



ISSUE BRIEF

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Healthy Aging in the Commonwealth: *Pathways to Lifelong Wellness*

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Table of Contents

Executive Summary	i
Goals and Research Methods for Issue Brief	1
Chronic Illness, Disability, and Costs from an Aging Society	1
Concepts of Healthy Aging	3
Ingredients of Healthy Aging	5
The Systems Model for Healthy Aging	11
Programming for Healthy Aging	13
Evidence-Based Programs	16
Approaches to Promoting Healthy Aging in Communities	17
Healthy Aging in Other States	26
Conclusion	27
Acknowledgements	28
References	29
Appendix I: List of Individuals Interviewed	33

Executive Summary

Overview of aging, illness, and disability. In the next few decades the U.S., including the Commonwealth of Massachusetts, will experience a rapid aging of its population and related rises in chronic illnesses, disability, health care and long-term care costs, and demands on family caregivers. The changes will challenge our care and financing systems. However, this should not be seen as a gloom and doom scenario.

Rather, we should celebrate the advances in health care, public health, and economic status that have made it possible to extend life expectancy far beyond what it was a century ago. Moreover, there is ever-stronger evidence that the "price of success" for living longer does not need to be added years of chronic illness and disability, as some feared (Cassel, Rudberg et al. 1992). There is a growing campaign to promote "healthy aging" (HA), which can help many individuals avoid or delay disability and the worst consequences of illness as they age, and even help those who are ill and disabled to better manage their conditions and live meaningful and involved lives.

In preparing this Issue Brief we reviewed research and policy initiatives on HA, interviewed experts both nationally and in the Commonwealth, and visited sites where HA programming is taking place. We hope the paper will spur discussion and shape action to further the efforts already underway.

The concept of healthy aging. One of the original conceptions of HA was "successful" aging, which was defined as aging without chronic illnesses or disabilities and with high involvement in interpersonal relationships and the community (Rowe and Kahn 1997). Research soon found, however, that only a fraction of older adults could meet this definition and that the poor and minorities were less likely to "succeed" (Holstein and Minkler 2003; Depp and Jeste 2006). Also, when older adults were asked how they defined "success" and "health" in old age, they shared more inclusive conceptions that revolved around being involved in valued and meaningful activities, having a positive but realistic attitude, and having security and stability in their environment and social supports (Bryant, Corbett et al. 2001; Reichstadt, Depp et al. 2007). By these broader definitions, large majorities of older adults report they are healthy.

The ingredients of healthy aging. The ingredients of HA are therefore multi-dimensional and include behaviors that foster both physical and mental health and social connections. There is a strong body of research that connects these behaviors to reduced likelihood of chronic illness, reductions in disease risk factors, less physical and cognitive disability, better mental health, and longer lives. The behaviors include:

- Regular physical activity, including aerobics, strength building, balance, and flexibility.
- Healthy diet, including 5 or more fruits and vegetables a day.
- Little or no alcohol intake and no smoking.
- Social engagement with family, friends, and community.
- Finding meaning and purpose in life.
- Taking charge of one's health by obtaining preventive care and learning about one's chronic conditions and how to manage them.
- Feeling safe and secure.

Several points stand out regarding the prevalence of these behaviors among older adults. First, national data show that older adults in Massachusetts do better than the U.S. averages on several of these criteria, but there is plenty of room for improvement on all of them. Second, there are significant disparities by class, race, and ethnicity on many measures of HA. Third, for the most part, these behaviors for HA are the same behaviors recommended for adults and children of all ages. Indeed, some respondents favor the concept of "lifelong wellness" as more inclusive model, which also might be helpful to combat ageism.

A system for healthy aging. Theories of public health and individual behavior point out that people are more likely to change their behavior when they find support for the changes in the environment. In turn, the environment is more likely to change when individuals collectively are making changes themselves. This "socio-ecological model" posits that HA initiatives need not only help older adults change their health-related behaviors, but also promote changes in the environments in which older adults live, including their communities, the agencies and professionals that work with older adults, and even the physical environment.

Initiatives to promote healthy aging. In recent years federal and state governments, private philanthropy, professional and trade associations, local governments, agencies providing health care and supportive services, and individual professionals are all increasingly involved in efforts to both promote individual change and to change environments. The most prominent initiative to promote behavior change, funded by the federal Administration on Aging (AoA) with technical assistance from the National Council on Aging (NCOA) is broadly replicating programs that have been shown through strong evaluation designs to improve health, reduce disability, and/or reduce health care costs.

These so-called "evidence-based programs" are variously targeted to help older adults to manage their chronic conditions, avoid falls, improve diets, engage in physical activity, combat depression and substance abuse, and more. One model is to deliver these programs to small groups using trained lay leaders, who have been trained by Master Trainers. Another model is to train care coordinators and other professionals to screen for problems and to support behavior change and improved health. All the evidence-based programs seek to empower older adults to take charge of their lives, their health conditions, and their care by providing information, teaching skills, and fostering self-efficacy, i.e., the idea that if you think you can do something, you probably can. The group-based programs add the power of group persuasion.

The Commonwealth's Executive Office of Elder Affairs (EOEA), in collaboration with the Department of Public Health (DPH), is one of 24 states to receive one of the AoA grants. They are also one of 8 states to receive Atlantic Philanthropies funds through NCOA to plan for sustaining CDSM programs. These grants are giving new power to long-standing HA initiatives in the Commonwealth. Massachusetts has also received a grant from the NCOA to design and embed systems changes that will make healthy aging and self-management support permanent features of aging and public health programming. To date these grants, with state and local funds, have supported training of 166 Master Trainers and 287 group leaders; and nearly 2,000 older adults have taken classes in chronic disease management, fall prevention, and healthy eating.

Healthy aging in communities. Approximately 150 local agencies, including senior centers, nursing facilities, assisted living residences, health care providers, and others, serve as hosts for these programs and help with recruitment and administration. The range of settings shows that older adults with a range of conditions in both independent housing and residential care settings can benefit from HA activities.

The AoA and Atlantic grant activities are the centerpiece of current HA activities, but there are

other initiatives as well. These include:

- Senior centers across the state that provide healthy and affordable meals, social activities such as book clubs, transportation for those who need it, and a variety of HA programs such as falls prevention and physical activity classes.
- Programs that promote work, civic engagement, volunteering, lifelong learning, and social support such as Foster Grandparents, the Elder Disparities Coalition, the Massachusetts Senior Action Council, and Beacon Hill Village.
- Livable Communities programs that promote sidewalks, accessible and affordable grocery shopping, and placement of congregate housing near shopping.
- Models that change the way services are delivered to older adults, moving from simply providing services toward person-centered care models that empower service users.

Healthy aging in other states. The Commonwealth and organizations within the state are among the national leaders in HA, but there are other states that offer lessons and models. Other model states include Maine, Michigan, Iowa, Oregon, and New Jersey. The latter has been particularly successful in creating an integrated administrative structure at the state and local levels, making chronic disease management a statewide priority, including minority communities with special grants initiatives, and making HA prominent on the state's website.

Conclusion. Healthy Aging is very much on the agenda of key agencies and organizations in the Commonwealth, but there are many hurdles to overcome to fully implement the agenda. As can be expected, the most frequently cited barrier to expanding HA programming and participation is resources, but there is also work to be done on creating a vision for an integrated infrastructure to offer evidence-based programs, on strengthening approaches to address disparities, on transforming services to empower service users, on linking HA with lifelong wellness efforts, on planning for livable communities, and on combating ageism.

Goals and Research Methods for Issue Brief

The goal of this Issue Brief is to synthesize what is known about programs and policies that support healthy aging (HA). It presents a synthesis of research on the health and functional challenges that can accompany growing older, as well as the consequences this can have for society. It also presents approaches that have been developed that can often help people stay healthier and avoid or delay disability, including both things that individuals can do and things that society and organizations within it can do to create an environment that supports everyone to live healthier lives.

To prepare the brief, we not only reviewed research and policy literature, we also spoke to 28 experts and practitioners in HA, services to older adults, public health, and community-based organizations. The focus was on informants in Massachusetts, and we visited many of them at their workplaces to see their programs in action. We also interviewed experts around the country. We do not quote anyone by name from these interviews, but sometimes we quote without attribution from our notes. The names of the individuals we interviewed are in Appendix A.

Chronic Illness, Disability, and Costs from an Aging Society

Readers of this report are likely familiar with the statistics on aging and its impacts on health and society. Still, the highlights are worth repeating because they lay out possible paths we all face as we grow older, the changing faces of an aging population, and the challenges in promoting healthy aging.¹

Population: The number of people 65 and over in the U.S. will nearly double in 25 years: from 37 million in 2006 (12 percent of the population) to 72 million in 2030 (to nearly 20 percent of the population). The population age 85 and over is growing the fastest and accelerates even more after 2030 as baby boomers start to reach that age. The numbers of older adults relative to the numbers in other age groups affect how we feel the demands that older adults make on pensions, health care systems, and family caregivers.

Chronic illnesses: The prevalence of chronic conditions is widespread among older adults and differs by gender and race/ethnicity. For example, older women report higher levels of arthritis and depression but lower levels of cancer and heart disease than men (Table 1). African Americans and Hispanics both have much higher levels of diabetes than non-Hispanic whites. Chronic illnesses affect functional status, the complexity and costs of health care costs, and mortality. A recent national survey of persons age 44 and over conducted by National Council on Aging shows the personal effects of chronic conditions: Half said they were unhappy or depressed at least occasionally due to health problems, a third lived in constant or frequent physical pain, a third were always or frequently tired, a third cut down or skipped social activities, and more than a quarter had to miss work (NCOA 2009).

Functional limitations: The rate of functional limitations among older people has declined slightly in recent years, but it remains high. In 2005:

- 12% of older adults had difficulty performing one or more IADLs (but no ADL limitation²);

¹ Unless otherwise noted, all the data in this section are from the website of the Federal Interagency Forum on Aging-Related Statistics (www.agingstats.gov). It is an informative and accessible source reporting on 38 consensus indicators of the status of older adults in the U.S. in terms of demographic, economic, health and functional status, as well as risk factors and health care costs. Information is easy to read and use in charts, PDF files, and PowerPoint slides.

² IADL limitations refer to instrumental activities of daily living and include difficulty performing (or inability to perform) for a health reason one or more of the following tasks: using the telephone, light housework, heavy housework, meal preparation, shopping, or managing money. ADL limitations refer to difficulty performing (or inability to perform) for a health reason one or more of the following tasks: bathing, dressing, eating, getting in/out of chairs, walking, or using the toilet.

- 18% had difficulty with 1–2 ADLs;
- 5% had difficulty with 3–4 ADLs;
- 3% percent had difficulty with 5–6 ADLs; and
- 4% were in a nursing facility.

Overall, 42% of older adults reported one or more of these limitations, with women more likely to be limited than men. Trouble hearing, seeing, and walking outdoors also affected many older adults (Table 1). Limitations in functional status affect older adults' ability to take care of themselves and their opportunities to participate in society. For example, trouble seeing may mean it is not possible to drive a car, and trouble hearing can hamper social interactions.

Health care costs: Health care costs for older adults are high and rising. Medicare covers barely half of total costs for hospitals, physician services, nursing facilities, home care, prescription drugs and other health and long-term care services. This leaves high out-of-pocket costs for older adults. Adjusted for inflation, health care costs rose 51% between 1992 and 2004 to \$13,052 per person. In 2004, out-of-pocket spending for health care amounted to 8% of income for all older adults and 29% of income for poor and near poor older adults.

Life expectancy: Americans are living longer than ever before. Life expectancy at age 65 is 18.7 years (to nearly 84). Life expectancy gaps between black and white older adults have essentially disappeared in recent years, but women still outlive men (Table 1). Life expectancies for U.S. older

<i>Table 1: The Aging Population¹</i>		
	Men	Women
<u>Chronic conditions</u>		
Arthritis	43%	54%
Heart disease	37%	26%
Cancer	24%	19%
Clinical depression	12%	17%
High blood pressure	52%	54%
<u>Functional problems</u>		
Any IADL or ADL problem or in a facility	35%	47%
Any trouble seeing	16%	18%
Any trouble hearing	48%	35%
Cannot walk 2-3 blocks	15%	23%
<u>Life expectancy</u>		
At age 85	6.1 years	7.2 years
<u>Economics</u>		
Poverty rate	7%	12%
<u>Living arrangements</u>		
Live with spouse	73%	42%
Live alone	19%	39%

¹ Non-institutionalized, civilian persons age 65 and over. Source: www.agingstats.gov

adults are longer than in England and Wales, but they lag behind those of Japan, Canada, and France.

Care from family and friends: As society ages, families (especially older women) are called on to provide care to their aging members. In one study, older spouses who were caregivers and experiencing strain were 63% more likely to die over a 4-year follow up than control caregivers who were not strained, after controlling for socio-demographics and disease (Schulz and Beach 1999). Between 1989 and 1999, the proportion of older adults receiving care from family and friends fell and the proportion receiving no care increased. Among those with care, the proportion of care provided by adult children rose (to 41% vs 38% from spouses), and the proportion of caregivers working alone increased (from 35% to 53%) (Wolff and Kasper 2006).

Concepts of Healthy Aging

The foregoing review of population aging, disease, disability rates, health care spending, and caregiving may seem gloomy. In fact, when the field of gerontology was getting started in the 1950s and 1960s, the predominant images of aging were decline, disease, disability, and death. Before the passage of social safety net programs, the image also included poverty and isolation. Another component was loss, particularly loss of valued roles and social status, as well as loss of loved ones and friends. Gerontologists even had a word for it - senescence - the condition or process of deterioration with age.

Although these data reflect high rates of illness and disability among older adults, another way to look at the data is that many older adults are not disabled or chronically ill. Some older adults, even at advanced ages, manage to avoid the seeming eventualities of aging. Moreover, as shown below, many older adults report that they feel "healthy" despite the fact that they have

chronic illnesses and disabilities. They acquire some of the physical and medical challenges of aging, but they remain active and feel positive about their lives. This change in frame is the origin of the so-called Healthy Aging (HA) movement. The movement has interests and objectives at multiple levels. One is to reduce and delay the incidence and severity of chronic illnesses and disability. Another is to help older adults have the confidence and skills to have the best possible health and function and wellbeing in the face of chronic conditions and disability. And a third and perhaps most important is to create environments in communities and in systems of care that work well for people at various levels of disability.

Perhaps the most well-known concept of HA is that many of the health problems that people experience as they get older can be avoided or at least delayed. One of the earliest and certainly the most prominent entries into the HA field - Rowe and Kahn's research on "successful" aging (Rowe and Kahn 1997) - focused on this concept. Their work defined people who were successfully aging as having three characteristics:

- Free of chronic illnesses and low rates of disease risk factors;
- High functional levels in both physical and cognitive areas; and
- Active engagement in life in the form of interpersonal relationships and productive activity, including work and civic engagement.

They then showed that genetic factors affected risk of disease, but environmental and behavioral factors also affected risk, especially at higher ages. They also showed that changes in environment and behavior could modify risk factors.

This research thus opened the door for interventions to modify risk factors and promote HA. It also highlighted that the result could be lower rates of chronic illness

and disability (and the associated burden of disease, health care costs, and demands on family caregivers). Also, it altered the frame of older adults simply as drains on society: They were shown to contribute through work, civic engagement, volunteering, caregiving, and more.

However, Rowe and Kahn's "successful" aging model has been criticized as being too narrow in its definition of "success" and also as being implicitly negative regarding those who do not measure up. Indeed, one review of studies of the Rowe and Kahn model in older adult populations found that barely one-third of older adults met the success criteria (Depp and Jeste 2006). A longitudinal study of British civil servants found even fewer "succeeding" (Britton, Shipley et al. 2008).

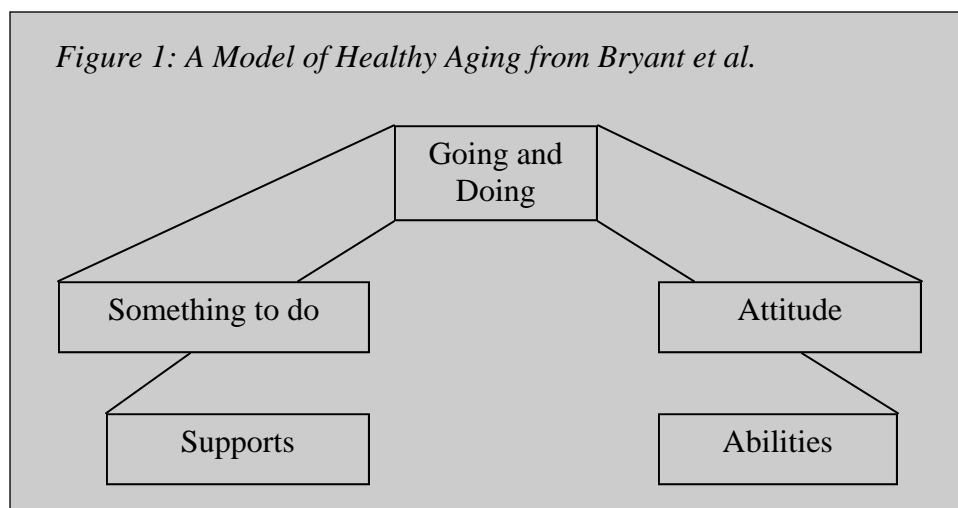
Others have criticized the Rowe and Kahn model as biased by gender, race, and class (Holstein and Minkler 2003), based on the fact that white males with higher incomes are the most likely to be able to have the opportunity to avoid disease and disability and be engaged in volunteer and civic activities. These critics also point to the further danger that those who do not "succeed"- from whatever class/gender/race background - will internalize their shortcomings and label themselves as failures.

One way to break out of the relatively narrow definition of success in the Rowe and Kahn model is to broaden the concept of health and who can be included as "healthy." At the same time as the Rowe

and Kahn model was being proposed, Baltes and Baltes were defining "success" in aging as being able to adapt to losses and limitations in later life, whether physical, psychological, or social (Baltes and Baltes 1990). In this model people age well when they are able to select the things they most want to do among the options available in the environment, and then mobilize the resources necessary to achieve goals. Here "success" is related to resilience, adaptation, and empowerment, and it can be achieved by individuals in a wide range of functional and health statuses.

Researchers have found that another way to broaden the definition of HA is to ask older adults themselves to define health and success in aging. The result is another broad definition of health and what it means to age well. For example, Bryant and colleagues' asked older adults in focus groups to define what they meant by "health." The response was "going and doing something meaningful" (Bryant, Corbett et al. 2001). In this conception of HA (see Figure 1), as in the Baltes and Baltes model, even older adults who have disabilities and illnesses can feel healthy and seem healthy to others if:

- They have something worthwhile to do;
- They modify what they want to do based on their changing abilities;
- They have a positive attitude about the world and themselves; and
- They have the supports they need to go



and do what they want.

Similarly, in another focus group study (Reichstadt, Depp et al. 2007), older adults said that they and their peers were successfully aging when:

- They have a positive and realistic attitude and the ability to adapt to changes;
- They experience security and stability in their physical environment, in social supports, and in family; and
- They are engaged with life, have a purpose, and are useful to society.

Moreover, older adults in the focus groups discussed whether being healthy in the form of absence of disease and disability was part of successful aging, but there was not agreement on these as ingredients to HA. The importance of older adults' self-assessments of their health should not be underestimated. Self-rated health is predictive of mortality in controlled analyses, with the greatest impact seen in healthy individuals (Schoenfeld, Malmrose et al. 1994).

In short, older adults do not simply let disease and disability define their lives as "unhealthy," and with meaningful activities, the right skills and techniques, supports and confidence, and positive attitude, they can be more resilient than their objective health conditions. Using this more expansive type of self-definition of success in aging, a survey of community-dwelling adults over 60 found that 92% rated themselves as aging successfully (Montross, Depp et al. 2006).

Finally, healthy aging researchers and advocates point out that older adults have the best chance to be healthy when they live in communities that are supportive, including a safe and accessible physical environment, access to health services, and

supports for attitudes and behaviors that promote health and well-being. The Issue Brief returns to this broader "socio-ecological" model of healthy aging below. First, the next section reviews the "ingredients" of HA at the individual level.

Ingredients of Healthy Aging for Individuals

Given these broad models of HA, let's look more closely at the specific ingredients of HA for individuals and at evidence that the ingredients are associated with physical and mental health and social engagement. In the last 20 years a great deal of research has been conducted to articulate the ingredients of HA and to test their validity. The research points to a multi-dimensional model of HA that incorporates physiological, behavioral, material, and psychological states (Figure 2). It posits that individuals who are aging well will be physically active, have good diets, be socially engaged, lead meaningful lives, be pro-active about health, and feel safe and secure. The box at the bottom of the figure makes it clear that supportive communities enhance the chance of achieving these outcomes.

Research supporting each individual ingredient is reviewed briefly below. Each section also reports information on how well older adults in the U.S and Massachusetts are doing in each of these areas. Most of the data come from The Centers for Disease Control and Prevention (CDC), which gives the nation and individual states "report cards" on key health behaviors.³

Be physically active: Normal aging-related declines in muscular and skeletal strength can be minimized or reversed through a combination of cardiovascular exercise and resistance training. The greatest benefit is seen for those who start from a low base of

³ <http://apps.nccd.cdc.gov/saha/>

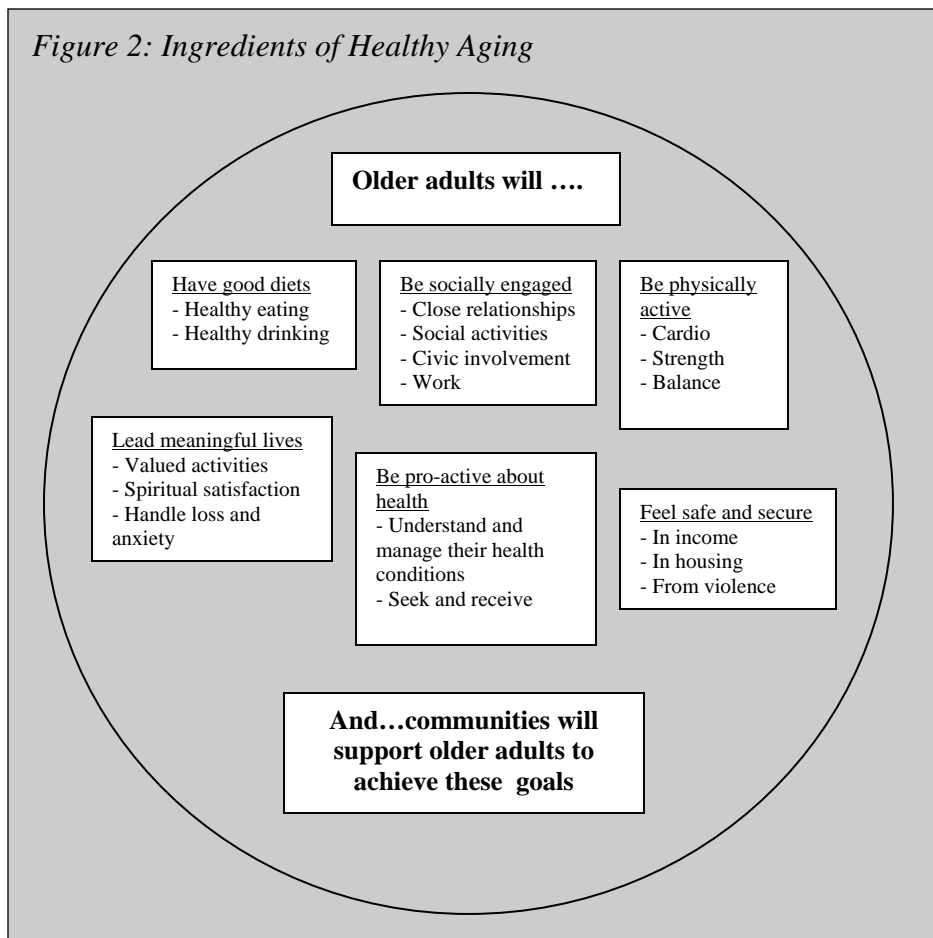
exercise, but the ideal is more challenging: a cumulative total of 30 to 50 minutes of aerobic activity performed 3 to 5 days a week, plus resistance exercises targeting the major muscle groups twice a week (Galloway and Jokl 2000). Participating in classes or other structured exercise is one way to achieve results (Karani, McLaughlin et al. 2001; Roubenoff 2007). Leading an active life of everyday physical tasks such as walking, gardening, and housekeeping has positive effects (Galloway and Jokl 2000), including improvements in mortality (Manini, Everhart et al. 2006). For older adults who are in danger of falling, a focus on balance and strength training for lower limbs is key (Brouwer, Musselman et al. 2004).

The CDC data indicate that nearly 1/3 of older adults in the U.S. and just over 1/4 of older adults in Massachusetts have no leisure time physical activity (Table 2). Data from the 2007 National Health Interview Survey are more specific and more pessimistic: Only 21% of older adults met the standard for regular, vigorous leisure-time physical activity.⁴ Fully 52% reported no sessions of even light leisure-time activity of at least 10 minutes duration.

Have a healthy diet: There are clearly positive effects to eating plenty of fruits and vegetables and drinking little or no alcohol. The so-called Mediterranean diet, which includes fresh fruit, vegetables, cereals, olive oil, fish, legumes, spices and herbs,

⁴ Vigorous activity is defined as three or more sessions per week of vigorous activity lasting at least 20 minutes or five or more sessions per week of light or moderate activity lasting at least 30 minutes. http://www.cdc.gov/nchs/data/series/sr_10/sr10_240.pdf

Figure 2: Ingredients of Healthy Aging



<i>Table 2: Health Indicators and Behaviors¹</i>			
	MA	US	MA rank
<u>Health behaviors</u>			
No leisure-time physical activity	28%	32%	10th
Eats 5 or more fruits and vegetables daily	36%	30%	7th
Obesity	17%	20%	5th
Current smoking	8%	9%	13th
<u>Preventive care and screening</u>			
Flu vaccine in past year	71%	68%	20th
Mammogram in past 2 years	82%	75%	10th
Ever had pneumonia vaccine	65%	65%	25th
Colorectal cancer screening	68%	63%	11th
<u>Self-assessed health status</u>			
Frequent mental distress	6.2%	6.3%	20th
Disability ²	31%	34%	10th
Physically unhealthy days in last month	4.9 days	5.5 days	6th

¹ Non-institutionalized persons age 65 and over. Source: <http://apps.nccd.cdc.gov/saha/>

² Has an activity limitation or uses a device due to a physical, mental, or emotional problem.

and limited amounts of red meat, has been widely researched. This kind of diet has been associated with decreased cognitive disorders (Solfrizzi, Panza et al. 1999; Martin, Cherubini et al. 2002), a 50% lower rate of all-causes and cause-specific mortality (Knoops, de Groot et al. 2004), positive associations with quality of life, and inverse associations with the risk of certain cancers (Roman, Carta et al. 2008). Fish intake has also been associated with a slower rate of cognitive decline (Morris, Evans et al. 2005).

In regard to alcohol intake, the current CDC guideline is a maximum of two drinks a day for men and one for women. A glass of wine a day is one example of this; and in fact, some studies have found that being a nondrinker of alcohol may be associated with greater risk of death and poorer health-related quality of life (Byles, Young et al. 2006; Sun, Schooling et al. 2009).

However, for many older adults, even one drink may be dangerous. According to the Mayo Clinic website, the most likely danger is that alcohol may have adverse interactions with both prescription and over-the-counter medications, including antibiotics, anticoagulants, antidepressants, diabetes medications, antihistamines, beta blockers, pain relievers, and aspirin (Clinic 2009). Sensitivity to alcohol also rises with age, and drinking is also contra-indicated for individuals with specific health conditions, e.g., liver problems.

The CDC data in Table 2 show that there is much room for improvement in older adults' diets and substance intake. While MA rates relatively well nationally, only 30% of older adults in MA eat 5 or more fruits and vegetables a day, and 17% are obese. Eight percent still smoke cigarettes. Older Americans Act meals programs help with nutrition but there are still gaps. One study

of participants in a senior center meals program found that only 6% had adequate daily energy and nutrient intake, and 53% were marginal in these areas (Prothro and Rosenbloom 1999). Without the noon meal at the senior center, which supplied 38%-44% of the average daily energy intake and 33%-65% of the average intake of selected nutrients, the daily adequacy would have been far worse.

Be socially engaged: Social engagement in the form of having close personal relationships, being involved with social activities, and making contributions to society in the form of caregiving, volunteering, civic involvement, and even continuing to work are part of both the Rowe and Kahn "successful" aging model and the definitions of health of older adults themselves cited above. Both specific and general effects have been identified. Simply having meals with more people present rather than alone can combat reduced appetite and consequent poor nutrition and impaired health among older adults (de Castro 2002).

More broadly, Bailis and colleagues asked older adults whether they were part of social groups such as their family, places of worship, and caregiving relationships, whether they participated in the groups, and how highly the groups were valued (Bailis and Chipperfield 2002). Older adults who reported participation in highly valued groups (a measure of high "collective self-esteem") reported fewer chronic conditions and had better self-reported health. In the same study, having high collective self-esteem was an especially important protective factor for older adults who reported low levels of locus of control over their health. Vaillant and colleagues found a strong positive relationship between social supports and physical health, but they found that the relationship was weakened when they controlled for alcohol abuse, smoking, and depression (Vaillant, Meyer et al. 1998). In other words, these three risky behaviors predicted weak social supports, which were also associated with poor health.

Unfortunately, as people get older, socializing and communicating account for a declining proportion of leisure time, falling from 13% of leisure time for those 55-65 to 10% of leisure for those age 75 and over. Well over half of leisure time for all Americans age 55 and over is spent watching television.

Lead meaningful lives: Having something meaningful to do is an ingredient of both of the HA models cited above that were derived from focus groups of older adults. What is meaningful may come in the form of social activities, a solitary hobby, or from spiritual pursuits. A recent large longitudinal study of Medicare beneficiaries found that older adults who said that they found meaning and had a purpose in life lived longer than those who did not (Krause 2009). The most likely pathway for reduced mortality was that having a purpose improved health, and improved health reduced mortality.

Other studies have shown positive health effects from attending religious services. In one longitudinal study, a variety of religious belief and participation patterns were associated with stronger social support and healthy behaviors, and less depressive symptoms at every level of impairment (Hays, Meador et al. 2001). Another study found improved pulmonary function from attending services (Maselko, Kubzansky et al. 2006).

The ability to adapt and be resilient in the face of loss and anxiety is another aspect of having a meaningful old age, as shown in the work of Baltes and Baltes discussed above. Older adults face almost inevitable losses in the form of retirement, death of loved ones, loss of capacities, and forced residential relocation. More than 6% of older adults experienced frequent mental distress both in the U.S. and in Massachusetts (Table 2). Among non-institutionalized adults aged 65 years and over surveyed in the 2007 National Health Interview Survey, 10% felt sad, 12% felt hopeless, and 11% felt "everything was an effort" at least some of the time in the last

30 days.⁵ These rates of sadness were related to income: 19% for older adults covered by Medicare and Medicaid, 11% for those Medicare alone, and only 8% for those with Medicare and private health insurance. Older adults, especially white men over 85, have higher rates of suicide than younger adults. This is in part associated with serious losses (Devons 1996).

Be pro-active about health: Being knowledgeable and pro-active about health, illness, and health care is a tenet of HA. This includes learning about health conditions that one has and how to manage them, as well as obtaining recommended health care, preventive care, and supportive long-term care. Fostering self-efficacy and control is one of the goals of the well-respected chronic disease self-management program (Lorig, Sobel et al. 1999), and obtaining screenings and vaccines reduces the incidence of serious illnesses.

Data on preventive care and screening show that most older adults in the U.S. and MA meet targets (Table 2) and that MA ranks in the top half of the country on most measures. Nevertheless, more than a third of older adults in MA have never been vaccinated for pneumonia, nearly a third have never been screened for colorectal cancer, and 29% were not vaccinated for the flu in the prior year. Data on disability and illness show that MA is again among the stronger states, but some level of disability is still widespread among older adults (31% by this measure), and the average older adult spends nearly five days a month in a physically unhealthy state.

Being able to understand and manage one's health care is in part dependent on health literacy, which is defined as the "capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."⁶ A measure

of basic literacy is the ability to read a one-page article about a health condition. Thirty-nine percent of people age 75 and over do not have even this level of literacy.

Feel safe and secure: As seen above, older adults include security and stability in their physical environment, in their social supports, and in their family as part of their definition of health. Being able to feel safe and secure is strongly influenced by social and economic factors that may be beyond the control of individuals. The economic status of older people affects their ability to buy adequate housing, food, transportation, health care, and leisure time activities.

Because of Social Security and Medicare, poverty rates among older adults in 2006 were lower than younger age groups (9% of older adults versus 11% of working age adults and 17% of children). However, older women are much more likely to be poor than older men (Table 1), and rates of poverty among Hispanic older adults (19%) and black older adults (23%) were much higher than among non-Hispanic whites (7%). Moreover, 26% of older adults lived on incomes that were between the poverty level and 200% of poverty. Thus, more than one-third of older adults are in very vulnerable economic situations.⁷ These figures all precede the current recession.

The living arrangements of older adults correlate with the availability of caregivers in the case of illness and disability and also with the likelihood of isolation. In 2007 older men were much more likely to live with their spouse and less likely to live alone than older women (Table 1). Older non-Hispanic white women and black women were more likely to live alone (40% each) than older Asian women (20%) and Hispanic women (26%).

Multiple factors: Many of the best studies of the effects of risk-related behaviors on

⁵ http://www.cdc.gov/nchs/data/series/sr_10/sr10_240.pdf

⁶ http://www.agingstats.gov/agingstatsdotnet/main_site/default.aspx

⁷ An excellent analysis of the economic vulnerability of seniors in Massachusetts is Meschede, T., T. Shapiro, et al. (2009). Living Longer on Less in Massachusetts. Waltham, MA, Heller School, Brandeis University.

health and mortality use multivariate analyses to assess the joint effects of multiple risks. These include healthy diet, not smoking, moderate alcohol intake, regular exercise, and low waist circumference or body-mass index (BMI). Impacts of being on the "healthy" side of combinations of these behaviors have been associated with lower rates of infection (Leveille, Gray et al. 2000), mental distress (McGuire, Strine et al. 2007), and death (Spencer, Jamrozik et al. 2005), as well as absence of chronic illness (Burke, Arnold et al. 2001).

In their long study of two cohorts of college and inner city men, Vaillant and Mukamal tracked six outcomes as ingredients of HA: physician assessed health, self-assessed health, length of life without disability, objective mental health, subjective life satisfaction, and satisfaction with social

supports. Men who scored high on all six were called the "happy-well" and those who scored poorly were called the "sad-sick." They found that there were seven protective factors that are to some extent under personal control and that distinguished the happy-well from the sad-sick: not overweight, regular exercise, more education, no abuse of cigarettes or alcohol, good relationship with spouse, and "mature" defenses to dealing with distress (e.g., suppression, humor, altruism, anticipation, and sublimation) (Vaillant and Mukamal 2001).

The respondents to interviews conducted for this Issue Brief also tended to cite multiple factors when they were asked about what HA meant to them (Figure 3).

Summary: Several points stand out from this review.

Figure 3: Concepts of Healthy Aging from Respondents

- "Development and maintenance of optimal physical, mental and social well-being and function in older adults."
- "Health is how you feel and function.... Lots of things play in. Just getting out can impact your health."
- "Maximizing resilience and minimizing risk to promote the achievement of self-determination throughout life."
- "Wellness — in body, mind, and spirit."
- "I like the CDC's 2010 goals: living longer, healthier lives and eliminating health disparities."
- "Keep active and involved and you fare better."
- "It's public health across the life span. At the big level it's bringing needed supports for living with integrity to function in the world.... At the small level, it's getting people to change their behavior - chronic disease management, exercising...."
- "At a basic level, HA includes income security, access to affordable health care. The elders we work with often say they hoped that older years could be less trouble instead of being a struggle to survive. One vision is to live in a community that has the supports to help people survive."

- The things that foster HA are for the most part the same things that foster health in the rest of the population. The components for HA could thus also be called the components for lifelong wellness.
- Although we know a great deal about the behaviors and the supports that foster HA, many older adults fall short on some factors, while most older adults fall short on others. There is a great deal of room for improvement.
- The risks for unhealthy behaviors and for poor supports are not evenly distributed. Low income creates the greatest risks since it reduces the opportunity to buy healthy food, transportation, good and safe housing, health care, and more.
- Old age is filled with a variety of losses, and the capacity for resilience and adaptation to loss is related to maintaining good mental health and avoiding depression, substance abuse, and despair.
- Many risks and protective factors are environmental, e.g., safe or unsafe communities, a network of friends, a built environment that fosters driving rather than walking.

The next section of the Issue Brief turns to these latter environmental factors.

The Systems Model for Healthy Aging

This section proposes that the promotion of HA should be approached through a systems model. It also introduces some of the players in the system -- for example, state and local government, provider agencies, and social service programs - as well as the roles they play currently and could play in an improved system. Roles in HA relate not only to how players relate to one another, e.g., in terms of referrals and coordination, but also to their own

programming. The types of questions that arise include: Are current programs operated consistent with the concepts of HA, e.g., the empowerment of older adults? How ageist is the rest of local government? How paternalistic, i.e., service driven, is the aging network?

A compelling model for explaining these relationships between individuals and their surroundings is "socio-ecological" theory, first articulated by Urie Bronfenbrenner (Bronfenbrenner 1979). Figure 4 is adapted from Alcalay and colleagues (Alcalay and Bell 2000) and is informed by Bronfenbrenner as well as scholarship from the University of California, Irvine (UCI 2009). It highlights several features of the socio-ecological model as applied to efforts to foster healthy aging:

1. Health promotion - HA is in essence a health promotion effort, and as such it is targeted at both individuals and the environment. The health-promoting interactions of individuals and their environments produce HA.
2. The Individual - Individual behavior is shaped in part by knowledge, skills, capabilities, and attitudes, but also by the environment. Knowledge, skills, etc. can be acquired.
3. Multiple dimensions in the environment - The environment in which an individual lives includes subsystems broadening out through immediate social relationships, community organizations, providers, levels of government, cultural beliefs and traditions, economics, and the physical world. Community organizations, providers, and government are key actors in shaping the environment, particularly when it comes to promoting HA.
4. Systems - Actions at one level in the environment affect other levels.
5. Reciprocity - The environment not only shapes individual behavior, the sum of

individual behaviors affect the environment.

6. Difference - Environmental factors may affect individuals and communities differently, based for example on their economic and cultural status.
7. Effective interventions - Interventions are most effective at the community level, but it is best to intervene at multiple levels.

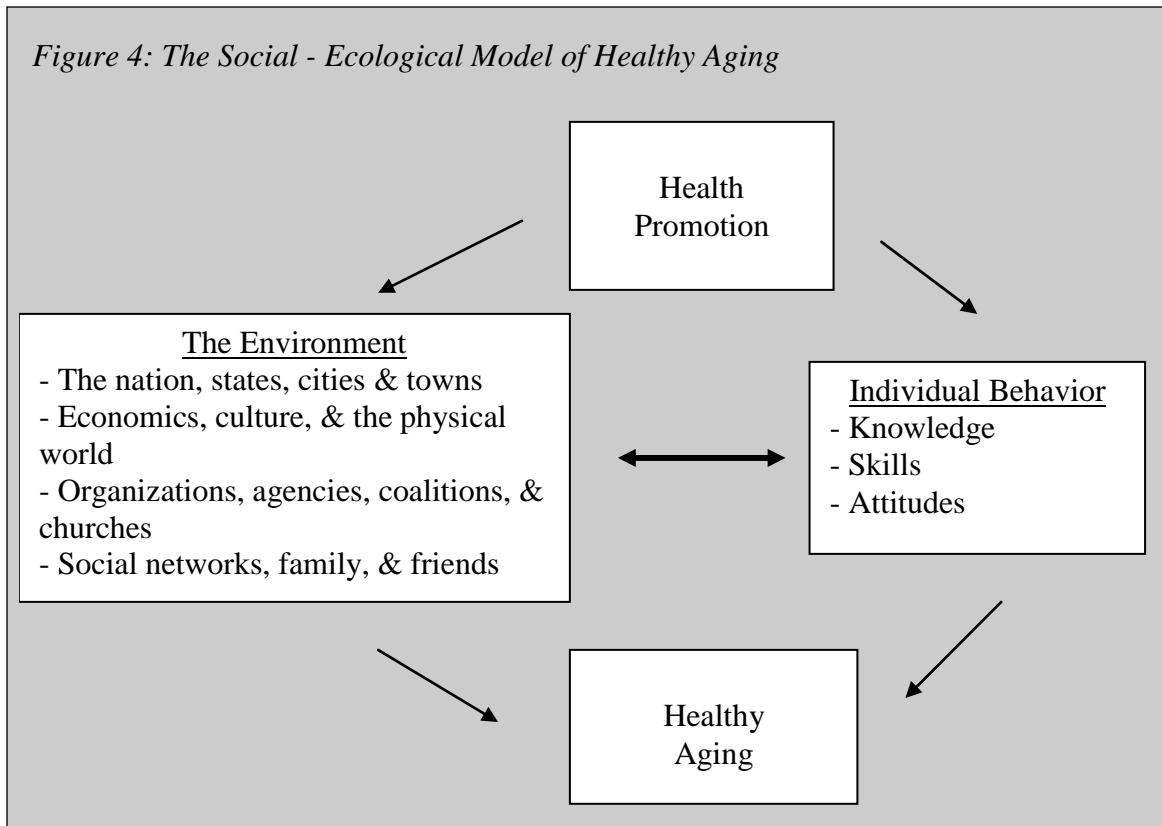
The socio-ecological model thus includes the goal that older people will act and think in ways that promote their own physical, social, and mental well-being. But it also recognizes that people do not act and think in a vacuum. The CDC's Healthy Aging Research Network states that optimal functioning of individuals (HAN 2009).

"...is most easily achieved when physical environments

and communities are safe and support the adoption and maintenance of attitudes and behaviors known to promote health and well-being; and by the effective use of health services and community programs to prevent or minimize the impact of acute and chronic disease on function."

Similarly, according to Whitelaw (Beattie, Whitelaw et al. 2003; Whitelaw 2008), healthy aging includes not only individual behaviors that promote health, but also communities that:

- Provide opportunities to be healthy and safe;
- Have physical environments that promote rather than block healthy behaviors;



- Support attitudes and behaviors known to promote wellness and well being;
- Provide programs that preserve function and social connections; and
- Support effective use of preventive health services.

Further, although the local community environment is key because that is where individuals live, communities cannot be effective without support from the broader environment, including large agencies and organizations, states, and the federal government.

The Institute of Medicine succinctly lays out the challenge to HA from unhealthy environments:

“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.”

One of the Massachusetts officials interviewed lays out the needed approach to counter this "conspiracy":

"I see healthy aging as strategic planning: the interplay of individual responsibilities and environmental/social responsibilities. Who is responsible? All levels - including federal/state/local governments, providers/agencies, and individuals taking responsibility for their own health."

Respondents emphasized two other dimensions of the systems arguments: the consistency of HA with a lifespan approach to wellness, and the need to combat ageism. A lifelong approach makes sense because

the things that are good for older adults to do to stay healthy are generally the same things that younger people can do, and starting earlier in life has benefits that accrue with age. Regarding ageism, if society openly acknowledges that we are all aging and that aging is not something to be avoided or denied, the stigma related to aging will be reduced. An important effect is that older people will be less likely to internalize the stigma. The quotations from respondents on these issues in Figure 5 show that sometimes these two points were mentioned as two sides to the same coin.

Programming for Healthy Aging

Figure 6 provides a more concrete view of the environment for HA, i.e., the actual organizations involved in developing, funding, delivering, supporting, and evaluating HA programs. In the box at the top of Figure 6 are programs and organizations that are involved at multiple levels. In the boxes around the sides and bottom are programs and organizations that are supportive of older adults in a variety of ways and areas, including being directly involved in HA initiatives. It is certainly a complex picture. On the one hand it looks like an intimidating challenge to get so many players working together. On the other hand, the figure highlights the opportunities for varied players to get involved in each community, depending on their interests and capabilities.

At the top of Figure 6 are federal agencies that shape and fund programming that is administered and delivered at the state and local levels, including:

- The Administration on Aging (AoA) supports a national network of State Units on Aging (e.g., EOEA in MA) and local Area Agencies on Aging (e.g., operated by 23 of the 27 Aging Services Access Points in MA), as well as local Senior Centers run by Councils on Aging in each town.

Figure 5: Respondent Comments on Ageism and Lifelong Wellness

"Healthy aging should be part of a lifespan approach to health, which would help to address ageism as a barrier."

"How does it become the norm to age? We need to work on re-norming. Why should people feel as if they need to apologize for aging?"

"Across the life span is key. What you do when you are young influences what you do and how healthy you are when you are old. We need to fight ageism - eliminate the stigma - and acknowledge we are all aging. There is an 'us-and-them' dynamic we need to fight. Make it all 'us.' Here's a way to frame it: Aging together. Families and friends go out and exercise together, and along the way they pick up neighbors. You get both exercise and community."

"Older people don't like to think they're losing abilities. There's a stigma. Then we see someone not going out because they don't want people to see them using a walker."

"We need a cultural shift - a Tipping Point— like with smoking in public. Now we have to do something similar with older adults so that it's not just helping people age well but they're helping us. We need to not look at older adults as victims. Will boomers see this and start to put in place what they want? Not to be a "victim" who needs care. Can we get to a Tipping Point where the word is 'Aging is wonderful....These are the valuable ones'?"

Core AAA and ASAP services include case management and in-home support services for frail older adults, as well as information and referral. Core services of Councils on Aging include transportation, information and referral, congregate and home-delivered meals, and recreational/ social activities.

- The Centers for Disease Control and Prevention (CDC) is involved in a wide range of prevention activities, including funding the multi-university Healthy Aging Research Network, which develops HA programs and tests their efficacy.
- The National Council on Aging (NCOA) is a non-profit organization whose mission is to improve the lives of older Americans. Its Center for Healthy Aging operates an AoA-funded Technical Assistance Center that supports an AoA grants program to

24 states (including Massachusetts) to further test effective HA programs in real-world service delivery settings. These evidence-based programs, which are detailed below, help participants to gain the knowledge, skills, capabilities, and attitudes to do things that can improve their health.

- The Centers for Medicare and Medicaid Services (CMS) operates Medicare and Medicaid, which pay for health care and preventive care. Medicaid pays for long-term care supports in the community and in nursing facilities.
- Other broad supporters are private charitable organizations, which fund innovation and fill gaps in public funding. An example is the Commonwealth's Sustainable Systems grant from NCOA, which gave Atlantic Philanthropies foundation funds to eight states to plan for sustaining CDSM programming. The Commonwealth

is one of eight states to receive one of these grants in the current funding round.

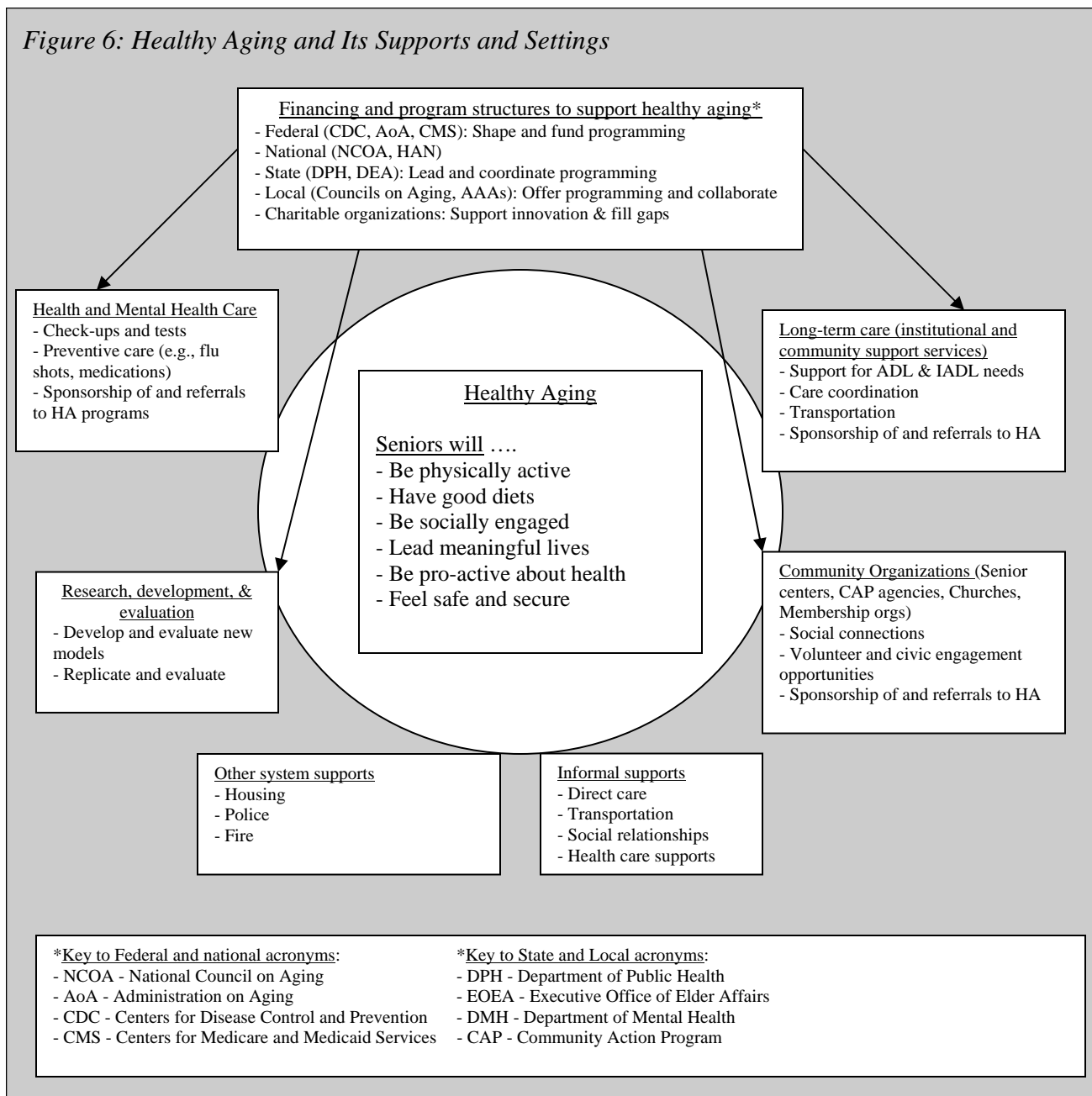
- Also, professional, trade, and citizen organizations play important supportive roles.

The next boxes in Figure 6 include health care, long-term care (LTC), and community organizations, which provide important supports that keep older adults healthy and independent. To do this, they receive

support from the funders at the top of the figure. Also pictured at the bottom of the figure are supports that are not part of the formal health and LTC systems, including formal systems such as police, fire, and housing, as well as family caregivers.

All of these programs and actors are pictured to overlap and intersect with the circle of HA efforts and with each other because they comprise the socio-ecological environment of older adults. Their services and supports for health care, long-term care,

Figure 6: Healthy Aging and Its Supports and Settings



income, safety, housing, social relationships, and more are essential to older adults' wellbeing.

The key HA systems question is whether they go beyond their standard missions and practices and become active partners in HA initiatives. Basic ways that formal organizations can do this include sponsoring specific HA programs (e.g., evidence-based programs), and/or by better linking clients and patients to HA programs (e.g., by setting up programs to identify at-risk older adults among their clientele and to refer them to HA programs). A more fundamental way for these organizations to promote HA is to change the ways that their own services are provided to be more consistent with the tenets of HA, e.g., nursing facilities moving their operations toward person-centered care or "culture change" (Leutz, Bishop et al. 2009).

Evidence-Based Programs

Over the past few years, with the support of AoA and NCOA, state agencies have been partnering with community-based agencies to offer evidence-based HA programming across the Commonwealth. Before turning to the details of the Commonwealth's efforts, this section of the Issue Brief first describes the evidence-based programs in more detail.

Researchers have developed and tested a large number of programs to help older adults gain the knowledge, skills, practice, and confidence to lead healthier lives and better address the risks that their health conditions and impairments may pose. Research on some programs has provided evidence that the programs improve outcomes for participants (e.g., through reduced falls, weight reduction) and perhaps save resources for society (e.g., through reduced hospital admissions).

Some of the evidence-based programs use a

"train-the-trainer" model, whereby Master Trainers get extensive training and then train the individuals who will actually lead groups of older adult participants. Time for training for Master Trainers varies from 5 days for Chronic Disease Self-Management (CDSM) to two days each for Matter of Balance and Healthy Eating. The group trainers are generally lay persons. For example, in the widely replicated CDSM program, the lay group leaders are often older persons who have chronic diseases themselves.

Other programs train coordinators of home care service programs with new skills so they can work more effectively with their clients. Examples include Healthy IDEAS, which adds depression awareness and management into care coordination, and the Medication Management Improvement System.⁸

The evidence-based programs use a variety of techniques to help participants succeed. One element is social persuasion and cohesion, which comes from providing the program in a small group setting with a leader and other participants grappling with the course's issues. During the series of workshops the members of the group often bond and support one another. Another element draws on self-efficacy and empowerment theories - if people think they can do something, they probably can - to help participants solve problems, plan actions, and follow through. A third is modeling and skills mastery, e.g., around management of conditions.

All 24 of the states funded by AoA and assisted by NCOA are required to implement the CDSM program. In addition, each state participating in this grant program could select and implement one or more other evidence-based programs such as those listed below.

- Pro-Active Management of Health
- Enhance Wellness

⁸ <http://www.homemeds.org/>

- Physical Activity – Enhance Fitness, Active Living Every Day, Healthy Moves, Fit and Strong
- Fall Prevention - Matter of Balance, Stepping On, Tai Chi: Moving for Better Balance
- Nutrition and Diet – Healthy Eating
- Depression– PEARLS, Healthy IDEAS

In its effort to implement the AoA/NCOA HA programming, the Commonwealth has partnered with three community agencies to lead the training for CDSM, Matter of Balance, and Healthy Eating (Figure 7). The partner agencies have in turn trained a large cadre of trainers and recruited a wide range of agencies to sponsor the core evidence-based programs. Besides the

evidence-based programs, other Massachusetts initiatives that support older adult wellness include Massachusetts in Motion - Keep Moving walking clubs, which are operating in 133 communities, and a program on Older Adults and Substance Abuse, which has 150 organizations and 200 individuals involved. The more these agencies and organizations communicate and collaborate to form the supportive community for HA, the more likely older adults will hear the messages, find the programs, use the supports, and make and sustain the behavioral changes that comprise HA.

Approaches to Promoting Community-Wide Healthy Aging

Given this background on the health status of older adults, the individual behavioral elements of HA, and a systems model for thinking about how to change individual behavior and environments, this section

Figure 7: Highlights of the Commonwealth's Evidence-Based and Other HA Programs

The Executive Office of Elder Affairs is one of AoA's state grantees, and it is working in partnership with the Department of Public Health and three local partners to implement three evidence-based programs. As of August 31, 2009 here are performance data:

- Chronic Disease Self Management - Coordinated by Elder Services of Merrimack Valley and being implemented in 71 sites, including residential facilities, multi-purpose social service organizations, healthcare organizations, councils on aging, mental health club house, assisted living, hospitals, and senior housing. Data: 6 T-Trainers, 76 Master Trainers, 101 Group Leaders. 858 older adults enrolled - 72% completed.
- A Matter of Balance - Coordinated by Action for Boston Community Development and implemented in 31 sites, including senior centers, residential facilities, adult day health centers, YMCA, rehabilitation centers, district police office, multi-purpose social service organizations, and assisted living centers. Data: 22 Master Trainers, 99 Group Leaders. 442 older adults enrolled - 86% completed.
- Healthy Eating - Coordinated by Hebrew SeniorLife and implemented in 60 sites, including residential facilities, senior centers, and healthcare organizations. Data: 68 Master Trainers plus 87 Group Leaders. 548 older adults enrolled - 80% completed.

The initiatives use the RE-AIM model for assessing whether the programs are reaching the target population, achieving buy-in from agencies offering programs, implementing the interventions effectively, and maintaining them over time (RE-AIM.org 2009).

reviews how the Commonwealth and its communities are promoting HA. Because HA is a community venture, this section is organized by the types of communities in which older adults live, including residential care (nursing facilities and assisted living), congregate housing, and the broader community. Because communities are also differentiated by economic class, and disparities in HA are related to class, these dimensions are also addressed.

Healthy Aging in Residential Care

Communities: The concept of HA may seem like a contradiction in terms for individuals who are already so physically and/or cognitively impaired that they are living in assisted living or nursing facilities. This is far from the truth according to informants for this report and from the data on HA programs. There are several approaches to HA in these settings that go beyond their continuing to deliver their core services of housing, assistance with ADLs and IADLs, food, and (in the case of nursing facilities) skilled nursing and therapy services.

First, all three of the evidence-based HA programs being offered around the Commonwealth are being offered in nursing facilities and assisted living residences. However, from the data on the number of total evidence-based program sites (a maximum of 162 according to Figure 7) it is clearly the exception rather than the rule, given that in 2007 there were 428 nursing facilities and hundreds more assisted living residences in the state. Because injuries from falls are one of the controllable risks for frail older adults in residential care communities, the Matter of Balance program is highly relevant. Research on the program shows that even very weak individuals can regain strength and reduce the likelihood of falling. In assisted living settings, being able to understand one's illnesses and medications is important, because older adults in these settings by and large need to be able to care for themselves. Offering CDSM to older adults who are cognitively intact could lead to improvements in their abilities to manage

their health care and conditions.

Second, the social and relational dimensions of life in residential care are critical to the personal support that older adults receive and to their opportunity to find meaning in life, including the chance to "go and do" something meaningful. In this regard, the so-called "culture change" and "person-centered care" movements to create more home-like atmospheres in nursing homes and to try to be more flexible in honoring residents' preferences are important HA initiatives (Leutz, Bishop et al. 2009). Culture change has also been associated with decreases in staff turnover, which also contributes to a richer community atmosphere. Culture change is a large undertaking for a nursing facility. Not many facilities in the Commonwealth are very far along, but culture change has great potential to make nursing facility communities more "healthy" places to live.

Congregate housing communities: Older adults living in congregate housing offer a ready-made opportunity for HA programming. This includes older adults on both ends of the income scale - those with incomes low enough to qualify for publicly subsidized units, and those with incomes high enough to afford a continuing care retirement community (CCRC). Through a partnership with state ASAPs, low-income older adults in public housing can receive help with IADLs and ADLs in the Commonwealth's Supportive Housing program. This is not the same package of services and amenities as a CCRC, but Supportive Housing does allow older adults in public housing to live there longer with more disabilities.

Although resources, services, problems, and facilities may differ, older adults in congregate settings have much in common. They moved to congregate settings because they were old enough to qualify, and they overwhelmingly seek to "age in place." They can be identified and reached easily. With the help of staff and common space, there is the opportunity to form and maintain social relationships and participate

in meaningful activities.

The background interviews identified several examples of going further in senior housing to foster elements of HA:

- Older adults in senior housing can organize to improve and maintain their housing. For example, the Massachusetts Senior Action Council is a membership organization of older adults (\$10 per year dues) that has seven local chapters across the state. Their mission is to organize low-income older adults around issues that matter to them. They are working across 16 Boston housing authority sites to maintain adequate security staff. Leadership development and civic engagement are also goals. Some of the senior housing settings moved from as low as 7% voting and to as high as 60%.
- Hebrew SeniorLife has a comprehensive HA strategy for its residences for older adults, including both its upscale CCRCs and its subsidized housing. All residences have fitness rooms, with trainers on staff. Subsidized housing residents elect a president and council, and more than 50% of residents volunteer as part of a welcoming committee, manning the front desk, and other activities. Three of HSL's housing sites are among 80 senior housing programs in the U.S. that use the "COLLAGE" assessment to document and respond to residents' cognitive, physical, social, and emotional needs.⁹ The assessment helps shape action plans that are passed on to residents and staff concerning exercise, social engagement, nutrition, and other areas. A larger research effort is tracking outcomes for COLLAGE.

The broader community: The great majority of older adults are spread among the rest of the population, living in apartments, condominiums, and single-family homes. The full range of HA programs and strategies are appropriate for older adults living in the community, but

their specific needs and the ways to approach them differ by demographic and functional status, living arrangements, geography of their community, their patterns of social connections or isolation, the safety of their neighborhoods, and more.

Frail older adults: Frail older adults, especially those living alone, are the most vulnerable to many of the things that HA is trying to avoid, e.g., falls, hospitalization, poor diet, social isolation, and lack of a sense of meaning in life. As the demographic data in Table 1 show, nearly 75% of older men but only about 40% of older women reside with their spouse. Women are twice as likely to live alone as men, and the proportion of older adults living alone rises with age.

The core of supports for frail older adults in the community in the Commonwealth is the statewide network of 27 Aging Services Access Points (formerly called Home Care Corporations), which provide in-home and community-based support services for low-income and moderate-income older adults. Twenty-four of the ASAPs are also Area Agencies on Aging, through which they provide Older Americans Act services such as information and referral, transportation, ombudsman, and caregiver support programs. Some ASAPs have been involved in HA activities, e.g., Elder Services of Merrimack Valley is the lead training agency for CDSM in the state's AoA and NCOA Sustaining Systems grants (Figure 7), but for the most part ASAPs are focused on home care service provision.

Beyond basic supportive long-term care services that are hopefully supplied by formal and family caregivers, depending on specific situations and needs, HA interventions for frail older adults could include any of the evidence-based programs, help getting out for recreation and socialization, and/or visits from outsiders to bring social contact to those who have a difficult time getting out. Making this happen takes (1) recognition from caregivers or older adults themselves that there is a need, (2) knowledge of

⁹ <http://www.hebrewseniorlife.org/hsl.cfm?id=706>

options available to address the need, and (3) availability of supports, e.g., supported transportation, to make the connection. Evidence-based programs delivered through case managers, such as Healthy IDEAS, PEARLS, and Medication Management could be delivered in the home.

The kind of work that needs to be done to reach frail older adults in the community was described very well by one of the Boston-area respondents (Figure 8). It points to the need to know the community and even individual older adults, as well as the need to have convenient space to offer programs. The description also shows that the Commonwealth's array of evidence-based programs, while impressive, is not yet the integrated system that many envision. Respondents pointed out that it is unusual for physicians to refer their patients to the programs, and the same is true for ASAP case managers. And this is understandable, since in most areas of the state, there is no reliable and easy-to-access information system to find out when and where classes are offered.

Respondents pointed to the need for broader, community wide information and recruitment efforts that would engage older adults and diverse organizations and help them to "own" these programs. As one respondent pointed out, important as individual connections are, recruitment cannot be "just one at a time." One piece of the model might be to train older adults to be leaders and champions. Also, efforts need to be community-wide and well publicized and organized, e.g., the Boston metro area would say, "In the next 6 months we are offering programs for A, B, C, and D. Find one that works for you...."

Another requirement for frail older adults' participation in HA programs is reliable and affordable transportation. If a family member or friend is not available, older adults need to connect with transportation programs. For example, one of the respondents in this study was SCM Transportation, a non-profit that provides 9,000 trips a month to 3,000 people in

Somerville and nearby towns. Ninety percent of their riders are older adults and more than 80% of them have low and moderate incomes. Rides are provided in vans and are primarily to adult day care, medical care, and senior centers. Drivers are chosen and trained to get to know people and to tailor services to needs. Funds come from Medicaid and PACE (to cover trips to health services and day care), community development block grant (covers shopping trips), ASAPs, and Councils on Aging (to senior centers). SCM's only source for subsidized trips to cultural events is a grant from the Tufts Health Plan Foundation.

Although this system provides the basics, it is seen to be inefficient (large vans) and not user-friendly (long trips). Also, riders generally need to make reservations well in advance, as they do with The Ride, another supported transportation model. Respondents believe that volunteer models are a better alternative for many trips that older adults who cannot drive or use public transportation need to make. The leader in volunteer models is Independent Transportation Network, which started in Maine. It is a time-bank model in which volunteers use their own cars and insurance. They charge by the mile and are open 24 hours a day. The volunteers can contribute back their profits or get credits in the time bank that they can use later. A problem with this model is that there is little training of drivers, little access for people with wheelchairs, and poorly covered liability. A promising future model is a spin off from ZIP car called GoLoco, which is an online ride sharing model based on the social networking model. Trust in the driver is based on who you know who knows the driver. Rides are posted on an electronic ride board. The system even calculates cost sharing.

Once frail older adults have a way to get out, they can find HA programs as well as socialization and recreation opportunities (e.g., more trips) in senior centers, community centers, and adult day care centers (which tend to serve much more

Figure 8: Working the Community to Recruit Elders into HA Programs - ABCD

Action for Boston Community Development (ABCD) is a non-profit community action agency that includes services for older adults in its programs. They are the lead training agency for Matter of Balance, and they also try to find seniors in Boston who could benefit from any of the evidence-based HA programs and to connect them with the programs.

Recruitment. ABCD gets the word out about programs through partnering with organizations and agencies, e.g., the East Boston Neighborhood Health Center, PACE centers, and housing buildings. They use a Tufts Health Plan Foundation grant to recruit new people to Matter of Balance in the West and North Ends. They put fliers out and also knock on doors. The people who don't get out are the hardest to reach.

Participation: Participation is not a problem in Matter of Balance. If you go to the places where seniors are, "they get it." Using neighborhood sites helps with participation. The ABCD satellite offices vary in space. Some share space with community organizations. ABCD tries to hook Balance graduates to continuing activities, e.g., a walking group.

The vision and the reality: Ideally the evidence-based programs would have a web-based calendar across the state that you could click on and enroll in a local class. Limits on staff, funding, and training make the reality far short of the ideal. For example, two neighboring councils on aging recently called ABCD for help forming a Chronic Disease Self-Management class for their communities. ABCD looked around for coaches to do it, but it was difficult to recruit them without a stipend for the coach, which was not being offered. One way to move toward the ideal with adequate funds and steady referrals to fill classes would be to have health plans (1) support coaches and (2) sell the evidence-based programs to doctors. But the programs need to be in place if they expect to receive referrals from doctors.

frail individuals than senior centers). The best-equipped day care centers have their own exercise equipment and programming.

Another support for frail older adults in the community that our interviews found are volunteers who visit older adults in their homes. An example we found is MATCH-UP Interfaith Volunteers in Boston (Figure 9). They connect volunteers from the community (usually working-age adults) to frail older adults. The goal is to create kin-like relationships that bring satisfaction and connection to both sides, and in turn kin-like supports that include rides to recreation and community services result. This work is supported completely by foundations and fund raising.

Independent and interdependent older adults: The great majority of older adults living in the community can take care of their own personal and instrumental needs, and they can also get around independently

inside and outside of their homes. Others live with little or no help from formal services, but they may rely on family and friends for help with things such as shopping, heavy housework, and transportation. They may also use adaptive equipment and devices or home modifications to accommodate impairments. They may also be contributing to their families and communities in the form of caregiving, volunteering, and civic activities. In short, there is a continuum of capabilities and needs for help among older adults in the community, and they may be both receiving from and contributing to their families and communities in interdependent ways.

The types of HA programs that are particularly relevant to these older adults are preventive to help them maintain independence. Another need is social connections and meaningful activities, such as volunteering and other forms of civic

engagement. Also, broad strategies for environmental changes can support their safety and continued independence. Finally, despite their independence, many of these older adults have complex conditions, risk of falling, poor diets, and mental health challenges that can be addressed by participation in evidence-based HA programs.

It is difficult to summarize or synthesize the broad range of activities that older adults find meaningful in recreation, family, culture, religious groups, senior centers, civic organizations, politics, volunteering, and more. Some of these activities are intergenerational, while others are age-segregated. For many older adults, particularly those with low incomes, the local senior center is a core support. While AAAs are the local administrative arms for

Older Americans Act programming, senior centers are the local faces for key program elements, including activities and congregate meals. In the Commonwealth, 349 local cities and towns have a large say in the extent to which they will supplement core AoA funds going to their Council on Aging to enhance senior center programming and facilities.

A good example of a vital senior center is Kit Clark Senior Services in Boston (Figure 10). They serve a largely low-income population, and are a nutrition lifeline for 1,200 older adults a day. Moreover, by bringing older adults to the center and being in touch with others at home who cannot come to the center, they break down potential isolation and link vulnerable older adults to social life, services, and healthy activities such as walking clubs, line

Figure 9: Volunteers to Support Frail Elders - MATCH-UP

Boston's MATCH-UP is one of 500 Interfaith Volunteer programs in the U.S. that recruits and manages volunteers to form relationships with frail older adults and other persons with disabilities. The mission of MATCH-UP is to decrease social isolation and increase quality of life for older adults and people with disabilities. Generally volunteers make an 8-10 month commitment to spend at least two hours once a week with an older adult.

Relationships: Both the volunteers and the older adults are 75% female and 25% male. Volunteers range in age from 9 to 90 with a majority of the volunteers between the ages of 20 to 50. MATCH-UP is reaching out to the newly retired to attract a larger cohort of persons in their 60s. In a way, they are creating families or familial-type relationships for older adults whose children live far away or who don't have children. Having a relationship with a volunteer visitor may be more meaningful to an older adult than a relationship with a paid professional. In the words of a MATCH-UP staff member, it sends the message that "something is still good about me. I have something to give." It can mean that "someone will remember me when I'm gone" and allow an older adult to find peace at end of life. "He knew I knew his stories, so he could die."

Activities: Volunteers address quality of life issues—taking a frail older adult to see the ocean, going to the mall. These are things that public programs do not cover. In addition to the long-term volunteer program, MATCH-UP has a Medical Escort Program, which provides transport and accompaniment to appointments; a one-time assistance program for help filling out forms, carrying boxes, driving, reading a lease for a blind person, etc.; a Strong for Life program, in which trained volunteers do exercises with older adults in their homes using a Thera-Band and video; and a Walking Buddies program, which provides a companion to take frail older adults for walks.

Referrals: MATCH-UP coordinates and receives referrals from a wide array of places, primarily from homecare agencies, hospitals, visiting nurse associations, the Veterans Administration and other agencies. Other referrals come from physicians, clergy and family members.

Figure 10: A Full Service Senior Center - Kit Clark Senior Services

Mission and services: Kit Clark is one of the largest of the 29 sites in Boston where aging network services are delivered. Headquartered in Dorchester, it has programs in 35 locations and serves a low-income population: 90% have incomes below 100% of poverty. Its services include:

- Nutrition - 700 meals a day at 30 nutrition sites across Boston for a voluntary contribution and 500 delivered to homebound older adults.
- Adult day programs, including meals, activities, and a memory loss program.
- 40 vans for food delivery and transportation to and from the center.
- Art and recreation programs.
- A fitness center and a Fit-4-Life Program.
- A senior health center with two physicians three times a week.
- A homeless shelter, congregate and transitional housing programs.
- A home improvement program.
- Individual and group counseling for mental health and substance use disorders
- Advocacy and case management for older adults with limited English proficiency.

Social connections: The senior center gets older adults out of their homes and into the community. It is also a place safe from violence. Elders' desires for independence and fear for safety can lead to isolation. If people ask for help and embrace interdependence, then their needs will be met more effectively. Some of the most high-risk older adults, the homebound especially, are hard to identify if they don't get out into the community. Even bringing meals to someone is an important way of reducing isolation. Sometimes the Meals on Wheels driver is the only person the older adult will see in the entire day, and they often serve as the link to the outside world.

Barriers: Kit Clark's limitations are mostly financial in nature. It relies heavily on "soft money" and so programs are begun that cannot be sustained once the grant ends. Funding is quilted together so there are always some holes. This stop-and-start funding also affects HA programs that Kit Clark has offered.

dancing classes, and yoga. The Massachusetts Association of Council on Aging and Senior Center Directors is the state trade association for the local Councils. The MCOA has been working with HA staff at DPH and EOEA to work out how to bring evidence-based HA programs to more senior centers. One option is to partner with local Y's to offer the physical programs, as is done in Northampton. More rural areas of the state pose challenges in finding master trainers and in the small numbers of older adults in many towns. One option is having neighboring Councils collaborate on offering programs. Another challenge is convincing cities and towns to invest in HA

programs for older adults. Their budgets are tight, and they don't receive any direct payback since they don't pay for the health care costs of older adults.

Healthy Communities: A significant challenge that even relatively healthy and independent older adults may face is a physical environment that is not conducive to a healthy lifestyle. For older adults in suburbia, this may include an environment built to use automobiles rather than walking for socializing and shopping. For urban and low-income older adults it may include an environment conducive to walking but that has limited access to healthy food (fresh fruits and vegetables) in local stores. In

both settings, walkways may be poorly lit for night travel, and crosswalks may be dangerous due to tripping hazards, bumps and inclines too steep for wheelchairs, and inadequate warnings to cars. Because people can often walk safely later in life than they can drive safely, being able to walk to shopping and social life is important.

A strategy for addressing these and other environmental challenges is the healthy/livable communities movement. The entire Summer 2009 issue of Generations, the publication of the American Society of Aging, was devoted to this movement, and it includes articles on models and local initiatives for creating aging-friendly zoning, housing, services, provider coalitions, and more. AARP's definition of a livable community is age-neutral:

"A Livable Community is one that has affordable and appropriate housing, supportive community features and services, and adequate mobility options. Together these facilitate personal independence and the engagement of residents in civic and social life" (Mia R. Oberlink 2008).

To date work in the Commonwealth on livable communities as a HA issue has resided in DPH's Division of Prevention and Wellness (formerly the Division of Health Promotion and Disease Prevention), which has an Office of Community Liaisons responsible for promoting policy and environmental changes for healthy communities. The Division is actively bringing public health information to local officials to consider in zoning and building decisions, including health effects on citizens of all ages (Figure 11). The Commonwealth's city/town form of local government vests land use and public works decisions in transparent and accessible town boards, which are ultimately answerable to city councils and town meetings. This creates opportunities for local lifelong

wellness advocates to shape the physical environments of their communities towards healthy models.

An additional advance for systematic approaches to HA is the transportation modernization bill passed by the Massachusetts legislature in the spring of 2009, which contains a healthy communities section. The bill mandates a "healthy transportation compact" among representatives from energy and environmental affairs, transportation, mass transit, and public health:

"The secretary (of transportation) and the secretary of health and human services shall work cooperatively to adopt best practices to increase efficiency to achieve positive health outcomes through the coordination of land use, transportation and public health policy...." (Legislature 2009).

Civic engagement: One of the basic ingredients of all HA models is civic engagement. When older adults band together with others to promote healthy communities or other causes, they are getting the side benefits of having goals and finding meaning in their lives, which have been associated with better health and longer lives. Although this aspect of the Rowe and Kahn "successful" aging model has been criticized as more available to healthy, wealthy, and well-educated older adults than to poor and sick older adults, there are counter examples in the Commonwealth. One is the Massachusetts Senior Action Council (see above), which has organized older adults living in public housing. Another active, grassroots, inner city group is Boston's Health Disparities Coalition, whose mission is to educate and empower its members to take more part in their health care and also to participate in HA activities such as exercise, healthy eating, and civic engagement. Based in Roxbury, the group has about 150 members who pay \$2 in annual dues. The Coalition's monthly meetings regularly attract 60-70

people to hear speakers on health-related topics.

Besides purely voluntary efforts, there are programs that recognize the value of the work of volunteers by providing small stipends, which can also put needed income in the pockets of low-income older adults. For example, the Foster Grandparents program (operated by ABCD in Boston and Quincy, Citizens for Citizens in Fall River, and Coastline Elderly Services in New Bedford) matches poor people over age 60 with children in Head Start and day care who need special help. The opportunity to help children as well as the small stipend are important spurs to keep these low-income older adults active and to provide

them with valued roles. The Corporation for National and Community Service supports stipends of \$2.65 per hour (tax free) for 15-20 hours of work a week. ABCD has 150 volunteers, and there are materials and training in English, Spanish, and Chinese.

Another community-based support organization that has received widespread attention is Beacon Hill Village (Figure 12). It is a non-profit membership organization that provides concierge and case management services, social networking and activities for members, and discounted access to services, including in-home supportive services. Although it does not have the financing to provide home care for members with ADL and IADL needs, it's

Figure 11: Healthy Communities in the Commonwealth

The DPH Division of Prevention and Wellness seeks to work with planning boards, zoning commissions, and health departments to facilitate the connection between land-use, transportation and public health. The goal is to help them see how their decisions affect older populations and that they can do things to promote HA. The Department has been working with the Massachusetts Association of Health Boards and Massachusetts Municipal Association to develop tools and resources to foster this connection.

Health information as a lever for change: The Department provides local boards of health with data about the health effects of new sidewalks or the location of new housing for people age 55 and over. Details include information about how traffic calming, crosswalks with adequate timers, and safe and reliable public transportation are all necessary for healthy aging. The "complete street" model of planning takes more than motorists into account. It asks, how does the physical land/streets meet the needs of walkers, bikers, drivers, public transportation riders, etc.? The Division staff also gives information and materials to planners that allow them to think through the health effects of location. Isolation is a major problem for older adults so it makes sense to build a 55+ community near shopping rather than in an auto-dependent location.

The built environment perspective is long-term in scope. In 20 to 30 years baby boomers will be the "old-old", so what will the physical environment we are building now allow and not allow? How would changes affect current childhood obesity rates? With help from several foundations, DPH is supporting initiatives to address obesity through better nutrition and more physical activity in 12 localities: Everett, Revere, Gloucester, Worcester, Fall River, New Bedford, Weymouth, Fitchburg, Springfield, and a collaborative of Lee, Lenox and Stockbridge. A requirement of the grants is to develop a partnership (a combination of municipal departments/officials and community organizations) to conduct a community-wide assessment using a CDC tool, and to develop and begin implementation on an action plan. Similar initiatives are underway in Boston, Holyoke, Somerville, and Boston under Kellogg and Robert Wood Johnson Foundations funding. According to one state official, a key lesson from these efforts is: "Little pots of money go a long way with many community agencies."

Figure 12: A Community Cooperative Model - Beacon Hill Village

Organization and mission: BHV was started by Beacon Hill residents who wanted help to remain in their homes as they aged. The concept is "aging in community," because helping each other and staying connected with friends and neighbors is core to BHV's mission. BHV is organized as a non-profit with a member board. The 450 members range in age from 51-80, with an average of 75.

Finances: Annual membership fees are \$600 for an individual membership and \$850 for a household (usually a couple). BHV receives no funds from federal agencies. An annual budget of \$475,000 supports four full-time staff. If a household makes \$45,000 or less they can apply for "Membership Plus," the lower-cost alternative that is partially foundation funded. Fifty of BHV's 350 membership units are in Membership Plus, which now has a waiting list.

Services: BHV is largely a concierge service that responds to member requests. One staff function is to act as gatekeeper to discounted services. They make sure work gets done in a timely manner and that members don't get taken advantage of. Staff also helps members organize activities. Forty percent of members join for social aspects—meeting new friends and joining groups (travel group, book clubs, bridge clubs, political clubs, etc.) Staff calls members every six weeks if they haven't seen them or heard from them. There is a peer support program for the frailest members called "The Connection." Sometimes younger members are paired with their frailer counterparts, and sometimes two frail people are paired to keep each other company.

Strengths and weaknesses: Financially, the vast majority of the members are white and most are relatively comfortable financially. This reflects the Beacon Hill population. There are replication sites in Cambridge and Martha's Vineyard and others are underway in Newton, Milton, and Wellesley. Replications in lower income communities have had to rely more on volunteers rather than paid staff. In terms of services, the model is strong on social activities, volunteer support, and coordination, but it is shallow in actually paying for services. It covers short-term geriatric case management, but long-term management is fee-for-service. Also, direct care services are discounted by 10% to 20%, but costs are high if extensive in-home support is needed.

member involvement, mutual support, and social activities make it a model for HA.

Healthy Aging in Other States

Respondents pointed us to other states as examples of progress and promising approaches to HA. They include Maine, Iowa, and Oregon. In addition, New Jersey provides some useful lessons and models for programming and policy, as detailed below. Elements that have helped it progress include a streamlined administrative structure, consistent state and local policies, a commitment and plan for addressing disparities, and a useful website.

Streamlined administration: New Jersey's State Unit on Aging (the Division of Aging and Community Services) and state health department are co-located in the Department of Health and Senior Services. NJ's AAAs are operated by the state's 21 counties, and the counties also have health departments.

Policies: NJ has committed to make CDSM available statewide and to also make other evidence-based programs available in each county. Practice standards for healthy aging are consistent between the local health departments and AAAs to foster collaboration and consistent programming. There is increasing collaboration at the county level, although who takes the lead differs by county (AAA, health department,

or community-based non-profit). The policy for Older Americans Act health promotion activities was recently revised to require that the OAA funds be spent on evidence-based programs. NJ is also reaching beyond older adults to offer CDSM to state workers, inmates of correctional facilities, and participants in addiction treatment/recovery.

Disparities: The State Unit has partnered with the DHHS Office of Minority and Multicultural Health to develop a HA infrastructure in minority communities. Contractors, which include agencies and religious organizations, receive \$25,000 to (1) find three people who reflect the community to become master trainers, (2) support master trainers as they implement two community workshops, 3) identify and train 10 peer leaders from the community, and (3) lead recruitment of older adult participants and oversee program delivery by the peer leaders. The State Unit coordinates the master training and provides program support. Successful programs can obtain one more \$10,000 contract to expand capacity. State funds have supported 18 initial contracts and 10 follow-up contracts. In the first year that CDSM was offered, 6% of the participants were minorities. Last year the figure was 41%.

Website: Healthy Aging initiatives figure prominently on the state's website (<http://www.state.nj.us/health/senior/index.shtml>). There are easy links to specific HA programs, and there is a Blueprint for Healthy Aging that explains how it all fits together. There are no links to local calendars of class offerings, however. The State Unit on Aging is in the process of updating this website.

Barriers: Leaders of HA in NJ have learned that there is more to successful programming than just training the trainers and signing up sites. Of the 450 peer leaders who have been trained, 200 have never led a peer class. The State Unit is now providing clearer guidance for sites about how to implement programs and making sure that new trainers have support

from more experienced trainers. The state also found that the CDSM name was a turnoff so they have renamed it "Taking Care of Your Health."

Conclusion

Healthy Aging is very much on the agendas of key agencies and organizations in the Commonwealth. The HA and lifelong wellness staff at EOE and DPH are working together closely, and they have been successful in obtaining federal and foundation funding to implement and test evidence-based programs in chronic disease management, falls prevention, nutrition, and other areas. Other elements of the network of agencies and organizations serving older adults are also sensitized to HA issues and strategies and participating in programming when they can. They include individual Councils on Aging, ASAPs, nursing facilities, trade associations, and older adult advocacy and membership programs. On a broader level, respondents pointed again and again to the fact that HA is more than offering evidence-based programs and fostering behavior change among older adults. It must also include a systems strategy that seeks to embed the tenets of HA in agencies' policies and programming, community planning and land use, professional practice, and more.

As can be expected, the most frequently cited barrier to expanding HA programming and participation is resources. In many specifics the shortfalls seem small, e.g., a stipend for a CDSM Program trainer so a class can be held. But creating the infrastructure in which the trainer should be working is a larger issue, because it requires organization throughout the system and resources to support that organization. The vision of having a web-based calendar of evidence-based classes is an example. It would take not only a newly linked-up website and someone to run it, it would also require administrative resources at local agencies to feed into the website, manage the signups and communications, set up the

rooms, and pay the trainer. It would also take coordinated outreach work by community-wide coalitions of agencies and local governments to find older adults who could benefit from the programs and to encourage and help older adults to sign up. It would take special efforts in low-income communities and among various racial/ethnic/language groups to make programs culturally competent. It would also take affordable and accessible transportation to get the older adults to the programs. And at this stage in the development of HA initiatives, it should include data collection and evaluation to show positive results, and dissemination of best-practice models.

Although resources are clearly needed to provide and publicize the evidence-based programs, outside foundation and federal support is unlikely to bankroll the effort fully or indefinitely. If offering evidence-based programs does not become part of the routine operations of community health care and social care systems, there is a real danger that they will wither away after the federal and foundation grants wind down.

This danger makes attention to the broader socio-ecological issues even more important. First is the need to change negative stereotypes about aging. Reframing healthy aging to include lifelong wellness - even for people with chronic illnesses and disabilities - is a promising approach politically. Another approach to combat ageism is to emphasize the idea of interdependence rather than independence - it is not a failure for older adults to seek and accept help, and caregivers who help are not just giving - they get something back from the relationship. Care giving and care receiving is another lifelong condition.

Second is the concrete need to change the physical environment to support wellness. Safe sidewalks and crosswalks, as well as walkways and bike paths that lead to shopping, schools, and recreation are tools for society not only to combat obesity and poor conditioning but also to combat pollution and global warming. Attractive congregate housing near shopping

(including healthy food) could lure isolated older adults as well as younger adults away from their single-family homes.

Finally, healthy aging needs to lose its image as a privilege and pastime for elites and add an image as available to and smart for all. Saying this is not to minimize the greater challenges that poor and low-income people face in finding and affording healthy food, having safe and pleasant places to exercise, having community support systems, feeling secure and hopeful about their lives, and overcoming other disparities. Those are surely real barriers, and changing them requires a policy agenda that is much bigger than healthy aging. But HA has a part in this agenda. The socio-ecological model of change has an arrow back from individual change to social change. Healthy older adults who are strengthened physically and involved socially can make a difference in their communities, just as their communities can make a difference for them.

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Appendix A: List of Individuals Interviewed

1. Ann Hartstein, Massachusetts Secretary of Massachusetts Executive Office of Elder Affairs
2. Ruth Palombo, Assistant Secretary, Program Planning and Management Massachusetts Executive Office of Elder Affairs
3. Anita Albright, Director, Massachusetts DPH Office of Healthy Aging
4. David Stevens, Executive Director, Massachusetts Council on Aging and Senior Center Directors
5. Chet Jakubiak, Director of Mental Health, Mass Exec Office of Elder Affairs
6. Bob Green, President, Massachusetts Association of Older Americans
7. Emily Shea, Director of Elder Services, Action for Boston Community Development
8. Dale Mitchell, Executive Director, Ethos
9. Reed Cochran, Executive Director, SCM Community Transportation
10. Zoila Torres Feldman, Executive Director, Kit Clark Senior Services
11. Judy Willett, Executive Director, Beacon Hill Village
12. James Seagle, President, Rogerson Communities
13. Nancy Whitelaw, Senior Vice President, Healthy Aging and Director, Center for Healthy Aging, National Council on Aging
14. Sarita Bhalotra, Associate Professor, Heller School, Brandies University
15. Vincent Mor, Chair of the Department of Community Health, Brown University School of Medicine
16. Leah Ojaama, Massachusetts DPH
17. Senator Pat Jehlen Massachusetts Joint Committee on Elder Affairs
18. Janet Seckel-Cerrotti, Executive Director, and Lois Waller, Director of Volunteers, MATCH-UP Interfaith Volunteers
19. Alice Bonner, Massachusetts Extended Care Federation
20. Jewel Mullen, MD, MPH, Director of Bureau of Community Health Access and Promotion, DPH
21. Loretta Dixon, Elder Health Disparities Coalition
22. Rep. Alice Wolf, Massachusetts Joint Committee on Elder Affairs
23. Amy Whitcomb, Executive Director, Health Care for All
24. Sue Baldauf, Mass Municipal Association
25. Carolyn Villers, Executive Director, Massachusetts Senior Action Council
26. Rob Schreiber, MD, Physician in Chief, Hebrew SeniorLife
27. Gerry Mackenzie, MSS, Program Manager, NJ Department of Health and Senior Services
28. Len Fishman, Executive Director, Hebrew SeniorLife