collaborations because they do not have competing interests with most of these other entities. The result would be improved public health. A university-promoted community collaboration showed that more walkable neighborhoods with interconnected streets to shops, restaurants, services, public transportation, and parks led to residents getting more exercise, resulting in a reduction in poor health outcomes such as diabetes and cardiovascular disease.⁶⁵

Ensuring Program Evaluation

A lack of evaluation is a major problem in terms of knowing whether or not a particular model of AFC is better or even viable. It is unclear whether the AFC-related changes have made a significant impact on the lives of older people, particularly those from lower socioeconomic strata. Objective measures of the success of the AFCs are needed, such as attracting more seniors, reducing age-specific morbidity and mortality, improving quality of life in a quantifiable manner, and reducing healthcare costs. Given the diversity of AFCs, each will need to evaluate its own outcomes from specific interventions. This is an area where academic centers can play a vital role.

There are some useful efforts underway to evaluate the impact and outcomes of lifestyles for healthy aging, but presently these are not embedded or integrated directly within most AFC initiatives. For example, the LiveWell Programme in the United Kingdom⁶⁶ is a research program that develops and tests the effects of lifestyle-based interventions to promote health and well-being in older adults, focusing on diet, physical activity, and social connectedness. This group also works on creating measurement tools for health and well-being in older adults (versus disease-focused outcomes). Through this work, researchers developed a concept of "healthy ageing phenotype"⁶⁷ that can be used to guide research, programs, and interventions. The elements of this phenotype are physiologic and metabolic health, physical capability, cognitive function, social well-being, and psychological well-being.⁶⁸ Wider implementation of such efforts is urgently needed.

Resolving Conflicts with Local Businesses

There is often a pressure on urban environments because of conflicting goals of private developers and those seeking to develop an AFC, who may have little influence on urban planning and design. Similarly, there can be tension between social needs of older adults and private ownership of public spaces, as well as geographic disparities within urban areas, leading to age- and class-segregated neighborhoods. On the other hand, there are clear business opportunities for various agencies to help aging in place. With appropriate incentives, businesses can play a major role in contributing to making communities age-friendly. The needs of older adults, developers, and businesses should coincide with opportunities for collaboration and effective structuring for financial incentives.

Optimizing Financial Priorities

There is sometimes a lack of clarity and political will for determining resource allocation priorities in various levels of local government. For example, a metropolitan city may support smart growth and development of rapid transit, but neighboring cities and communities may be resistant to such objectives for fear of “influx” of older neighborhoods. Such a conflict of interests will make it inherently difficult to create a coherent transportation system across jurisdictions. Aging in place may be unattractive in places in which older people are facing economic and social decline.⁶⁹ The impact of economic austerity being implemented across the globe will create a paucity of public resources. Nonetheless, it is hoped that AFCs can help reduce healthcare costs by promoting efficient and effective healthcare, based on preventive services and collaboration among service providers. What is needed is objective evidence of a significant reduction in healthcare costs while improving health and well-being in AFCs. Obviously, it will take years to produce such data, but demonstrating positive outcomes should be a consistent focus for the AFCs, from the outset.

Promoting Intergenerational Activities

Effective AFCs must be multigenerational to avoid segregating older adults within their communities in

age-isolated programs and also to counter a perception that a community must choose between its younger and older members on which to focus. Positive intergenerational activities are helpful to all generations. Most older adults will do better if their lives are integrated with other age segments, and this would support sustainable change. Likewise, older adults have much to offer to youth, and better mental health can mediate their ability to give back to the community. An excellent example of such activities is the “Experience Corps” study⁷⁰ in which 128 volunteers aged 60–86 years, with 95% African American, served 15 hours or more per week in public elementary schools (grades K–3) in Baltimore, Maryland, in roles designed to meet schools’ needs and increase the social, physical, and cognitive activities of the volunteers. At a follow-up of 4–8 months, physical activity, strength, social support, and cognitive activity increased significantly and walking speed decreased significantly less in these volunteers compared with control subjects. At the same time, there were selective improvements in student reading/academic achievement and classroom behavior while not burdening the school staff.⁷¹ Such intergenerational programs should be an integral component of any successful AFC.

Establishing AFCs for Underserved Communities

A recent major study has shown stark differences in longevity by income along with clear evidence that community characteristics have a preponderant influence on longevity.⁷² Functional status and longevity are markedly reduced in lower versus higher income communities, which implies that the AFC programs need to start earlier in lower income areas because people there are aging more rapidly.

Underserved communities such as those with low-income seniors or lesbian, gay, bisexual, transgender groups and ethnically diverse and immigrant communities need more assistance to enrich their environment and to support the activities to develop adequate capacity to engage older adults. The goal should be to strengthen the community’s social fabric by wider engagement across sectors. The benefits and cost savings of the AFC will only be realized when the needs of all groups of older adults are met, including those in underserved communities.

Expanding Involvement of Academic Geriatric Psychiatry

As summarized above, the AFC initiatives in Halifax, Johnson County, and San Diego illustrate contributions by academic geriatric psychiatry to community-based health promotion with the support of local government or private funding. The Halifax FoH program recently received a Positive Aging Grant from the Nova Scotia Department of Seniors to pilot FoH materials in primary care and a New Horizons Grant to pilot a 6-week senior peer leadership project. Quality assurance data from both projects will assess whether seniors acquire new health information, shift beliefs on aging, set concrete health behavior goals, and meet those goals. In Johnson County, the University of Iowa Center on Aging is helping with surveys of older residents' unmet needs. In San Diego, University of California San Diego's Center for Healthy Aging has recently received a grant from the San Diego Foundation to conduct a pilot study of training and empowering older adults to advocate for making their neighborhood more walkable.

Developing Rural AFCs

The AFC initiative has historically focused on urban environments. However, most of the world population lives in villages. Developing AFCs in rural areas may be difficult because of a lack of suitable infrastructure. A successful example of AFC initiative in a rural province is in Nova Scotia, with a 50% rural population. It sought and received permission from the WHO to work on rural age-friendly endeavors. Approximately half of the municipalities in Nova Scotia are now receiving age-friendly development funds. The work of these municipalities is highly collaborative in nature: Several of them have been exchanging ideas that are working in rural settings.

Supporting Greater Use of Technology

Training in and easy access to technology including smart phones, telehealth, and social media can help keep seniors in communication with their peers and families, feel safe, and reduce loneliness.⁷³ Prior data support the use of tablet devices for leisure activities by individuals with mild cognitive impairment.⁷⁴ A recent pilot study investigated the feasibility,

safety, usefulness, and correlates of personalized cognitive engagement using a tablet device as a novel nonpharmacologic tool in managing older inpatients with dementia and agitation.⁷⁵ All participants, regardless of dementia severity, used various apps and were rated by the staff as being less agitated after tablet use. There were no reports of adverse events or damage to the tablet equipment. Thus, under caregiver supervision, even persons with severe cognitive impairment can use tablets with simple and intuitive apps, especially when they are matched to each individual's preferences and level of cognitive function. Further empirical data are needed to help clinicians and caregivers to utilize technology to enhance care of seniors in the community.

Offering Educational Opportunities for Older Adults

A number of universities across the country offer extension courses, some of which are specifically intended for older adults. These can play a useful contributing role in making a community age-friendly by offering education and job training. Training interested older adults in learning skills needed for new jobs would make it easier for them to compete in the rapidly changing job market.

Working with Local Media

Local media can play a critical role in informing and educating the public and influencing political decision-makers by keeping this topic in the public eye. Identifying and working with journalists having a passion for care of seniors is, therefore, of considerable value.

In conclusion, geriatric psychiatry should be actively involved in, contribute to, and take an appropriate leadership position in specific aspects of AFCs. The result will be an enrichment of both the AFCs and the field of geriatric psychiatry, helping the well-being and health of older adults in urban and rural as well as underserved communities.

The authors acknowledge members of the UC San Diego Think Tank on Healthy Aging, whose deliberations were helpful in the preparation of this manuscript: Laura Carstensen, Ph.D., Gary Gottlieb, M.D., M.B.A., Christopher Langston, Ph.D., Kiang Liu, Ph.D., Tracy Lustig, D.P.M.,

Age-Friendly Communities Initiative

M.P.H., Nambi Seshadri, Ph.D., Sandra Rosenbloom, Ph.D., and Judith Salerno, M.D. The authors also thank other participants in our discussion while preparing the manuscript: Ranna Parekh, M.D., Sejal Patel, MD., Alejandra Sotelo-Solis, B.A., Hayley P. Gleason, M.S., and Jason Childers, B.A.

Supported, in part, by the UC San Diego Center for Healthy Aging and the Sam and Rose Stein Institute for Research on Aging, along with The San Diego Foundation, and the County of San Diego's Aging and Independence Services.

References

1. Ortman JM, Velkoff VA, Hogan H: An Aging Nation: The Older Population in the United States. [United States Census Bureau Web site]. May 6, 2014. Available at: <http://www.census.gov/library/publications/2014/demo/p25-1140.html>. Accessed April 7, 2016
2. The Maturing of America-Communities Moving Forward for an Aging Population. Released by National Association of Area Agencies on Aging, MetLife Foundation, International City/County Management Association, American Planning Association, National Association of Counties, National League of Cities, and Partners for Livable Communities [MetLife FOundation Web site]. June 2011. Available at: https://www.metlife.com/assets/cao/foundation/MaturingOfAmerica_FINAL_Rpt.pdf. Accessed April 7, 2016
3. The mental health and substance use workforce for older adults: in whose hands? Released by The Institute of Medicine [The National Academies Press Web site]. 2012. Available at: <http://www.nap.edu/catalog/13400/the-mental-health-and-substance-use-workforce-for-older-adults>. Accessed April 7, 2016
4. Barrett L: Home and Community: Preferences of the 45+ Population. Released by AARP Research Center [AARP Web site]. September 2014. Available at: http://www.aarp.org/content/dam/aarp/research/surveys_statistics/il/2015/2014-Home-Community-45plus-res-il.pdf. Accessed April 7, 2016
5. Iecovich E: Aging in place: from theory to practice. *Anthropol Noteb* 2014; 20:21-33
6. Alley D, Liebig P, Pynoos J, et al: Creating elder-friendly communities: preparations for an aging society. *J Gerontol Soc Work* 2007; 49:1-18
7. Jeste DV, Palmer BW: A call for a new positive psychiatry of ageing. *Br J Psychiatry* 2013; 202:81-83
8. Jeste DV, Palmer BW, Rettew DC, et al: Positive psychiatry: its time has come. *J Clin Psychiatry* 2015; 76:675-683
9. Lavretsky H: Resilience and Aging: Research and Practice. Baltimore, MD: Johns Hopkins University Press, 2014
10. Blazer DG, Kinghorn WA: Positive social psychiatry. In: Jeste DV, Palmer BW, eds. *Positive Psychiatry*. Arlington, VA: American Psychiatric Publishing, 2015:675-683
11. Kubzansky LD, Thurston RC: Emotional vitality and incident coronary heart disease: benefits of healthy psychological functioning. *Arch Gen Psychiatry* 2007; 64:1393-1401
12. DuBois CM, Lopez OV, Beale EE, et al: Relationships between positive psychological constructs and health outcomes in patients with cardiovascular disease: a systematic review. *Int J Cardiol* 2015; 195:265-280
13. Ostir GV, Markides KS, Peek MK, et al: The association between emotional well-being and the incidence of stroke in older adults. *Psychosom Med* 2001; 63:210-215
14. Chida Y, Steptoe A: Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosom Med* 2008; 70:741-756
15. Lawton MP, Nahemow L: Ecology and the aging process. In: Eisdorfer C, Lawton MP, eds. *The Psychology of Aging and Adult Development*. Washington, DC: American Psychological Association, 1973:619-674
16. Menec VH, Means R, Keating N, et al: Conceptualizing age-friendly communities. *Can J Aging* 2011; 30:479-493
17. Wahl HW, Iwarsson S, Oswald F: Aging well and the environment: toward an integrative model and research agenda for the future. *Gerontologist* 2012; 52:306-316
18. Hunt ME, Gunter-Hunt G: Naturally occurring retirement communities. *J Hous Elder* 1986; 3:3-22
19. Age-Friendly Communities the Movement to Create Great Places to Grow Up and Grow Old in America. Released by Grantmakers in Aging and Pfizer Foundation [GIA Web site]. April 2013. Available at: http://www.giaging.org/documents/130402_GIA_AFC_Primer.pdf. Accessed April 7, 2016
20. About Beacon Hill Village [Beacon Hill Village Web site]. Available at: http://www.beaconhillvillage.org/content.aspx?page_id=22&club_id=332658&module_id=75811. Accessed April 7, 2016
21. Greenfield EA, Scharlach AE, Lehning AJ, et al: A tale of two community initiatives for promoting aging in place: similarities and differences in the national implementation of NORC programs and villages. *Gerontologist* 2013; 53:928-938
22. Scharlach A, Graham C, Lehning A: The "Village" model: a consumer-driven approach for aging in place. *Gerontologist* 2011; 52:418-427
23. Thomas M: Villages: Helping People Age in Place. Released by AARP The Magazine [AARP Web site]. May/June 2011. Available at: <http://www.aarp.org/home-garden/livable-communities/info-04-2011/villages-real-social-network.html>. Accessed April 7, 2016
24. About Village to Village Network [Village to Village Network Web site]. Available at: http://www.vtvnetwork.org/content.aspx?page_id=22&club_id=691012&module_id=65139. Accessed April 7, 2016
25. WHO global network of age-friendly cities and communities [World Health Organization Web site]. 2016. Available at: http://www.who.int/ageing/projects/age_friendly_cities_network/en/. Accessed April 7, 2016
26. World Health Organization: *Global Age-Friendly Cities: A Guide*. Geneva, Switzerland: WHO, 2007
27. Livable communities [AARP Web site]. 2015. Available at: <http://www.aarp.org/ppi/issues/livable-communities/>. Accessed April 7, 2016
28. Kihl M, Brennan D, Gabhawala N, et al: *Livable Communities: An Evaluation Guide*. Released by AARP Public Policy Institute and prepared by Arizona State University Herberger Center for Design Excellence [AARP Web site]. 2005. Available at: <http://www.aarp.org/content/dam/aarp/livable-communities/plan/assessments/livable-communities-an-evaluation-guide-2005-aarp.pdf>. Accessed April 7, 2016
29. Livable Communities [National Association of Area Agencies on Aging web site]. 2016. Available at: <http://www.n4a.org/livablecommunities>. Accessed April 7, 2016

30. What is the advantage initiative? [The AdvantAge Initiative Web site]. 2013. Available at: <http://www.vnsny.org/advantage/whatis.html>. Accessed April 7, 2016
31. Fitzgerald KG, Caro FG: An overview of age-friendly cities and communities around the world. *J Aging Soc Policy* 2014; 26:1-18
32. Greenfield EA, Oberlink M, Scharlach AE, et al: Age-friendly community initiatives: conceptual issues and key questions. *Gerontologist* 2015; 55:191-198
33. Scharlach A: Creating age-friendly communities in the United States. *Ageing Int* 2012; 37:25-38
34. Lui CW, Everingham J, Warburton J, et al: What makes a community age-friendly: a review of international literature. *Australa J Ageing* 2009; 28:116-121
35. Buffel T, McGarry P, Phillipson C, et al: Developing age-friendly cities: case studies from Brussels and Manchester and implications for policy and practice. *J Aging Soc Policy* 2014; 26:52-72
36. McGarry P: Building an age-friendly Manchester [OECD Web site]. Available at: <https://www.oecd.org/sti/ieconomy/McGarry%20Presv1.pdf>. Accessed April 7, 2016
37. Creating Age-Friendly Places: A Guide for Cities, Boroughs, Towns or Counties, Councils, Partners and Communities. Released by the Beth Johnson Foundation and Manchester City Council for the Local Government Association's Ageing Well programme [AARP Web site]. 2013. Available at: <http://www.aarp.org/content/dam/aarp/home-and-family/livable-communities/2013-12/manchester-uk-creating-age-friendly-places.pdf>. Accessed April 7, 2016
38. Johnson County Livable Community for Successful Aging Policy Board Strategic Plan 2011-2014. Released by the Members of the Livable Community for Successful Aging Policy Board [AARP Web site]. 2011. Available at: <http://www.aarp.org/content/dam/aarp/livable-communities/plan/planning/johnson-county-livable-community-for-successful-aging-strategic-plan-2011-2014-aarp.pdf>. Accessed April 7, 2016
39. Keefe J, Hattie B: Age-Friendly Cities Project Halifax Site. Released by the Nova Scotia Centre on Aging [Nova Scotia Canada Web site]. March 2007. Available at: https://www.novascotia.ca/seniors/pub/2007_AgeFriendlyCitiesReport.pdf. Accessed April 7, 2016
40. Age-Friendly DC: Strategic Plan 2014-2017. [Age-Friendly DC Web site]. December 10, 2014. Available at: <http://agefriendly.dc.gov/sites/default/files/dc/sites/agefriendly/publication/attachments/afdcstrategicplan20141017website.pdf>. Accessed April 7, 2016
41. The Age-Friendly Mission [Age-Friendly Boston Web site]. Available at: <https://agefriendlyboston.wordpress.com/>. Accessed April 7, 2016
42. Lehning A, Scharlach A, Wolf JP: An emerging typology of community aging initiatives. *J Commun Pract* 2012; 20:293-316
43. Buffel T: Researching Age-Friendly Communities. Stories from Older People as Co-Investigators. The University of Manchester Library [The University of Manchester Web site]. Manchester, UK, 2015. Available at: https://www.research.manchester.ac.uk/portal/files/32297850/FULL_TEXT.PDF. Accessed April 7, 2016
44. NHS Profile, Halifax, RGM, Nova Scotia. 2011. [Statistics Canada Web site]. Available at: <http://www12.statcan.ca/nhs-enm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=1209034&Data=Count&SearchText=Halifax&SearchType=Begin&SearchPR=01&A1=All&B1=All&Custom=&TABID=1>. Accessed April 7, 2016
45. Focus on geography series, 2011 Census metropolitan area of Halifax, Nova Scotia. 2011. [Statistics Canada Web site]. Available at: <https://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=205>. Accessed April 7, 2016
46. The fountain of health initiative for optimal aging [Fountain of Health Web site]. Available at: <http://fountainofhealth.ca/>. Accessed May 4, 2016
47. QuickFacts Johnson County, Iowa [United States Census Bureau Web site]. 2010. Available at: <http://www.census.gov/quickfacts/table/PST045215/19103>. Accessed April 7, 2016
48. QuickFacts Boston city, Massachusetts [United States Census Bureau Web site]. 2010. Available at: <http://www.census.gov/quickfacts/table/PST045214/2507000>. Accessed April 7, 2016
49. Massachusetts population projections [UMASS Donahue Institute Population Estimates Program Web site]. Available at: <http://pep.donahue-institute.org/>. Accessed April 7, 2016
50. U.S. Census Bureau: American Fact Finder Boston City, Massachusetts [United States Census Bureau Web site]. 2010. Available at: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml. Accessed April 7, 2016
51. Washington, DC [Census Reporter Web site]. Available at: <https://censusreporter.org/profiles/16000US1150000-washington-dc/>. Accessed April 7, 2016
52. QuickFacts District of Columbia [United States Census Bureau Web site]. 2010. Available at: <http://www.census.gov/quickfacts/table/PST045214/11,53>. Accessed April 7, 2016
53. Demographic & socio economic estimates jurisdiction San Diego [SANDAG Web site]. September 9, 2015. Available at: http://datasurfer.sandag.org/download/sandag_census_2010_jurisdiction_san-diego.pdf. Accessed July 19, 2016
54. Series 13 regional growth forecast: City of San Diego [SANDAG Web site]. October 2013. Available at: http://datasurfer.sandag.org/download/sandag_forecast_13_jurisdiction_san-diego.pdf. Accessed July 19, 2016
55. About live well San Diego [Live Well San Diego Web site]. Available at: <http://www.livewellsd.org/content/livewell/home/about.html>. Accessed April 7, 2016
56. Volunteers—AIS [County of San Diego Health and Human Services Agency Web site]. Available at: <http://www.sandiegocounty.gov/hhsa/programs/ais/volunteers/>. Accessed April 7, 2016
57. Military service members, veterans and their families [County of San Diego Health and Human Services Agency Web site]. 2016. Available at: http://sandiego.networkofcare.org/veterans/services/agency.aspx?pid=SeniorVolunteersInActionSVAandRetiredSeniorVolunteerProgramRSVPagingIndependenceServicesAISHealthandHumanServicesAgencyCountyofSanDiego_870_17_0. Accessed April 7, 2016
58. Ball MS, Lawler K: Changing practice and policy to move to scale: a framework for age-friendly communities across the United States. *J Aging Soc Policy* 2014; 26:19-32
59. Wurm S, Warner LM, Ziegelmann JP, et al: How do negative self-perceptions of aging become a self-fulfilling prophecy? *Psychol Aging* 2013; 28:1088-1097
60. Levy BR, Slade MD, Kunkel SR, et al: Longevity increased by positive self-perceptions of aging. *J Pers Soc Psychol* 2002; 83:261-270
61. Levy BR, Slade MD, Kasl SV: Longitudinal benefit of positive self-perceptions of aging on functional health. *J Gerontol* 2002; 57B:P409-P417
62. Ragan AM, Bowen AM: Improving attitudes regarding the elderly population: the effects of information and reinforcement for change. *Gerontologist* 2001; 41:511-515
63. Ursuliak Z, Cassidy KL, Eskes G, et al: An observational study of the effectiveness of group cognitive behavioral therapy for late-life depressive and anxiety disorders. *Can J Geriatr* 2008; 11:88-93

Age-Friendly Communities Initiative

64. Padesky CA, Mooney KA: Strengths-based cognitive-behavioural therapy: a four-step model to build resilience. *Clin Psychol Psychother* 2012; 19:283-290
65. Sallis JF, Cerin E, Conway TL, et al: Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study. *Lancet* 2016; 387:2207-2217
66. The Livewell Programme [Newcastle University Web site]. Available at: <http://research.ncl.ac.uk/livewell/>. Accessed May 4, 2016
67. Franco OH, Karnik K, Osborne G, et al: Changing course in ageing research: the healthy ageing phenotype. *Maturitas* 2009; 63:13-19
68. Lara J, Godfrey A, Evans E, et al: Towards measurement of the healthy ageing phenotype in lifestyle-based intervention studies. *Maturitas* 2013; 76:189-199
69. Scharf T, Phillipson C, Smith AE, et al: Growing Older in Socially Deprived Areas: Social Exclusion in Later Life [ARAN - Access to Research at NUI Galway Web site]. *Help The Aged*, 2002. Available at: [https://aran.library.nuigalway.ie/bitstream/handle/10379/3196/Growing_Older_in_Socially_Deprived_Areas_\(2002\).pdf?sequence=1](https://aran.library.nuigalway.ie/bitstream/handle/10379/3196/Growing_Older_in_Socially_Deprived_Areas_(2002).pdf?sequence=1). Accessed April 7, 2016
70. Fried LP, Carlson MC, Freedman M, et al: A social model for health promotion for an aging population: initial evidence on the experience corps model. *J Urban Health* 2004; 81:64-78
71. Rebok GW, Carlson MC, Glass TA, et al: Short-term impact of experience corps participation on children and schools: results from a pilot randomized trial. *J Urban Health* 2004; 81:79-93
72. Chetty R, Stepner M, Abraham S, et al: The association between income and life expectancy in the United States, 2001-2014. *JAMA* 2016; 315:1750-1766
73. Jeste DV, Vahia IV: Leveraging technology to improve mental health for seniors [Psychiatry Advisor Web site]. February 13, 2015. Available at: <http://www.psychiatryadvisor.com/leveraging-technology-to-improve-mental-health-for-seniors/article/398115/>. Accessed April 7, 2016
74. Lim FS, Wallace T, Luszcz MA, et al: Usability of tablet computers by people with early-stage dementia. *Gerontology* 2013; 59:174-182
75. Vahia IV, Kamat R, Vang C, et al: Usefulness of tablet devices (iPads) in the management of agitation among inpatients with dementia: an open-label study. *Am J Geriatr Psychiatry* 2016; in press