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The U.S. Long Term Care System: Development and Expansion of Naturally Occurring Retirement Communities as an Innovative Model for Aging in Place

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Abstract The current U.S. health and long term care systems are inadequately prepared to meet the diverse and changing needs of the rapidly growing senior population. This paper describes the importance of naturally occurring retirement communities (NORCs) to promote the health and mental well being of older individuals through the collaborative efforts of formal and informal home and community based services and support. NORCs are considered a crucial model for aging in place since older adults prefer to remain in the comfort of their homes, and services can be provided in a much more efficient and cost effective manner. This paper examines the strengths, opportunities, and challenges of existing NORCs and discusses the need for the development and expansion of additional NORC programs as an innovative and viable solution for older adults aging in place.

Keywords Naturally occurring retirement community (NORC) · Supportive service program (SSP) · Aging in place · Long term care · Elders · Seniors

Introduction

Older Americans are an important and growing segment of the U.S. population. Over 36 million Americans are aged 65 and older which accounts for 12 percent of the total population. This number is expected to rise dramatically as more baby boomers reach retirement age. By 2030, it is projected that there will be approximately 72 million over 65, accounting for about 20% of the population (Feldstein 2007). Current health and long term care systems are inadequately prepared to meet the diverse and changing needs of seniors that are essential for maximizing the quality of their lives. It will be especially challenging for long term care service providers, payers, and policymakers. One model that has been

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developed and used to promote the health and mental well being of older individuals is naturally occurring retirement communities (NORCs), a community development model to provide collaboration between formal and informal home and community based services and support. NORCs are considered a crucial model for aging in place since older individuals prefer to remain in the comfort of their homes, and services can be provided in a much more efficient and cost effective manner. Local demonstration projects funded by the federal government have created many NORCs across the U.S.

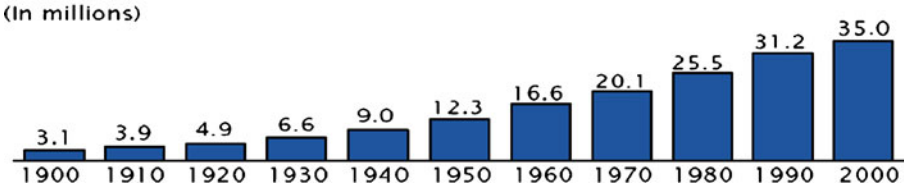
Demographic Trends and Growing Concerns for Older Adults

The U.S. population is aging, with 35 million aged 65 and older in 2000, 36.7 million in 2005 and expected to increase to 72 million by 2030, in which almost 1-out-of-5 Americans will be 65 years or older (see Figs. 1 and 2).

Those 65 and over will outpace that of the total U.S. population growth with the major contributor being the first of the baby boomers reaching 65 by 2011. A rapid increase in the older population will result, and by 2040, 80 million will be 65 and over (Guo 2008). The aged are becoming an increasing portion of the population from 12.4 percent in 2005 to 21 percent by 2050 (Fig. 2).

There are vast differences in service (health care, housing, and assistance) needs between healthy 65 year olds and frail 90 year olds. Figure 3 highlights the oldest old, those aged 85 years and older. They comprise of a small but rapidly growing group within the older population. In 1900, older adults in this category numbered only slightly over 100,000. By 2000, this group reached 4.2 million. Table 1 shows the projected increase of 85+ year olds from 5.7 million in 2010 to over 14 million by 2040. The rapid growth of the oldest old is related to increased life expectancy and decreased morbidity and mortality rates. Overall, the growth of this population group will significantly impact the health and long term care system.

On the one hand, older adults are leading active, healthy, and longer lives. Their experiences and skills are of benefit to their families, friends, and communities. On the other hand, there is cause for concern about the adequacy of services for elders. Table 2 summarizes these concerns. As the population grows older and lives longer, they will require the need for long term care services. The fastest growing segment of the aged is those 85 years and older who will demand more services and need assistance with a variety of activities required for daily living (Guo 2008). The cost of providing these services is rising significantly and especially for those aged 85 and older of whom 49% will require some type of long term care services. Long



Source: He, W, Sengupta, M., Velkoff, V.A. and DeBarros, K.A. 65+ in the United States, 2005. U.S. Department of Commerce, U.S. Census Bureau, December 2005. Figure 2-1.

Fig. 1 Population 65 and over in the U.S.

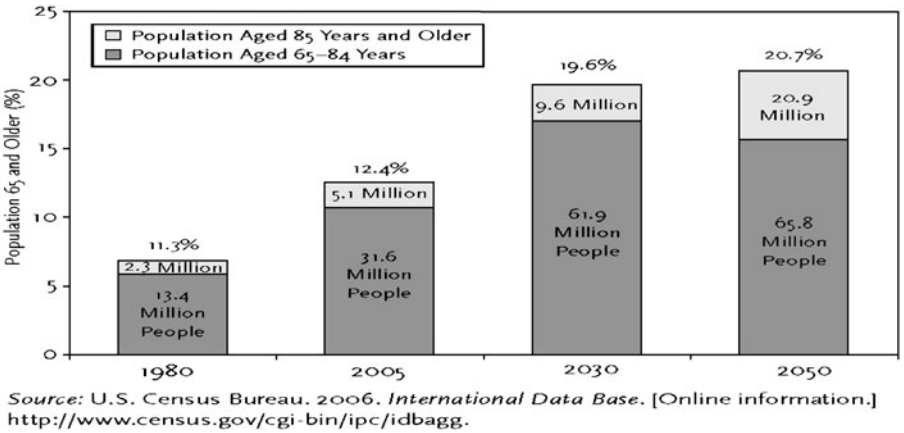


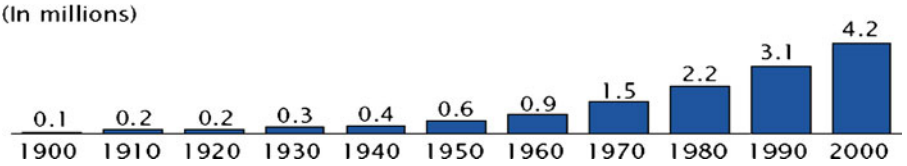
Fig. 2 Population 65 and older

term care is extremely costly; the average cost of nursing home was $75,000 in 2005, and this is expected to triple by 2025 (Feldstein 2007).

Currently in the U.S., Medicare does not reimburse for expenses incurred for chronic disability and only pays for acute medical expenses. Medicare does not cover services needed when an aged person has decreased ability to care for him/herself because of chronic illness, disability, or normal aging. Instead Medicare only covers for a limited number of postacute care days (100 days) in a skilled nursing facility following discharge from the hospital. The majority of long term care financing is through Medicaid which pays for long term care services for individuals with low income. Thus, those in the middle income bracket find it very difficult and increasingly more so to pay for the cost of long term care services.

Another major cause for concern is the rising number of elders who are and will be retiring. The mass exodus from the workforce as the baby boomers age and retire means that there will be inadequate resources to provide minimum income and pension for retirees. In the U.S., retirement income is based on a "pay as you go" system where individuals who currently work pay for the retirement income for those who are currently retired. This system only works if the number of individuals who work is adequate to meet the needs of those who are retired. However, this may not be the case since the population is aging more rapidly and the number of retirees will be greater in relation to the number of workers who contribute to the retirement and pension system.

A third major area of concern is that retirees wish to live in their own homes rather than move into retirement communities. Older adults living on their own require various support services, and there is a pattern of decline in the number of



Source: He, W, Sengupta, M., Velkoff, V.A. and DeBarros, K.A. 65+ in the United States, 2005. U.S. Department of Commerce, U.S. Census Bureau, December 2. Figure 2-4.

Fig. 3 Population 85 and over

Table 1 Projections of the U.S. population by selected age groups: 2010 to 2040

Age	(Resident population as of July 1. Numbers in thousands)			
	2010	2020	2030	2040
Total	310,233	341,387	373,504	405,655
Under 18 years	75,217	81,685	87,815	93,986
Under 5 years	21,100	22,846	24,161	26,117
5 to 13 years	37,123	40,792	43,858	46,743
14 to 17 years	16,994	18,048	19,796	21,126
18 to 64 years	194,787	204,897	213,597	230,431
18 to 24 years	30,713	30,817	34,059	37,038
25 to 44 years	83,095	89,724	95,242	101,392
45 to 64 years	80,980	84,356	84,296	92,000
65 years and over	40,229	54,804	72,092	81,238
85 years and over	5,751	6,597	8,745	14,198
100 years and over	79	135	208	298

U.S. Census Bureau

http://www.census.gov/population/www/projections/summarytables.html

informal caregivers such as friends and family members who can meet the needs of older retirees. That is, overall there will be inadequate caregiving personnel and services to care for the increasing number of elders who rely on these services. Therefore, more education programs are needed in gerontology and long term care management so that there are adequate numbers of professionals and paraprofessionals who are trained to care for elders in the home and who are knowledgeable and competent in caring for the varying needs of seniors.

Long Term Care Needs of Older Adults

Older adults have a greater need for a variety of services, ranging from medical to social support that enable them to function as independently as possible. These long term care services can be provided in institutional or community based settings to

Table 2 Increased older adult population and causes for concern

Increased older adult population
Highly diverse group of older adults who differ in culture, ethnicity, socioeconomic status, language, beliefs, religion, and geographical location
Inadequate services for older adults
High cost of (health and long term care) services
Workforce shortage as increased number of older adults retire
Desire for retirees to stay in their own homes

meet older individuals' physical, mental, social, and spiritual needs while maximizing the quality of lives. Long term care services should be holistic, while medical and nursing care only make up one aspect of meeting the needs of the individual, and emphasis should also be placed on non-medical factors such as social support and residential services. Table 3 summarizes the full range of long term care services that can be categorized into four distinct types: medical care, mental health, social support, and residential amenities (Singh 2005). The medical aspect of long term care is to prevent complications from chronic conditions through routine monitoring, health promotion, treatment of acute episodes, and coordination of care with various providers to provide a continuum of care. Many long term care users suffer from mental conditions such as anxiety disorders, depression, and dementia. Efforts to diagnose and treat mental disorders among older adults have been inadequate because of a general lack of knowledge about effective prevention, diagnosis, and treatment. Improper and delay in care and treatment occur because seniors tend to focus on physical ailments rather than psychological problems. Social and emotional support are necessary for elders to cope with life and its stressors such as the loss of a loved one, adverse effects such as frailty, pain, and depression, increased use of medical needs, and adjusting to new environments (Castillo 1997). As a result, greater reliance on social support is needed from family members, friends, neighbors, volunteers, staff of community organizations, and professional agencies. Having a variety of residential amenities promotes independence. Adequate space for privacy, safety, and comfort enables older adults to feel at ease in community settings and encourages them to pursue social and recreational activities that are pleasurable and therapeutic.

The increase in aging population, shrinking workforce, rising costs of long term care, and decreased number of family and friends to care for older adults are all growing concerns. These challenges will escalate as the older adult population continues to rise. Furthermore, older adults are a diverse group, differing in culture, ethnicity, socioeconomic status, language, beliefs, religion, and geographical location. These sociocultural factors affect how medical, mental health, and social services should be provided (Castillo 1997).

Seniors also have varying opinions about where they choose to live in their retirement years. Eighty-five percent of older persons surveyed by the American Association of Retired Persons (AARP) indicated that they prefer to live in the

Table 3 Four types of long term care services

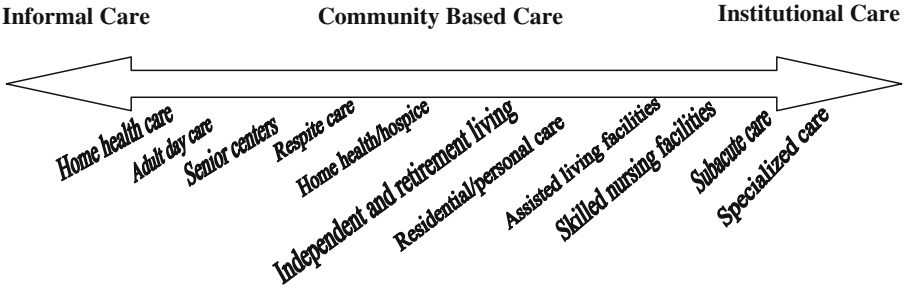
Types of service	
Medical care	Prevent complications from chronic conditions through routine monitoring, health promotion, treatment of acute episodes, and coordination of care with various providers to provide a continuum of care
Mental health	Prevent, diagnose and treat mental conditions such as anxiety disorders, depression, and dementia
Social support	Social support from family members, friends, neighbors, volunteers, and staff of community organizations and professional agencies are necessary for elders to cope with life and its stressors.
Residential amenities	Promotes independence and space for privacy, safety and comfort to enjoy social and recreational activities.

familiar and comfortable surroundings of their own homes (2005). The challenge for service providers is to make the home and surrounding environment as comfortable as possible. However, this may not always be possible based on the extent of their needs which change over time. Consequently, seniors are especially concerned with finding viable options that offer comprehensive services that are affordable, provide high quality, and are fully accessible.

Institutional and Non-institutional Care

The full range of long term care services is known as the "continuum of long term care" (shown in Fig. 4). A continuum of care is defined as "an integrated, client-oriented system of care composed of both services and integrating mechanisms that guides and tracks clients over time through a comprehensive array of health, mental health, and social services spanning all levels of intensity of care" (Evashwick 2005). Ideally, in long term care, the continuum should be client-oriented so that services revolve around those requiring services, and they should have control about how and when they should be able to access the system (Pratt 2010). The continuum of care should be fully integrated in which services are provided by specialized health professionals and paraprofessionals as the individual's functional independence and abilities change. The continuum should be comprehensive ranging from health promotion and illness prevention, to ambulatory care, inpatient services, residential long term care, community based, and institutional services.

The continuum of long term care is made up of the formal and informal system. The informal system of care relies on the types of services provided by family, friends, and privately paid help. Services rendered include general supervision, monitoring, running errands, dispensing medication, cooking, cleaning, and dressing. The extent of informal care is highly dependent on the social support network that the individual has. Thus, the informal system only works for those who can rely on close relatives and friends for support. For those without an adequate informal support network, the formal system is the one that they depend on. The formal system and long term care service providers can be categorized as community-based (noninstitutional) or institutional systems (Singh 2005). These systems compete and are complementary to each other. Depending on the individual's level of acuity and complexity of services needed, informal care such as basic assistance, can be offered by friends and family on one end of the continuum.



Source: Based on Singh, 2005.

Fig. 4 The continuum of long term care

On the other end, institutional care offered through skilled nursing facilities and specialized care are provided when an individual's long term care needs cannot be adequately provided in less restrictive settings. Thus, nursing homes, assisting living facilities, subacute care, and housing services are considered institutional care because the majority of care is provided in facilities designed specifically for those purposes. Home care, adult day care, respite care, and hospice care are usually provided in the consumer's home and considered as noninstitutional or community-based care. However, it should be clarified that some services can be both, so the distinction can be made between institutional and noninstitutional *services* rather than just among providers. For example, hospice care and assisted living care can have both an institutional and noninstitutional component. Adult day care is primarily community-based and sometimes can be provided in nursing facilities. Differentiating institutional from noninstitutional care is an important one to make because determining appropriateness of different types of care is essential for ensuring quality, choice, and cost for consumers, providers, payers, and policy makers.

Challenges in the Long Term Care System

Although some elders prefer the social interaction of being part of a retirement community that offers an array of elder services, others feel very strongly about continuing to live in their own homes after retirement. The dilemma faced by these seniors is a cause for serious concern since the current long term care system is not ideally a fully comprehensive, integrated, and client-oriented system. Rather what realistically defines the current long term care is a fragmented system made up of uncoordinated and inequitably distributed services (Pratt 2010).

The challenges of the long term care system are considerable (see Table 4). The dynamic and extremely complex long term care system involves a multitude of key individuals who play major roles in the current system; they are also the ones responsible for effecting change. Consumers, providers, payers, regulators, and policy makers must all work together to develop successful solutions. The single largest problem with the current long term care system is its reimbursement-driven nature rather than being consumer driven which results in duplication of services (Pratt 2010). Providers provide only services for which there is reimbursement, instead of developing services that are limited or lacking in reimbursement. The type

Table 4 Strengths and weaknesses of the long term care system

Strengths	Weaknesses
Uniquely American in values	Complex system
Responsive to consumer needs	Multiple players (self interest)
Innovative models	Fragmented, uncoordinated
Multi-level facilities	Reimbursement driven
Integrated health systems	Inequitable distribution of services

Source: Based on Pratt, 2010.

and amount of services available is dependent upon the type and amount of insurance coverage the individual has. For instance, if an older adult has private insurance coverage or public plans such as Medicare or Medicaid, the services he/she receives are restricted to those reimbursed by those plans. Again, whether individuals are eligible, have co-payments, the duration of coverage and selection of providers all affect the availability and accessibility of services that ultimately vary according to reimbursement.

In this complicated system, rather than focusing on the needs of the individual, the system emphasizes on who pays and how much is paid; thus, coverage and service gaps are usual occurrences when the individual cannot afford to make out-of-pocket payments. As an example, individuals whose insurance covers home care services will be able to receive care at home while another individual with the same functional disabilities receives care in a nursing facility because his/her insurance coverage is limited to institutional care. The length of time and level of services provided by a facility is also dependent on reimbursement. At the same time, with managed care plans focusing on cost effectiveness, there are even more restrictions on the types and amount of care provided. Consequently, a major weakness of the long term care system is its heavy reliance on reimbursement mechanisms.

Another weakness of the long term care system is inequitable distribution of services. Maldistribution of services and providers leaves many without adequate care. Limitations caused by geography, especially in rural areas and inner cities, contribute to lack of access to care because of a shortage of providers in those areas. By the same token, higher rates of poverty in rural and inner city areas also result in increased numbers without insurance coverage.

Additionally, the long term care system is fragmented and uncoordinated. Because there are multiple payers with different reimbursement plans, providers, and regulations that govern the industry, each has its own goals, interests, and rules. For instance, nursing facilities have different regulations from home care agencies, and laws that regulate both acute care and nursing homes are applicable to subacute care facilities. The resulting complication is that many multi-level long term care organizations must meet differing and competing regulations. This is a similar case with providers. For example, geographical location affects regulation. By federal law all states must license nursing home administrators, however, there are no overall standards governing how they do so. Thus, there is much variation among states. The fragmentation in the long term care system makes it difficult for providers, payers, and regulators, but the heaviest impact falls on consumers who rely on this uncoordinated system for care.

Strengths and Opportunities in the Long Term Care System

The long term care system provides essential care to a sizeable, diverse population. Although it has several weaknesses, the system also possesses strengths and opportunities (see Table 4). First, the system is very responsive to changing needs of consumers. Being able to rapidly respond to change and meet demand is the "cornerstone of its evolution" (Pratt 2010). The system is considered innovative as it

evolves to develop creative solutions. For example, new modes of delivery and new treatment options have been identified to better care for consumer needs. The system is uniquely American, just like its society; it represents values that are unique to American culture, such as its major reliance on personal responsibility, resistance to government involvement, and strong support of individuals' right of choice. Increasingly, the system is beginning to emphasize the client-centered approach or customer focus. Although consumers may lack awareness and knowledge, they are becoming better educated and more cognizant of their options and have been willing to demand services that will improve the quality of their lives. At the same time, providers have developed innovative ways to provide essential services resulting in more satisfied consumers. In this way, providers and consumers mutually benefit from a system that meets the needs of individuals. The most significant strength in the long term care system is its desire to provide better care that meets the needs of consumers. This is a major area of opportunity that key players in the system have been exploiting and improving. There are numerous innovative opportunities in the system. For instance, multi-level facilities provide different levels of care in the same location, which makes it more convenient for the consumer to receive various types and levels of care within one large organization. Another innovation is moving toward true integration of services in the long term care system whereby the ideal continuum of care is fostered to better serve consumers. Specifically addressing the long term care needs of elders, too often institutionalization has not always be the best choice in terms of cost and quality. Thus, a very important innovation to prevent institutionalization was developed. This new model called "aging in place" recognizes that older adults' long term care needs change over time, and services should be brought to them rather than moving them to where services are available.

Aging in place enables elders to receive care outside of institutional settings and allows them to remain at home. In other words, elders should live in stable, home-like settings that are comfortable and familiar, and most critically, they should be linked to elder care agencies in their communities that provide the support and services they need. In actuality, the logistics required to make this happen at affordable cost is challenging. For instance, there is incongruence between current facilities available and what is really needed by consumers. Although this is a daunting challenge, the system has evolved to develop an innovative and natural way to deliver elder care through a new alternative model for aging in place known as naturally occurring retirement communities (NORCs).

Aging in Place: Naturally Occurring Retirement Communities

The term "naturally occurring retirement community" was first coined by Michael Hunt, a professor in the school of human ecology at the University of Wisconsin-Madison. He defined a NORC as "a housing development that is not planned or designed for older people, but which over time comes to house largely older people" (Hunt and Gunter-Hunt 1985). He found that there are U.S. cities where more than 50% of residents are elders, not by design but rather as a result of living in the same communities over time. When their grown children moved out, the parents continued

to live in the same place as they aged. The desire to stay in the same place and age in place is strong because of familiar surroundings, preserving privacy and autonomy, and for social support. NORCs have evolved naturally than rather being deliberately created. Hunt believes that the idea occurred naturally where there is an "unintentional concentration of elders," but the innovation is to turn it into an "intentional community of elders" so that a full range of supportive services to meet the needs of elders are available in the same communities where they live.

Since the mid 1980s, NORCs evolved as conscious efforts have been made to develop and provide more elder services (e.g., social work, health, transportation, etc) where they live. In a 1992 AARP survey of seniors, 27% lived in NORCs (Bertrand 1995) and rose to 36% in 2005 and is expected to continue to increase dramatically as the wave of baby boomers retire (AARP 2005). A NORC is an innovative service delivery method that takes advantage of economies of scale so that providing services where concentrations of seniors are aging in place makes it possible to serve even more older adults at lower costs, enhances their ability to stay in their homes, and avoids costly institutionalization. Originally, NORCs did not include housing and supportive services. Now, NORCs have evolved as more funding has become available through the Older Americans Act, and the 2005 White House Conference on Aging to offer elder services in areas where there are high concentrations of elders who did not previously have elder-specific services. The first NORC with "supportive service programs" (SSP) began 1985 in New York. Bookman (2008) identified several key components of NORC-SSPs:

(1) geographical location where many elders live in close proximity to each other but have little or no previous social connection to one another before the NORC was started.
(2) NORCs are most commonly found in urban areas, but may also be located in a suburban or rural area.
(3) a multi-generational, age-integrated building or neighborhood which enables younger residents to interact with elders, and in some cases to provide assistance and or services to elders, and for elders to share their skills and experiences with younger members of their communities.
(4) A NORC is characterized by some level of involvement of elders in the planning of services and activities, and in some cases, the governance of the NORC-SSP.
(5) Through a social service agency, the NORC contracts or partners with one or more local service providers, home care service agencies, transportation companies, health care providers, as well as local schools and businesses to make services more available and affordable to members of the NORC.
(6) In a NORC, elders are organized to provide some tasks or services to others in their community, or each other, on a volunteer basis.

A wide selection of services is available and tailored to elders' individual needs. These include care planning and case management, health care management such as health promotion and disease prevention, medical and rehab services, nutrition and fitness, mental health counseling, personal care, educational, social and recreational activities.

Benefits of NORCs

NORCs are unique and innovative because they are designed to promote the health and well being of older adults as they age in place (see Table 5). Research suggests a relationship between physical, psychological, and social influence on health. These influences impact the capacity to function independently at home and are associated with institutionalization of older adults (Semke 2003). Furthermore, older adults who live in deteriorated neighborhoods report more physical health problems than older people living in better physical environments (Haan et al. 1987). Self-rated health has been attributed to functional status, chronic conditions, and social networks (Cox 1986). Depression among older adults is associated with increased age, decreased health status, and reduced social activities (Adams et al. 2004). NORCs have been developed in response to the needs of older adults, and they are the ideally suited for targeting risk factors of elders. Bedney and Goldberg (2009) suggest that NORC-SSPs provide efficient and effective ways to reduce the incidence and cost of health care conditions among older adults. Specifically, they addressed seven ways in which NORC-SSPs have been able to reduce health care costs among older adults. These include: reducing the risk and incidence of heart disease, falls, Alzheimer's disease, post-hospitalization re-admission, increasing knowledge of available community-based resources, promoting volunteerism, positive perceptions of health and positive expectations about community living. For example, heart disease and stroke among older adults is escalating along with rising costs associated with treating these diseases. In fact, these conditions are preventable through health promotion programs such as participating in physical activity and social support programs that reduce loneliness and social isolation. Second, the risk of falls among older adults is especially high. The cost of fall injuries exceeded $19 billion in 2000 and is projected to increase to $55 billion by 2020 (CDC 2008). Third, the number of individuals with Alzheimer's is expected to increase as the population ages and lives longer. Decreased social interaction and increased loneliness among older adults have resulted in higher rates of developing Alzheimer's (Wilson et al. 2007). Fourth, older adults discharged from the hospital to being home alone are more likely to be re-admitted to a nursing home. With the availability of NORC-SSPs, this reduces the need for care in higher cost settings. Furthermore, NORC-SSPs deliver

Table 5 Benefits of NORCs

NORCs promote health (physical, psychological and social) and well being
Reduce incidences of heart disease, falls and Alzheimer's disease
Increase knowledge and awareness of available community-based resources
Promote volunteerism
Promote positive perceptions of health and usefulness
Promote positive expectations about community living
Prevent costly institutionalization
Reduce health care costs
Offer a wide range of services and interventions
NORCs maintain and extend quality of life for older adults

interventions that promote physical activity and decrease social isolation and can be considered an effective and efficient way to reduce the risk and cost of heart disease, decrease the risk and cost of falls and among older adults, and lower the risk of Alzheimer's disease.

Additional benefits of NORCs are positive perceptions of health and usefulness of NORCs residents. For example, NORCs promote feelings of usefulness among older adults through volunteerism as they participate in community activities and volunteer their time and expertise. Those who volunteer have reported more favorable scores on measures of psychological and social well being (Gruenewald et al. 2007). NORCs are associated with promoting awareness of community resources that contribute to positive health and aging, including opportunities for increased volunteerism and feelings of usefulness and self-perception of better health among older adults. As a result, with the development and implementation of additional NORCs, the health and well being of older adults will be maximized, and ultimately reduces costs associated with the rapidly growing older adult population. Thus, from a public policy perspective, supporting and extending the quality of life for older adults is an essential element in the planning and building of livable communities that provide supportive services to promote independent and healthy aging in place.

NORC Programs

NORC-SSPs are partnerships formed to better meet the needs of seniors by bringing together residents with the housing administrators, health and social service providers, government agencies, and philanthropic organizations allowing for flexible and varied services to promote independent and healthful living for as long as possible. Supporters of NORC-SSPs believe that use of NORCs has resulted in substantial cost savings (Vladeck 2004). According to Bookman (2008), the first NORC-SSP was the Penn South Program for Seniors in New York City which was developed in 1986 by the United Hospital Fund based on funding from the United Jewish Appeal (UJA) Federation. The UJA–Federation estimated that in 1997 their on-site supportive services program at Penn South Mutual Houses forestalled 460 hospital and 317 nursing home stays, saving over $10 million for residents and taxpayers (Bell 1999). The Penn South program became a model for other NORCs (Altman 2006).

Between 1986 and 2001, professionally staffed supportive service programs for older residents were established in 35 naturally occurring retirement communities. Twenty-eight of these programs were in New York City; two in upstate New York, and five in other states including Illinois, Ohio, Maryland, and Pennsylvania (MacLaren et al. 2007). There are now more than 80 NORC-SSP programs in 25 states that are part of the National NORCs Aging In Place Initiative organized by the United Jewish Communities. In New York State alone, there are now 41 sites that have adopted this model and secured state and municipal funding to build the scope of services offered. For instance, Vladeck (2004) pointed out that the 1994 New York State NORC-SSP legislation provided one million dollars in annual matching grants to facilitate making essential services readily available to NORC residents living in New York State by mandating the access of organized and accessible

services. The first state public-private NORC-SSP Initiative administered by the New York State Office of the Aging focused on 14 low- and moderate-income housing developments where at least 50% of the heads of household were 60 years of age or older. New York City's newer program, begun in 1999, also provides matching funds to organized supportive services in NORCs. Both programs provide a range of supportive services accessible for NORC residents.

Case studies of several NORCs in Boston, Massachusetts were analyzed and comparisons were made (Bookman 2008). The majority of NORC-SSPs were funded by government, serving elders from diverse socio-economic groups and cultures. Findings revealed that NORC-SSPs delivered a wide range of services in centralized and accessible locations. Seniors built strong bonds among themselves through social and cultural activities. Programs created partnerships with health organizations to provide health services. Most importantly, residents brought reciprocity into caregiving as elders helped each other based on the concept of "I will help you and not expect anything specific back from you, but I have the confidence that someday someone else will help me down the road" (Putnam 2000).

Another example of a NORC demonstration project is Options Cincinnati, Ohio. This program is based on an approach of identifying clusters of seniors living in NORCs, providing elder services, engaging residents in activities through programming, and building relationships to create a sense of community. It collaborates with community partners that cater to older adults, such as Bethesda North and Good Samaritan Hospitals, Mullaney's Pharmacy, and Home Care to provide supportive services. Scripps Gerontology Center evaluated this program and found the Options Cincinnati NORC sites were "more likely to feel connected to their community, be age-integrated, and have higher assessments of their health," than seniors living in similar buildings not served by the program (U.S. Senate Committee Hearing 2006). More specifically, the NORC model offers a flexible approach to programming and service development since it is more responsive to specific recipient needs. This is especially appropriate for the continuously changing long term care needs required as older adults age. Furthermore, the NORC model enables older adults to play a greater role in the planning and implementation of services and activities which contributes to their overall empowerment and sense of belongingness, self determination, and increased quality of life and well being. The Options Cincinnati NORC is a natural complement to services and providers already existing in the community. The program has reduced the burden on limited resources and improved the health and social outcomes of the seniors served through its proactive approach.

A third example of a NORC is the Senior Friendly Neighborhoods in Baltimore, Maryland. This program is operated by a partnership of agencies with Comprehensive Housing Assistance, Inc. (CHAI) as the lead agency. Although an assortment of services (Area Agencies on Aging, a local Senior Center, a Jewish Community Center, a local medical complex with a hospital, nursing home, and out-patient services, and a Jewish Family Services agency with an older adult division) are available, older residents and the agencies had not been making optimal use and delivery of services. Thus, a federal demonstration grant allowed CHAI to create Senior Friendly Neighborhoods to test a new approach for providing services in this NORC. Like other services targeting seniors, this program also provides a

comprehensive array of services ranging from social activities, cultural exchanges, health education, social services assistance, transportation, major and minor home repairs, and other information and support. While these services are not unique, the uniqueness of this program lies in the efficiency and effectiveness of the delivery system. Specifically, the four unique characteristics are: a community orientation, a collaborative partnership, services onsite where people live, and a focus on prevention (US Senate Committee Hearing 2006). Together, these characteristics have been effective in serving the needs of seniors living in NORCs.

The above examples of NORCs in several states point out that NORCs provide much needed services to elders and can be considered viable options for aging in place. Using NORC surveys, research results have shown that older individuals who are considered needy in the areas of functional needs, mobility, financial management, loneliness, and vision are already utilizing significantly more NORC services. Of individuals who are currently not receiving NORC services, respondents reported that they would be likely to use those services (Cohen-Mansfield and Frank 2008). These cases have illustrated various approaches to enable elders to receive care based on innovative and collaborative NORC programs which help to prevent and delay institutionalized care so that needed services and programs are effectively delivered, and elders can lead healthy, active, and longer lives.

Challenges of NORCs

There are many advantages and support for increased development and delivery of services and programs targeting elders through NORCs. The primary goal of aging in place programs is to keep elders at home and prevent them from being institutionalized so that they can remain independent, have choice and control, and lead healthy lives; however, there are significant challenges faced by seniors and their service providers (see Table 6). One of the major challenges is to create communities with appropriate and affordable housing, adequate options for mobility,

Table 6 Challenges of NORCs

1. The need for more adequate and livable communities with appropriate and affordable housing, adequate options for mobility, and community services
2. Lack of awareness and information about community services
3. Access barriers that prevent utilization of existing services and programs
4. Inadequate caregivers
5. Lack of socialization and recreational opportunities
6. Inadequate funding for NORCs
7. Inadequate coordination of services
8. Variation among different types of NORCs
9. Diversity in culture and ethnicity (multicultural and multilingual challenges)
10. Shortage of workforce in long term care
11. Inadequate informal social and community support networks

and community services that facilitate independence and supportive social life. For example, seniors may have limited information about available services and other community organizations. Many experience barriers in accessing existing programs because of distance and transportation issues. Some face caregiving and aging issues without support and guidance. Others lack basic accessibility to socialization and recreational opportunities (AARP 2005). Consequently, the creation of NORCs is one innovative way to meet these challenges by providing older adults with the services and programs they need to age in place through public and private partnerships. Community-based services and NORC-related research grants funded by the Older Americans Act have enabled NORC expansions and strengthened their growth potential. With additional funding, this will help to improve communities' ability to respond to increasing needs and services of the aging population, and this can include the development of more NORCs as a cost effective aging in place approach to healthy living and aging. However, funding is not the only issue; additional resources are needed to provide enhanced services for seniors, and most importantly better coordination of services is needed to monitor, evaluate, and recommend improvements in existing programs and services that assist seniors in meeting their housing and service needs.

Currently, there is much variation among the different types of NORCs. Some are located in fairly wealthy communities while others exist in subsidized low income neighborhoods. Specifically, it is the middle category of NORCs that have the most challenging funding structure. Since NORCs were built using government funds, one major issue is to how develop funding models that take into consideration variations in NORCs. Another challenge is seeking and finding the ideal mechanism or fee structure that should be designed specifically for middle income elders whose income levels are too high to qualify for subsidy yet do not have adequate disposable income for private services that more affluent elders take advantage of.

A major challenge is the diversity of seniors living in NORCs. NORCs serve multicultural and multilingual populations. Service providers must take into account racial, ethnic, cultural, gender, and language differences in order to better serve their needs. For instance, there is a need for service providers to develop skills in relating to older minorities when providing services. These professionals must be responsive to and knowledgeable about cultural differences and the particular needs of minority seniors (Winkelman 2009). Furthermore, providers should be aware and sensitive to older adults' physical limitations, health problems, and psychological and emotional distress which may have developed from loneliness and isolation (Lyons and Magai 2001). Service providers should help seniors to feel more comfortable when accessing services since their level of comfort increases as they become more involved in numerous social activities and less isolated which increases overall well being. The key challenge is to educate and train service providers to be skilled in cultural sensitivity (Winkelman 2009); this is crucial to the growth and sustainability of NORCs. It is also important to note that shared activities, norms, and friendships among participants in NORCs should be greatly emphasized. This adds more meaning to individuals' lives, increases the informal support network, and engenders a sense of community and a sense of belonging.

A weakness to the study of aging is looking only at the macro or micro level, and the two are seen as separate and distinct models. Bookman (2008) believes a major

flaw in the system is to view the individual in one perspective totally separate from the institution. Rather, a dynamic process should focus less on the social structure of organizations that serve elders and more on informal groups (neighbor helping neighbors) who support each other. The advantage of this paradigm shift is to see elders as valuable assets rather than problems. Because of their experiences, elders bring positive influences to younger generations in their communities; thus, they should play a greater role in shaping their environment and social networks. However, the challenge is being able to adequately build informal support community networks that include elders, their neighbors and community institutions. Unfortunately, research on the relationship between the development of social capital and aging is lacking and unexplored. Meaningful social networks have yet to be developed. This challenge needs to be met and is critical to NORCs' long-term viability and success.

Discussion and Conclusion

A better understanding of NORCs and the value of providing supportive services can help public and private policymakers plan more livable communities for older adults. Current research evidence suggests that with the development and expansion of additional NORCs, the health and well being of older adults will be maximized, ultimately reducing costs associated with the rapidly growing older adult population. Thus, supporting and extending the quality of life for older adults is an essential element in the planning and building of livable communities that provide supportive services to promote independent and healthy aging in place. This paper suggests that NORCs are an innovative and valuable approach to aging in place, and additional programs are essential to providing comprehensive long term care services and support as the aging population in the U.S. increases in the coming decades. From a policy perspective, there are many implications. Government must continue to fund demonstration projects throughout all 50 states. Furthermore, federal, state, and local government must collaborate with the private sector to form public-private partnerships in order to build stronger community support that can more readily respond to seniors' needs in the delivery of comprehensive services. Successful programs depend on these partnerships that bring together the human, technical, professional services in a community to effectively exploit resources in order to address the physical, social, emotional, health, and environmental structural needs of the community and for its older adult populations. Based on the cases of innovative programs in New York, Maryland and Ohio, NORCs are an integral component of the long term care delivery system. Increased funding and other resources should be allocated to ensure the planning, development, monitoring, and evaluation of more NORCs to better serve older adults. Although all levels of government should be involved, local government is especially critical in protecting the public's health and plays a major role in supporting NORC development (Masotti et al. 2006). For instance, government should evaluate policies that address residential and business zoning, public health safety, and availability of health services. Additionally, evaluating the political and economic feasibility of facilitating NORCs within different geographic and socioeconomic status settings is important. Thus, the policy

implications of NORCs are time sensitive and comprehensive since understanding the impact of community services is linked to the health of seniors.

From a research perspective, additional studies need to be conducted to investigate case studies of elders in NORCs since they represent many types of individuals from diverse ethnic and cultural backgrounds, socioeconomic status, and geographic locations. A more accurate picture of seniors in NORCs can be shown in order to better assess and meet their changing needs. Further research should also analyze health outcomes of NORC residents and compare them to institutionalized residents in terms of service, access, cost, availability and quality. In this way, explorations of new and low cost and more effective approaches to servicing the aged and multilevel analyses and testing of community based interventions can be made. Expanding research on seniors living in NORCs provides a broader understanding of their needs so that community features and services can be built to meet their individual needs. Additional research should also examine best practices not only in the U.S. but innovative models of other nations to exchange ideas and approaches to aging.

Since the ultimate objective of NORCs is to support healthy and successful aging, building NORC programs that work is essential to the growth of livable communities which must offer an array of supportive services based on evolving needs to better serve the escalating numbers of older adults who choose to live at home and age in place. In conclusion, this paper has addressed and supports the increased growth of NORCs as an innovative approach for seniors as they age. As more baby boomers age and retire, the infrastructure needs to be established to promote healthy living and to adapt to their changing needs; this can be accomplished through the development, expansion, and growth of more NORCs as a viable and innovative solution for older adults aging in place.

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