

HOUSING THE FRAIL ELDERLY:
HISTORY, CONTEMPORARY PRACTICE, AND
FUTURE OPTIONS

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BY

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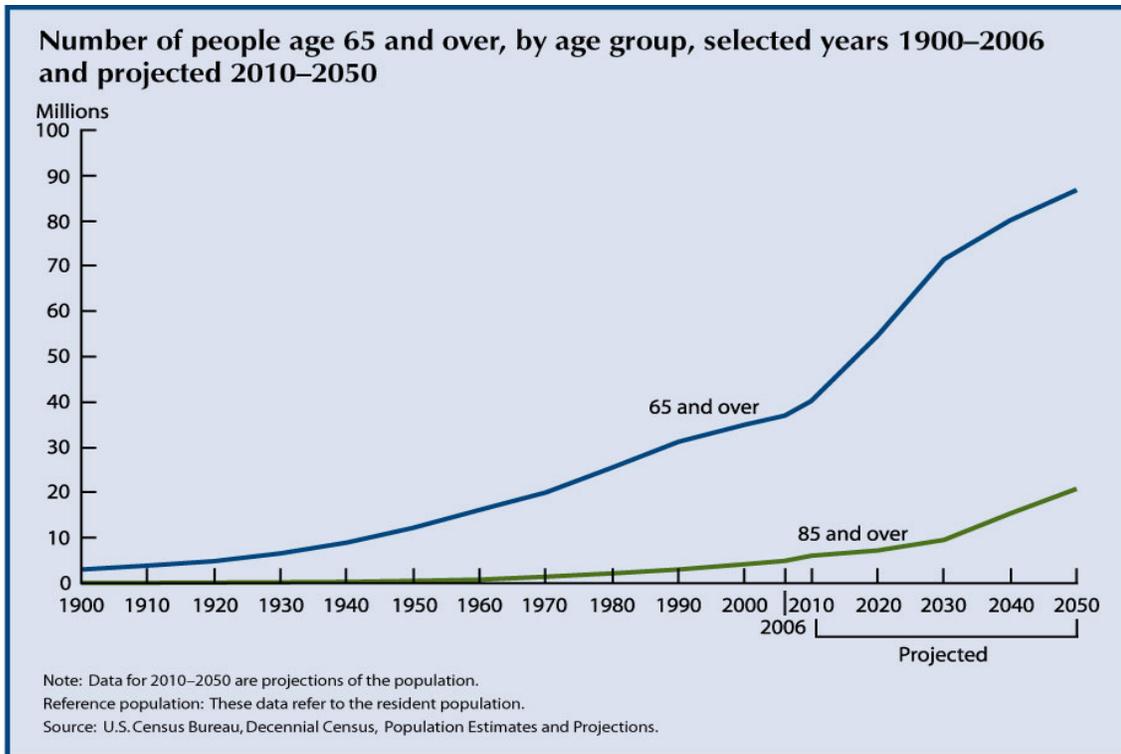
Chapter One:

Growth Of The Elderly Population And Their Needs

Introduction

The elderly population growth has greatly outpaced that of other age groups. For example, as Figure 1 shows, this population cohort increased by a factor of 11 from 3 million to 33 million between 1900 and 1994 and an estimated 39 million Americans were aged 65+ in 2009. By 2030, 80 million or nearly 1 in 5 people will be in this age cohort. Compounding this growth is that by 2012 some 10,000 baby boomers will turn 65 each day. Those aged 65 and older will account for 20% of the nation's total population by 2030. It is also estimated that one in four individuals aged 65 and over has a physical or cognitive disability which limits their independence or requires intensive medical care. Providing appropriate housing for this population is a critical housing concern. With a projected 5.4 million people reaching 85 years of age and above in 2030, a foreseeable lack of housing for the frail elderly will become an issue if planning for this tidal wave of need is not addressed ahead of time (American Geriatric Society 2005).

Figure 1 -Estimated and projected population of the elderly 1900 – 2050
 Source: U.S. Census Bureau, Decennial Census, Population Estimates and Projections



It is estimated that some 1.5 million elderly households live in housing units that are unsuitable for their needs. An additional 30% of elderly households face high housing cost burdens as shown by Figure 2. Figure 3 also shows that with age, a greater percentage of the population will require assistance with activities of daily living (ADL); half of those aged 85+ need such assistance. A 1987 study by the U.S. Department of Health Services of non-institutional elderly found that 11.4% needed assistance with at least one or more activities of daily living (ADL) including eating, bathing, cooking, and walking. In 1996 a similar study conducted by the U.S. Department of Health Services, found an increase in the assistance needed within the elderly population to nearly 23%.

The increase in needs will continue to grow as the 85+ age cohort gets larger in size and as a proportion of the total population. The housing needs of the elderly vary from house sharing arrangements all the way to nursing home care depending on the level of frailty.

Figure 2 - US households with residents 65 and over that report housing problems. 1985-2005
Source: Department of Housing and Urban Development, American Housing Survey

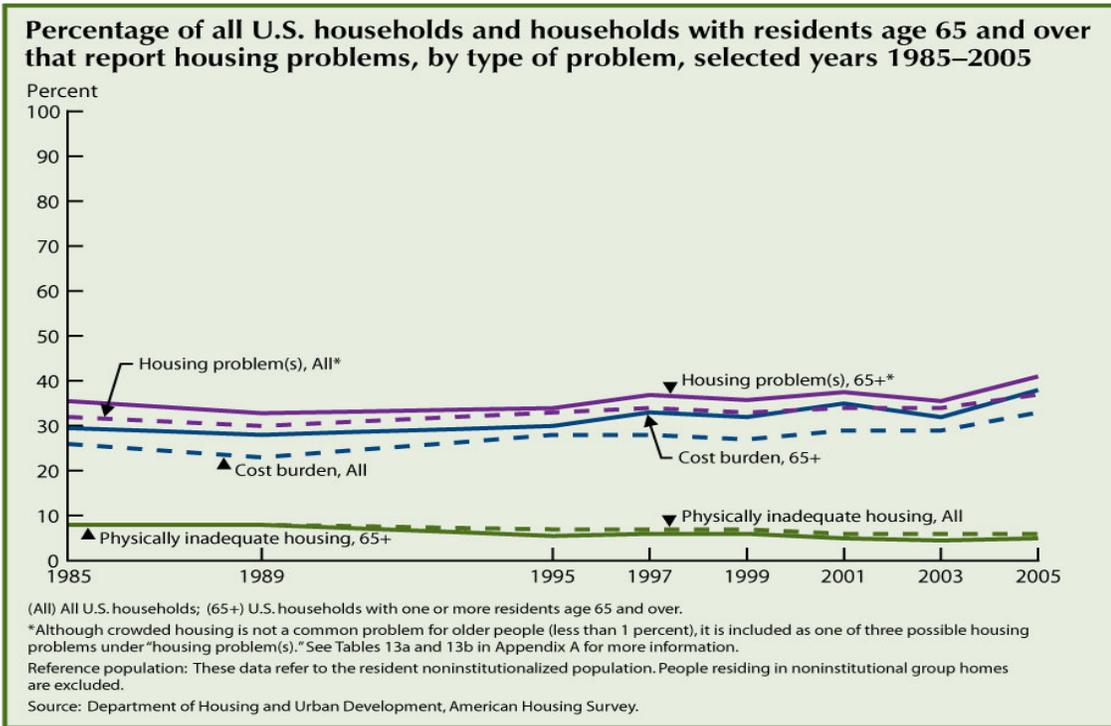


Figure 3 - Population needing assistance with ADLs
Source: U.S. Census Bureau 1995

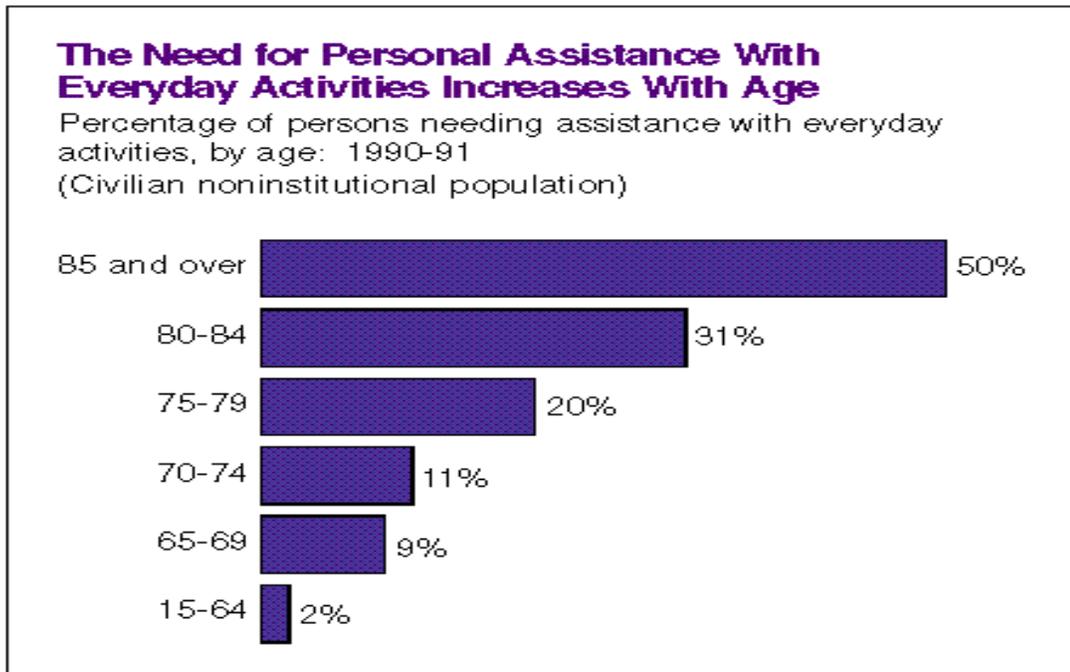
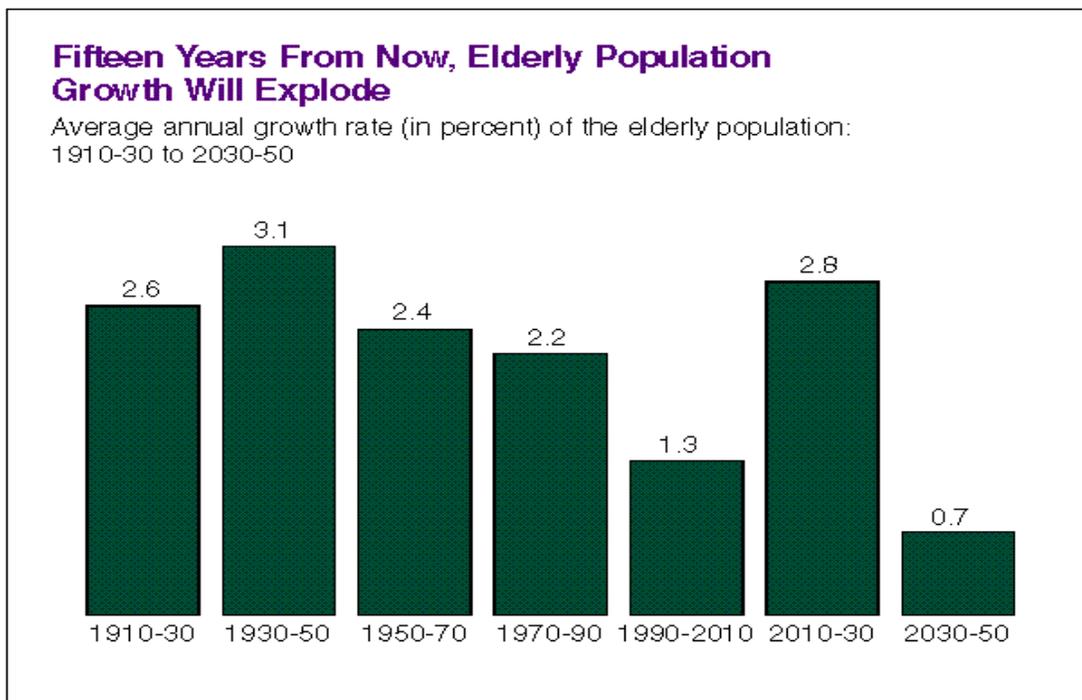


Figure 4: Projected percentage growth rate of elderly population
Source: U.S. Census Bureau, 1995



The senior housing market is defined by those aged 55 and older that change addresses and move into different housing units in a given year. In 1987 the senior housing market drew from about 5% of the national elderly population that relocate in that year. This increased to about 12% in 2007. Given the projected population of 80 million elderly by 2030, this market will comprise of almost 10 million households. The housing needs of the elderly are vastly different from the rest of the population, due to the increasing mobility and physical limitations that develop as one ages.

In 2009 the nursing home care field had a bed availability of 1.7 million beds and an elderly population of 65 and older of nearly 39 million. As expected, within the nursing home residence, 80% are mobility dependent, 47% are eating dependent and 65% are incontinent (Alpert and Powers. 2007). Figure 5 shows the increase of physical function restriction of the elderly over time. As Figure 5 and 6 show, the elderly not only need assistance with activities of daily living, they are also afflicted with chronic illness such as heart disease, hyper tension, stroke, diabetes, etc,

Figure 5 - Projected percentage growth rate of elderly population
 Source: Centers for Medicare and Medicaid Services, Medicare Current Beneficiary Survey

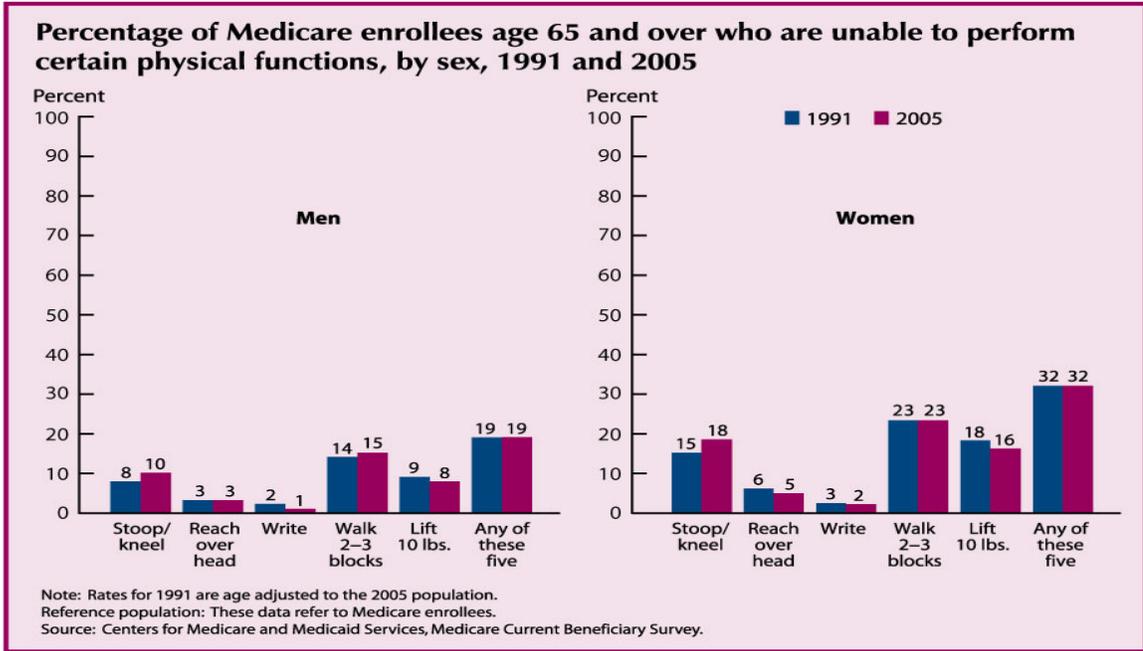
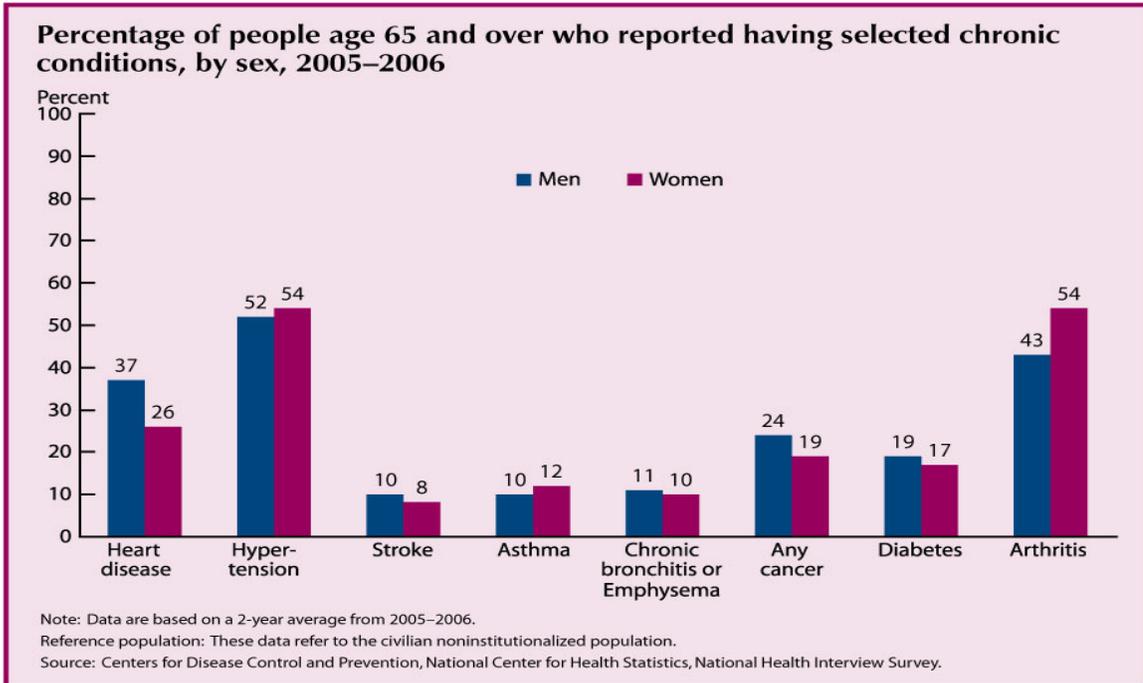


Figure 6 - Percentage of 65 and over with selected chronic conditions. 2005-2006
 Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



The Problem

A large number of elderly households are living in housing environments that are not conducive to their needs and or abilities. The housing units are either physically inadequate (about 10%), have physical and structural problems (about 40%) or the elderly pay a significant amount of their income on housing (about 35%) as figure 2 depicted. Support systems such as family, home health care, and other services seem to be available only to those who can afford them. Nishita et al. (2008) for example note that nursing facility residents desire to transition out of the nursing facilities and into community living, but remain in the facilities because there are no options available to facilitate leaving the nursing care facility. They also note that the important goal for planned housing for the elderly should be the provision of enriched social opportunities. The act of transitioning out of a nursing facility and into a community setting is a major decision as Nishita et al. note: “transition is a complicated decision in which the individual weighs the capacity and the desire to relocate, as well as the community support available to meet anticipated care needs” (Nishita 2008, p.6).

Chen et al. (2001) report that malnourishment in the elderly can stem from depression brought upon from living alone and becoming dependent on others for help: “When the supports the elderly have relied upon are lost or diminished in their old age, the elderly may have difficulty in forming new attachments, in coping, and in caring about life” (Chen 2001, p.137).

Birnholtz and Jones-Rounds (2010, p.143) also report that: “While aging in place allows seniors to maintain a sense of independence and to remain in a familiar environment, both of which are often desirable, it is important that they also be able to interact with others. Communication, after all, serves as a foundation for social relationships and can help seniors avoid the sense of isolation that often leads to loneliness and possible depression.”

As the human body goes through the many changes of life and old age becomes more apparent, mobility restrictions and activities of daily living such as moving around to changing clothes become harder or impossible to do. Solutions range from moving into a new ranch style home in order to eliminate stairs, to moving into an elderly care facility. Regardless of the housing facility, Bhushan (2010, p.20) notes, “the move can still be traumatic...this transition is also devastating to one’s feelings of well-being, security and orientation.” Elderly care should be more than the sterile environment we have grown to associate it with. The choices in aging care facilities are as varied as the people that inhabit them.

Purpose of Research

The purpose of this research is to promote the idea of “aging in place” through the means of universal design as well as the Eden Alternative concept as a replacement to the current model of institutionalized housing for the elderly. The choice of housing for the elderly will vary depending on need and level of supportive service needed. This research will review different approaches to housing the frail elderly, identify the major issues and concerns in the industry, and suggest ways to better address and meet the housing needs of this population.

It is hoped that by showing the ill effects of the current nursing home model on the individuals that live in these facilities, and contrasting it to the proposed option of aging in place through universal design and the Eden Alternative, the industry of elderly care will change. Through the provision of information, it is hoped that more individuals will seek out a better option than the status quo. The provided information can also lead to a change in the way developers build nursing facilities, cities are zoned, and nursing care is managed.

Methodology and Outline of Chapters

This study will utilize the case study approach. I will examine the factors that contribute to prolonging “aging in place” for the elderly. The Eden elderly housing approach will

also be discussed and used as the model on which to base future elderly housing design. The key elements of this housing approach will be identified and suggestions will be made for adapting this model for developing future elderly housing facilities. Before I do so, the next chapter will address the historical development of elderly care facilities to provide a guide for how we got to where we are today. Chapter three will discuss how the planning profession has adapted zoning codes and other regulatory tools to accommodate the housing needs of the elderly. Chapters four and five examine alternative design approaches to elderly housing. The thesis concludes with suggestions and proposals for designing appropriate housing for the elderly in chapter six.

Chapter Two:

History Of Elderly Care Facilities

From the temple to the rudimentary medical facilities of the past, little has seemingly changed in today's modern elderly care facility. This chapter traces the historical development of elderly care. The objective is to show both the evolution and changes that have occurred over time in the care of the frail elderly in society, especially in the United States.

Through the ages, the provision and development of long-term care has been “inextricably intertwined with the care of those that were sick, helpless or dependent” (Tibbits 1960, p.713). The U.S. Department of Health and Human Services defines long-term care as, “a variety of services and supports to meet health or personal care needs over an extended period of time”.¹ This care has been provided by various factions such as in the home, churches / temples, hospitals and community institutions such as almshouses. One thread that runs through all elderly care systems is the expectations for children to care for their parents. Initially, at least, because of this expectation, there was no need for care facilities to be built specifically for the elderly. This idea has now become, at least in America, virtually foreign. The idea that the offspring of the elderly

¹ U.S. Department of Health and Human Services - http://www.longtermcare.gov/LTC/Main_Site/Understanding_Long_Term_Care/Basics/Basics.aspx accessed on - 6/9/2010

provide all the care for their parents, from housing to food as they provided to their infants seems now more of a burden that is best left to someone else.

The invention of elderly care facilities began around the start of the modern era. The first attempts of providing hospitals for the sick dates as far back as sixth century B.C.E.; where Buddha appointed a physician for every ten villages and built hospitals for the disabled and indigent (McClure, 1968). It is much more difficult to determine when hospitals established themselves as specialized facilities for long term care of the elderly. Nonetheless, ancient temples found in Cos, Trikka, and Cnidus have shown evidence of institutions functioning as hospitals and, though indirectly, in some way as long-term care facilities (Gordon, 1949).

In Egypt, care for the elderly varied greatly from class to class and even from family to family. The wealthy drew income from their estates, requiring little effort or supervision on their part and were sometimes granted a Staff of Old Age² to fulfill the more onerous duties if they held a high position within the public office, while still retaining much of the salary. Those who were of the lower to middle class depended on their children for support and care in their elder years. If widowed, the children would often take in the widowed mother while giving the widowed father a stipend of food. This difference in care might be cultural in that women were considered vulnerable widows whereas fathers

² At the very highest levels of the Egyptian administration, officials had the option of never retiring or relinquishing their official incomes at all; instead an assistant was appointed to over take many of the duties associated with the office.

were seen as dependents. Those families that had no children adopted orphans to carry out the family name, although this was the extreme case (Stol, and Vleeming, 1998).

Within the Greek and Roman societies, little care was provided to the aged, widowed, orphans, sick or disabled (Gilleard 2007, p.626). The development of elderly care stems from the influence the Christian church had not only on the Byzantine Empire but also on the imposed order of social life.

Starting in the 5th and 4th centuries B.C.E., it was the sacred duty of the children to look after the elderly. The legal ramification of maltreatment of parents was punishable by revoking the rights of being a citizen, which was seen as a sentence second only to death (Thane, 2005). There were no public facilities for the aged - the very idea would have been alien to the Greeks. Greek law laid down severe penalties for those who rejected their moral duties to their parents. In Delphi, for instance, anyone who failed to look after his parents was liable to be put in jail. Though Athenians were required by law to look after their parents, contempt of the elderly became a national norm by the late fifth century B.C.E. This was in bright contrast to Sparta, where old people were held in high esteem (Garland, 1998).

Similar to the Egyptian custom, Greek men without children, could adopt a son who is then given the elderly man's entire estate. In return, while the adopted father is alive, he

would look after and care for the elderly man and after death provide for a proper burial and visit the tomb on a regular basis. The adopted son would lose all legal connection to his birth family and be unable to inherit from the birth family.

Literature of the Greek and Roman period indicates that the temples of the gods were also used as hospitals. In 369, Justinian built at Caesarea, a community hospital that provided a facility that not only tended to the sick but also cared for the elderly (MacEachern, 1962). The formation of many of the care facilities we are familiar with today began within the Byzantine society. These institutions included hospitals, poor houses, orphanages and old people's homes (Crislip 2005, p.105).

From moral obligation to moral authority, the church developed institutions for the first time in Europe that offered some degree of security for the aging and ill. Financial support for the institutions that cared for the elderly, widowed, orphaned and disabled was provided through alms collected by the church or through various charitable institutions that flourished throughout much of the empire. In some contrast, the wealthy established a monastery or retirement home in which to retire should they or their kin become unable to look after themselves. This provided a means of security in their later years as servants within the monastery would look after them.

Elderly Care In The Modern Era

The revival of learning during the Renaissance brought significant changes in the hospitals of Western Europe. Anatomy became a recognized field of study, and new drugs were discovered, which enabled higher degrees of care. During the same period, interest in the establishment of facilities that would alleviate the hardships and sufferings of the poor elderly were established. The earliest examples were the “almshouses”, as they would come to be known, that appeared in 1368 when Mr. John Stodie, Lord Mayor of London, donated thirteen buildings to be used for such purposes (Morley, 1890). The first English to settle in America brought with them the same health care methods as they existed at the time in England. These were based on the principles of public and local responsibility for the sick, poor and aged, which were incorporated into the English Poor Law of 1601.

Between 1776 and 1799 America was a young society and “old age security” at the time meant having children or wealth. Poor houses became home to the indigent elderly and the earliest federal welfare and pension programs were developed. The United States in the 1700's was comprised predominately of young people. Life expectancies were much shorter than they are today, primarily because so many people died in infancy or childhood. That meant that a relatively small percentage of the population lived to old age.

Other than the Native Americans, the country was populated almost entirely by immigrants, many of whom came from England or other parts of Europe. Getting here required an extremely hazardous ocean voyage, and life on the new continent was equally difficult. The immigrants who came here voluntarily were either fleeing from persecution or were poor and hoping for a better life in the new world, the only reasons they would take such a risk. Few people who were old or ill would have attempted such a trip, and many of those who did probably died in the process.

Before 1800, less than 5% of the U.S. population lived in cities. Everyone else resided in rural areas where extended families could live together easily and cheaply. Generally, people worked for themselves. As a 1937 Social Security pamphlet described it; "The home of a pioneer family was a little world in itself. Members of the family were their own farm and factory workers, butchers, bakers, and barbers; policemen and firemen; often their own doctors and nurses, and sometimes their own teachers as well" (Ross, 1937). You didn't need cash to survive in that economy, and families were fairly self-sufficient.

Children were expected to split their earnings with, or otherwise provide for, their parents. If a parent needed care, the children were expected to provide it. Elderly people in need of care who were childless but wealthy could hire whatever help they needed. Dependent elderly people who could not be cared for by their own families could be

'boarded out' with surrogate families, and the adult children paid for the cost of that care. Those elderly who were poor and childless, or whose children refused or were unable to care for them, ended up dependent on charity or public welfare.

Without a federal assistance program in the United States in the early 1700s to help pay for the care of the elderly or disabled, most states sent their impoverished citizens to "poor farms" or "almshouses." The homes were known for their dilapidated facilities and inadequate care, and states appeared to encourage the stigma as a motivating factor to keep people from relying on them. Some immigrant communities established organizations that helped newcomers and the aging instead of using public services (PBS. 2/13/2006). Drake (1857), tells of the construction of an almshouse as early as 1662 in Boston; the first health care facilities in this country.

The public welfare system in the 18th and 19th centuries was a local, not a federal, obligation, patterned on the English "Poor Laws". The Poor Laws established the government's responsibility to provide for those who could not care for themselves, but left the details about how to do it up to the local town or county officials.

Initially, "paupers" were given cash payments called "outdoor relief", which was paid for by the taxpayers of the city or county. As the cost of outdoor relief increased, governments decided to create a more cost-effective system, called "indoor relief". They

built poorhouses, almshouses, poor farms, county infirmaries, asylums, or county homes to house people who were too expensive to support with outdoor relief, and required welfare recipients to go to these facilities if they wanted assistance. In some states, the state owned and operated some or all of the poorhouses. In others, counties or cities ran them. A few states avoided the cost of building and maintaining poorhouses by boarding paupers out, sometimes with their own relatives, or paying farmers to care for them. Tennessee actually auctioned their paupers off to the lowest bidder (Katz, 1986).

A common concern of the public at that time was that the opportunity to get free room and board would be so attractive that people would deliberately pretend to be poor so they could live an "indolent life" in the almshouse at the expense of the taxpayers. Consequently, poorhouse life was made as unappealing as possible. The "inmates" were expected to wear a poorhouse uniform rather than their own clothes, and they were not allowed to leave the poorhouse. Many of the poorhouses had attached farms so they could produce their own food and be self-sufficient, and they were often located far out in the country to keep them out of sight. To offset the cost of care, the inmates were expected to do the work needed to keep the operation going. Even the older women were given jobs like sewing.

As time passed, the poorhouses became catch-alls for anyone who couldn't survive in the outside world, and they became home to poor dependent elderly people, where they lived

in the same rooms with "miscreants" (petty criminals), "inebriates" and "intemperates" (alcoholics), orphans, unwed mothers, and the "feeble-minded" (mentally ill) (Katz, 1986).

In 1800, the largest cities in the country were all in the original 13 colonies. By 1850, some of the "gateways" to the West, like Cincinnati, St. Louis, and New Orleans, overtook the eastern cities as the largest cities in the country. By 1900, the Midwest had become quite settled and many of the largest cities in the country were in the Midwest.

The westward migration of the country contributed to the dispersion of families. Although a few families took their elderly relatives along on the difficult journey west, a number of the western settlers left their parents and other relatives behind in the East. Some families made several moves, perhaps settling in the Midwest for a time before moving farther west. Each time they moved on, some members of the family might decide to stay put, leaving relatives scattered along the migration route. Over time, the massive westward migration made it less likely that many, or any, child lived near enough to their parents to provide help.

Family living arrangements have always had an impact on the need for long term care. Women were less likely than men to have accumulated assets of their own that they could use to take care of themselves in retirement, and unmarried people of both sexes were

more vulnerable in old age because they had no partner to provide them with physical and financial assistance. The most vulnerable group of all were unmarried elderly women.

Older unmarried women largely had to rely on children and other family members for help, and often ended up living with them. About 10% of married women and nearly 60% of unmarried women age 65 or older were living with children or other family members as dependents in 1890 (Costa, 1997).

Hundreds of benevolent societies affiliated with nearly every ethnic, religious, trade, profession, and social group imaginable were established during the 19th century. In response to the problems of the poorhouses, numerous nonprofit organizations began building old age homes to give "respectable" poor people a way to avoid the degradation of the poorhouse. Although they seem to be a precursor to nursing homes, most of the old age homes were more residential than medical. They probably provided something ranging from "room and board" or "board and care" to what we now call "assisted living". There are references to "infirmaries" in some old-age homes, and others included a separate building or section that they called a "hospital" where people who were very ill would be housed. The infirmary or hospital section of these facilities was probably comparable to what we call a "nursing home" today (Bowly, 1978).

While most of the elderly needing care were those that are poor or cast off from their families, there were also those that had the financial means but were still frail and needed care. The small number of non-indigent frail elderly people lived in "proprietary", privately-owned facilities called "rest houses," "convalescent homes," or "medical boardinghouses", generally just rented rooms in a family home.

Nursing began to emerge as a profession in the late 19th century, along with professional "home health care." The newly created hospitals needed nurses to care for their patients, and developed schools to train them. As trained nurses became available, wealthier families sometimes hired them as live-in care providers for invalids and the elderly.

During the early decades of the 1900s the convalescent home progressed as an institution furnishing care for the aged and the sick of all ages and became the forerunner of the modern nursing home. In spite of its contributions to later health care, the almshouse was regarded prior to World War I, primarily as a home for the indigent aged. Medical care for those residing in almshouses consisted of a small amount of infirmary care which bore little relationship to the care offered in many of today's nursing homes.

Table 1: Male Life Expectancy in the U.S. (1900-2000)

Source: Costa, D. (1997). *A House of Her Own: Old Age Assistance and the Living Arrangements of Older Nonmarried Women*.

| Year | White Male | | | Black Male | | |
|------|------------|----------------------------|----------------------------|------------|----------------------------|----------------------------|
| | At Birth | Additional Years At Age 65 | Additional Years At Age 85 | At Birth | Additional Years At Age 65 | Additional Years At Age 85 |
| 1900 | 47 | 12 | 4 | 33 | 10 | 4 |
| 1910 | 49 | - | 4 | 34 | - | 5 |
| 1920 | 54 | - | 4 | 46 | - | 5 |
| 1930 | 60 | - | 4 | 47 | - | 4 |
| 1940 | 62 | - | 4 | 52 | - | 5 |
| 1950 | 67 | 13 | 4 | 59 | 13 | 5 |
| 1960 | 67 | 13 | 4 | 61 | 13 | 5 |
| 1970 | 68 | 13 | 5 | 60 | 13 | 6 |
| 1980 | 71 | 14 | 5 | 64 | 13 | 6 |
| 1990 | 73 | 15 | 5 | 65 | 13 | 5 |
| 2000 | 75 | 16 | 6 | 68 | 15 | 6 |

Table 2: Female Life Expectancy in the U.S. (1900-2000)

Source: Costa, D. (1997). *A House of Her Own: Old Age Assistance and the Living Arrangements of Older Nonmarried Women*.

| Year | White Female | | | Black Female | | |
|------|--------------|----------------------------|----------------------------|--------------|----------------------------|----------------------------|
| | At Birth | Additional Years At Age 65 | Additional Years At Age 85 | At Birth | Additional Years At Age 65 | Additional Years At Age 85 |
| 1900 | 49 | 12 | 4 | 34 | 11 | 5 |
| 1910 | 52 | - | 4 | 38 | - | 5 |
| 1920 | 66 | - | 4 | 45 | - | 5 |
| 1930 | 64 | - | 4 | 49 | - | 6 |
| 1940 | 67 | - | 4 | 55 | - | 6 |
| 1950 | 72 | 15 | 5 | 63 | 15 | 6 |
| 1960 | 74 | 16 | 5 | 66 | 15 | 5 |
| 1970 | 76 | 17 | 6 | 68 | 16 | 7 |
| 1980 | 78 | 18 | 6 | 73 | 17 | 7 |
| 1990 | 80 | 19 | 7 | 74 | 17 | 6 |
| 2000 | 80 | 19 | 7 | 75 | 18 | 7 |

As tables 1 and 2 show, the number of people living to old age and the number of years they spent in old age continued to increase. The average life expectancy at birth increased by 10 years from 1900 to 1930, and increased by another 15 years from 1930 to 1990. This change occurred largely because fewer people were dying in childhood, so a larger percentage of the population lived to old age. In 1900, those hardy souls who outlived diseases and injury in childhood and early adulthood had nearly as many years ahead of them as today's seniors do, and finding a place where they could live for what might be a fairly lengthy period of time was just as important then as it is now. People who reached age 65 in 1900 could expect to live another 10-12 years. Those that reached the age of 85 could expect to live another 4-5 years.

The Advent of Social Security

Title I of the 1935 Social Security Act created the Old Age Assistance (OAA) program, which gave cash payments to poor elderly people, regardless of their work record. OAA provided for a federal match of state old-age assistance expenditures. Among other things, OAA is important in the history of long term care because it later spawned the Medicaid program, which has become the primary funding source for long term care today.

One of the big debates in the development of the Social Security Act legislation was how to provide assistance to the poor elderly while getting rid of the poorhouse system that

had become so problematic. The National Advisory Council was quite sure it did not want to encourage care in the poorhouses. One way to do that was to give individuals cash payments, which they called "pensions", that would hopefully allow the recipients to remain in their own homes.

In 1925 E.M. Stewart, in "The Cost of American Almshouses," reported that Massachusetts had 144 such institutions, which cared for around 6,000 patients, nearly 42 persons per facility. Just eight years later, the Commonwealth of Massachusetts claimed the existence of 435 nursing homes with a resident population of 4,350, an average of about ten residents per facility.

In addition to the controversy about whether care in a poorhouse was appropriate for the elderly, there was a question of cost. One Council member pointed out that it would cost half as much to support older people with a cash payment in their own home than in an institution. This was founded on the assumption that the older person would continue to work to help support himself if he lived at home, an argument which made sense if those in the poorhouse were too poor to support themselves but were generally healthy, or if they had family or friends who would take care of them in the community. Even in the early days, people noticed the benefits of aging in place which will be discussed in a later chapter.

Between 1930 to 1939 OAA recipients were able to pay cash at a time when there was little real money in circulation, making them very attractive customers for proprietary operators, and old age homes became a perfect "cottage" industry. They were being easily and often inexpensively launched by "mom and pop" operators who boarded their elderly customers in unused rooms in private homes. Some were run by unemployed nurses who provided rudimentary care in addition to room and board, giving rise to the term "nursing home." In a time when many people were still out of work, the fledgling industry provided homeowners with an opportunity to use the only asset they owned to generate a welcome source of cash. Nursing homes were emerging all over the country, but there were no federal standards for their design or operation. They were not licensed, buildings were unsafe, there were allegations of abuse and neglect, and nursing care was sometimes non-existent. In 1956 the Social Security Act was again amended to eliminate a cap on payments to medical providers for medical services. The elimination of the cap on payments meant that the government quickly became the primary purchaser of nursing home care (Social Security Online, 1956. Retrieved on May 2010. Web page: <http://www.ssa.gov/history/tally56.html>).

Types Of Elderly Care Facilities

The surge in the development of long-term care industry in recent years has been attributed to several factors. These include: the increasing population over the age of 65, advances in medical technology, and the changing attitudes of society towards institutionalized care of the aged. Today's long-term care facilities offer a variety of

services. According to Medicare.gov (2005), long-term care facilities provide one or more of the following:

- nursing care – nursing procedures requiring skill beyond that of untrained persons including, but not limited to, administering medications, injections, catheterizations, and similar procedures under orders of the patient’s physician;
- personal care – personal services such as assistance in walking, getting in and out of bed, bathing, dressing and eating, as well as the preparation of special diets; and
- residential care – room and board, laundry facilities, and personal courtesies such as aid with shopping or letter writing.

Long term care facilities focus on medical and non-medical care to people who are chronically ill or disabled by providing assistance in Activities of Daily Living (personal hygiene, dressing and undressing, meal preparation), rehabilitative services or specialized nursing care. Most common long term care is the nursing home with other options ranging from assisted living and home health care which provides assistance in ADL’s to those that are still well enough to live independently.

Long-term care facilities in the United States are operated essentially under three classifications of ownership and control: proprietary, governmental, and voluntary nonprofit. The Department of Health Care Administration at George Washington University reported in 1967 that 82.4 percent of all long-term care facilities were owned

and controlled by proprietary institutions. This number dropped to 66 percent in 2009, governmental institutions owned and controlled 3.5 percent of the facilities in 1967 and this increased to 7 percent in 2009, and voluntary nonprofit organizations owned and controlled 14.1 percent of the facilities in 1967 and this has almost doubled to 27 percent in 2009 (Rubin, A., Rubin H. 2009. "Statistics on Nursing Homes and Their Residents". Accessed on: 6-5-2010 <http://www.therubins.com/homes/stathome.htm>).. The number of nursing homes has increased from 15,700 in 1973 to 18,000 with 1,900,000 beds in 2002 but has since declined to 1.5 million beds in 16,400 nursing homes (Centers for Medicare and Medicaid Services 2007). At the same time, average number of residents per home increased from 88 to 91 and the total number of nursing staff hours per resident per day decreased from 3.9 to 3.8 hours between 2003 and 2008 (U.S. Department of Health & Human Services, Medicare; Statehealthfacts.org. 2003, *Average nurse hours per resident day in all certified nursing facilities, 2008*. Accessed on: 6-5-2010 <http://www.statehealthfacts.org/comparebar.jsp?yr=63&typ=1&ind=417&cat=8&sub=97>).

Another form of elderly care is the nursing home. Nursing home facilities provide 24 hour skilled nursing, assistance in ADL's, and rehabilitative services. Most residents in nursing homes can no longer live on their own and reside within the nursing home following a hospitalization from illness or accidents while others may need extended care due to a chronic nature. Some facilities offer specialized programs for residents suffering from Alzheimer's or other severe ailments. Settings range from hospital to home-like,

private rooms or shared rooms. While no specific date marks the inception of the American nursing home, it was fostered by the passage of the Social Security Act of 1935 (brought on by the Great Depression) and the establishment of Medicare and Medicaid in 1965. These two major coverage programs led to the growth of the nursing home industry, and the regulations that followed their initiation shaped the nursing homes as the standard long-term care setting.

Much of the elderly population may not need the care that is provided by a long-term care facility, so other options are available. They include adult day care, aging in place, assisted living, congregate housing, and continued care retirement communities among others.

One option of care for the elderly is the adult day care. This is a planned program of activities for the elderly population beginning at age 65. The programs provide structured social and recreational opportunities for the participants while also providing a needed break to caregivers. Adult day care is a form of non-institutional form of care where participants need to be mobile, and also need to be continent. Many adult day care facilities voluntarily become accredited under the National Council On the Aging's national standards to assure quality care. A limitation of this type of care, of course is that one has to be able to move around. Those who lack mobility functions cannot benefit from this type of care.

A second option for the elderly allow them to “age in place” This is an option that allows the elderly to remain in their home for as long as possible, regardless of physical or mental disabilities. Aging in place often requires the need to remodel the home to suit the changing needs of the inhabitants from adding grab bars in showers, to renovation of the lower level of a home to eliminate the need to use stairs. Those who age in place often have many services delivered to them from a full range of health services to meals on wheels. Most people who benefit from this option are relatively well to do and are home owners. Renters are thus less able to benefit from this option.

Assisted living is another option. This option provides supervision or assistance with activities of daily living in order to monitor residents’ activities to ensure their health, safety and well-being. The assisted living concept also provides a means of providing an alternative to those seniors who cannot live independently but who also do not require the need of 24 hour medical care provided by a nursing home.

The board And Care option is a group living arrangement that provides help in the activities of daily living for the people who cannot live on their own but do not require the needs of a nursing home. This option is also sometimes referred to as group homes. An obstacle to the provision of this form of care for the elderly is the NIMBY (Not In My

Back Yard) syndrome. Neighbors in which such homes are proposed to be located may protest their location fearing that they will depress property values.

Congregate housing is similar to nursing homes in design of a living facility or apartment style living but directed towards individuals who are in relatively good health and can perform some of the essential activities of daily living. Most provide a centralized common area for socializing, and a shared kitchen facility. Usually one communal meal is served daily and housekeeping as well as laundry services are provided. A 24-hour staff is available to assist residents in need. This option is also referred to as supported housing, life-care homes, congregate retirement housing, congregate senior communities, residential care, sheltered housing, enriched housing, and single room occupancy housing.

Continued care retirement community is an option of elderly care which allows flexible “aging in place” accommodations that are designed to meet the changing needs of the residents over time in one facility. Entering residents sign a long term contract that states the housing that will be provided as well as the services and nursing care. It is important, prior to entering into the contract that a full understanding is reached as to exactly what services will be provided, at what costs, and what contingency plans are available if more attentive care is needed. Various housing options are available from independent living,

assisted living and nursing facilities in single family, to apartment or condominium style housing.

Elder Cottage Housing Opportunity (ECHO) is a small free standing home for an elderly person or persons erected near family members of the elderly person. This option provides the security of knowing family is close by while still allowing the inhabitants to be independent. This is perfect for older persons who can no longer maintain a larger home but do not require nursing care accommodations. This is also sometimes referred to as Granny flats.

Hospice Care is provided 24/7 and may be within the patient's home, hospital, nursing home or private hospice facility with the family members being the primary caregiver. Caregivers are trained by a nurse to provide much of the hands on daily care. Hospice provides many services ranging from pain and symptom control to bereavement care and counseling for the family members who partake in hospice care.

Conclusion

As we can see, elderly care has evolved over time from one that relied entirely on the family to the now ubiquitous institutional care facilities. Institutional care facilities have grown with a change in the social structure of society where the nuclear family now

dominates and with two working family members. The extent to which these institutional care facilities are meeting the needs of the frail elderly will be taken up later in this thesis. In the next chapter, we examine how the planning profession has responded to this demographic shift in the country's population.

Chapter Three

Planning Regulations and Housing for the Elderly

In this chapter I will argue that successful practices of aging in place could be sustained in many residential neighborhoods through zoning. One way to achieve this is by allowing what are commonly known as granny flats but more technically called second dwelling units, Ancillary Dwelling Units (ADUs) or companion units to be built in single family residential neighborhoods.

Choosing where to live in the elder years can be a complex decision, based on social ties, financial availability, family relationships and available information and options. While many older people are forced into a hasty decision following an illness and hospitalization, change can be instituted to facilitate a more community based care as we experience a boom in the elderly population in this century.

Research (Oswald et al, 2000) has shown that most older Americans want to remain in their homes within the community, so as to

age in place. Homes are safe havens, places where memories are created. In the home, the elderly have feelings of belonging to a place and identification to with their childhood, and life experiences. Homes are physical and psychological attachment which creates the feeling of belonging. While the abilities of the elderly might decline as they age, the memories that were created within the home often keep them alive when their bodies start to fail.

Most aging Americans live and will be living in environments built and selected by them according to their goals, interests, and future needs. For this reason aging in place cannot be achieved in all locations and particularly true where zoning regulations and building codes become barriers against the needs of the elderly. Zoning regulations have created neighborhoods that are based on segregating land uses and do not consider the accommodation of people that might face unexpected disabilities. Because of the strict regulations that have seemingly gone unchanged over time, remaining unprogressive with the changing culture of the population, many aging empty-nester -homeowners are unable to adapt their homes to meet their changing circumstances. They may also be unable to move into smaller homes without leaving the familiar neighborhoods in which they have spent much of their lives. To get to where we can be more progressive, we need to understand some of the past and the reasons why we separate uses.

History of Zoning in the U.S.

Zoning in America formerly started in 1899 with the court case *L'Hote* verse New Orleans in which some residents contested the expansion of a “zone” in which houses of prostitution were allowed within “residential” zones. Continuing the progression of zoning was the New York Zoning Code of 1916 which created the “pyramidal” system in which residential zones are the highest rated and nothing else is permitted. Below it is commercial use in which residential uses but not industrial uses. Within the industrial zone all uses were permitted. The last milestone case was in 1926, in the case of *Euclid* versus *Ambler*, legalizing the right for municipalities to separate land uses in order to protect the sanctity of single family homes and allowed for all land to be regulated for future use (Fischel, 2004). Zoning ideally protects single family housing by restricting land use through two provisions; first, restrictions limiting use of a single family zoned area and what defines a single family; second, limiting single family use to only one single family dwelling per lot. Although the conceptual and legal basis for zoning was laid in the 1920s, the major impact of widespread zoning was not really felt till the period of rapid building that followed World War II. Control of growth was not a concern during the late 1920s into the 1930s due to the Great Depression.

Emerging from the Great Depression and World War II, suburban landscapes began developing around American cities. These suburban paradises representing the fulfillment of the American dream have now become the prisons in which we are confined. But times are changing. West coast states are enacting laws to slow outward growth of cities

by increasing the single family zone densities through what was once popular in the middle half of the 1900s, the accessory dwelling unit or ADU.

Accessory dwelling units or ADUs can be traced back to the early 20th Century, where they were a commonly seen feature on most properties. After World War II, an increased demand for housing was created by the availability of FHA loans which made it cheaper for someone to build a new suburban home than to improve upon a preexisting inner city structure. Many homes built between 1940 and the 1960s were designed to hold large households; as a consequence to the past trend of building homes for large families, these homes now have surplus living space (Gellen, M, 1985).

Accessory apartments and "elder cottages" are two types of apartments receiving recent attention in elderly housing discussions. Accessory apartments are created as an attachment to an existing single-family home and provide the opportunity for exchanging services and generating income. A second option is the use of elder cottages. Elder cottages (also referred to as Elder Cottage Housing Opportunities or ECHO) are prefabricated small dwellings that may be physically set apart from a house on a single site, typically a family member's or other caregiver's lot (Hare and Hollis, 1983). Like accessory apartments, ECHO units offer caregiving opportunities that allow an elderly person to remain independent, but with support nearby. However, unlike accessory apartments, ECHO units can be moved when the occupant dies or leaves and are often

inexpensive to build. Both arrangements often have to overcome zoning restrictions. An elder cottage technically reduces lot size, while accessory apartments cause single family dwellings to be classified as multifamily or business buildings. Perhaps because of such problems, or because these alternatives have not been vigorously promoted, there has been only scant interest in and relatively little development of them.

ADUs offer a variety of benefits to communities by increasing the community's affordable housing supply for many low and moderate income residents whether they are elderly or disabled, who wish to live close to family. They provide a residence for caregivers outside of the main home, and provide homeowners a source of income in tough economic times or a supplement income upon retirement.

Many of the elderly find their current home is too large to maintain, possibly too expensive within their fixed income and there is little if any alternative to their current living needs. The provision of alternative housing options within the community for the aging population has both social and economic benefits. Studies conducted by Gore & Mangione (1983), Kendel et al, (1985), and Moen (1996) have found that integration into the community can have various health benefits for the elderly such as prolonged life, better physical health, and reduced psychological stress.

Interaction and communication among the elderly is important. The elderly have a greater need for social support than other age populations (Biegel, et al 1994). The social interactions with friends and family members provides emotional and practical support, allowing the person to continue living an independent lifestyle in the community, promoting aging in place and reducing the possible need for formal health care services.

From a social perspective, housing is crucial to a person's ability to remain a valuable and valued contributor to the community. Communities are enriched by the presence of people of all ages. Communities where the range of generations remains complete may also see benefits extending past the social; from smoothing out the dramatically fluctuating demand for community services in many suburban communities to a reduction in the need for nursing home care. It is in this light that some states and courts have allowed the creation of special zoning provisions particularly for the elderly (Pollak and Gorman, 1989).

These communities allow shared residence for the elderly and permit ADUs, either by right or as a conditional use, in all or certain single-family zones. Special use permits, special conditions, or site plan review may also be appropriate in a community that wants to maintain control over the use of such residences so as to keep the integrity of a neighborhood intact. The distinction between shared residences and nursing homes or licensed care facilities is that shared residences enjoy no state sanction, licensing, and/or

responsibility, and have no staff. Such residences are not commercial operations; they function in essentially the same way as any other home, but without biological or legal bonds between the "family" members.

The identification of community need should go a long way toward legitimating particular provisions used to regulate second units. A number of communities have included lengthy statements of purpose to support such regulations. For example, Pollak (1994) writes about the Town of North East, NY and how they specify the following goals in the city's elder cottage regulation:

. . . Foster and support extended families; Permit adult children to provide small, temporary homes for their aging parents who are in need of support, while maintaining as much of the independence of the two generations as possible; Reduce the degree to which elderly homeowners have to choose between increasing isolation in their homes and institutionalization in nursing homes; Encourage the continued development and use of small homes, specifically designed and built for elderly people; . . . (Pollack 1994; p.521-531)

Through regulation and the approval process by the zoning board this approach can protect the property values and character of neighborhoods by ensuring that the units are compatible with the neighborhood and are easily removable.

In 2001, the state of California enacted Bill AB 1866, which states that every local agency shall grant a variance or special use permit for the creation of second unit housing as long as standard restrictions are met. Such restrictions stipulate that the second unit may not be built upon a property for the intention of sale, the lot must already have a single family home and the second unit must not exceed 1,200 square feet, to name a few. California anticipates that with the passing of this law, there will be a substantial increase in housing stock that will relieve the financial burden on many of the elderly by allowing them to continue to age in place within a smaller, more manageable home, maintain their community ties, and prolong the often un-needed move into a nursing home. Additionally, the increased housing stock will lower housing and rental prices which had been steadily increasing over the years. The lower cost of housing would help address the funding of a 2005 study by the Department of Housing and Community Development that older renters at all income levels have high needs for affordable rental housing.

By excluding ADU's from residential neighborhoods, the elderly who cannot drive are stranded in their homes and disconnected from society until they receive a visit from a friend or family. The benefit of ADUs is that they allow for continued bonding between older and younger generations. The aging elderly would live independently but in close proximity to their children and possible grandchildren. Because of this, the potential to create family care situations is increased as well as an increase in support system and companionship to the elderly. This is especially the case for those elderly who live alone

(Altus et al. 2002). The elderly can also provide babysitting, and house sitting duties to a working family.

One factor that cannot be overlooked is that to successfully age in place the design of the housing unit must take the needs of the elderly into consideration. If ADUs are considered as the alternative of choice, they must be designed or rehabilitated to accommodate the present and future physical needs of the aging person(s). To assist in the relocation from their current housing to an ADU, the principle of Universal Design must be implemented. Universal design would create (among other features), zero step entrances, minimum doorway widths of 34 inches allowing easy wheelchair access, reinforced walls for the addition of grab bars installation if needed, and electrical outlets placed higher than usual to avoid excessive bending. When Universal Design practices are implemented at the start of the design phase, costs do not increase but rather it saves money in the long run as changes do not need to be made to suit the users' future needs (The Center for Universal Design 2000).

Two contrasting communities: Buffalo, NY and Chula Vista, CA

Buffalo New York currently has a population estimate of nearly 260,000, of which almost 32,000 are aged 65 years and over. Despite this, the comprehensive plan for 2030 currently has no plan for the elderly and their needs for housing. Although the overall population has declined over the years, the percentage of households with people aged 60

and over has increased by nearly 40%, households with people 65 and over increased by nearly 38% and households with people 75 and over increased by 2% (City of Buffalo New York, Charter Commission, 2000).

While buffalo is a very affordable place to live, with median home values of \$67,800 (2008 values), the addition of an ADU in single family residential neighborhoods would potentially increase property values for the homeowners. Taking inflation into account, home prices have dropped 24 percent due to urban sprawl outside of the city center causing land assessments to decline (City of Buffalo New York, Charter Commission, 2000). One of the housing concerns stated within the comprehensive plan is the need to increase incentives for home ownership. By allowing ADUs within the residential neighborhoods, the elderly benefit with a more affordable home, remain connected to the community through social ties and connections with friend and family and can still remain independent through home health care services such as Meals on Wheels. Benefits are also gained by the residential neighborhood as well. Homeowners with ADUs gain a possible rental income, the street becomes more populated, meaning there are eyes on the street which results in lower crime and a safer neighborhood.

Zoning for any type of elderly care in Buffalo, New York is restricted to R3 districts which limit the direct connection to a neighborhood setting and family connection for direct elderly care. With restrictions in the city's zoning code to prevent overcrowding,

protect property values and the general character of the neighborhood as the objective of the Board of Appeals, the chance of ADUs being allowed in single family residential neighborhoods is seemingly non-existent. By contrast one national survey involving 47 communities suggests that communities with "favorable" zoning can expect to get approximately one ADU per 1,000 single family homes per year (Hare, Danbury, 1995) which shows that neighborhoods won't drastically change.

The city of Chula Vista, CA has been far more progressive in allowing accessory dwelling units within its residential neighborhoods. California state law mandates accessory dwelling units be allowed in single family neighborhoods for the purpose of providing more affordable housing options to the community. Within the Chula Vista comprehensive plan additional policies for housing are also promoted such as shared living which is a support program that connects those with a home and are willing to share the living accommodations with those seeking housing. This option allows an elderly person to move in with someone that would be willing to assist in some of the activities of daily living that the elderly person might not be able to perform, but is still not in need of 24 hour care service.

The city has an estimated 2008 population of 223,867. The elderly (65+) population is 23,392 (10.4%), Chula Vista's comprehensive plan states that there is a need for 93,000

housing units for the entire community. Chula Vista's median home value of \$449,600 in 2008 is substantially greater than that of Buffalo New York.

With a projected shortage of housing in the area, Chula Vista continues to rank as one of the top areas in the nation for highest priced and least affordable homes. For rental units, the typical two bedroom apartment cost just under \$1000 a month. Thus a person would need an annual income of just under \$40,000 a year to afford such a unit, well above the means of even two minimum wage employees living together.

By allowing group homes within all residential zones, the elderly can have a feeling of being part of the community instead of being pushed to the outer limits of city boundaries, away from everyday life interactions and possibilities.

Allowing seniors to age in place in a multigenerational environment (such as a granny flat) with the support of their family and friends is healthier, and from a governmental point of view less expensive, than putting more elderly Americans in nursing homes or other assisted living facilities. Zoning laws should promote, rather than discourage such housing possibilities.

Chapter Four

Universal Design and the Eden Alternative

With the aging population and the growing shortage of nursing home beds, different options need to be explored for housing the elderly. Two promising options are that of i) aging in place through the use of Universal Design, and ii) the Eden Alternative. The first option provides an opportunity for the elderly to be housed within the community, and the second option, seeks ways to make the elderly more comfortable in an institutional housing setting. These two options will be discussed in this chapter.

Aging in Place through Universal Design

One factor that cannot be overlooked in helping the elderly to successfully age in place is the environment in which the elderly live. Universal Design practices, when implemented at the start of the design phase, helps to decrease project costs in the long run as changes do not need to be made at a later time to suit the users' future needs (The Center for Universal Design 2000).

Universal Design, when coupled with the concept of aging in place, promotes the idea that the environment should suit the user's needs and not the other way around. As one ages there is often the fear of losing one's health, friends, mobility, and independence. The fear of being forced to leave one's home for various reasons or even having to move into a nursing home due to poor health can cause undue stress on many, which can perpetuate further health problems such as depression (Donald, 2009).

It is often difficult for the elderly to age in place because of difficulties of making the home habitable for the frail elderly. Reasons range from the need to downsize to a smaller home, to moving from a two story to a ranch style home, and the inability to maintain a lawn. Through renovation, forethought and the concept of Universal Design, the home can once again become a space that works for the users instead of the other way around. Home modifications in part or in whole, improve lifestyle and save money when compared to the expense of managed care facilities. By aging in place, and modifying one's home, the burdensome costs of purchasing a new home is avoided.

I have previously argued the importance of social ties and support on the health and well-being of the elderly. Krout and Wethington (2003) note that the elderly often desire to remain close to family, and maintain a sense of intimacy at a distance with adult children. Furthermore, they note that this desire reinforces the need for policy makers to develop, implement, and support a long-term care policy that provides multiple housing options

for older adults. A suggestion is made for a more community oriented solution, one that is based on better housing design. Housing should not be a place of temporary living once bought, but an investment for one's entire life, an environment that works for and not against the owner as physical limitations arise.

Disabilities are defined by products and architecture, not by failing health. If someone is unable to perform a task, design is to blame. A better, more user friendly design process needs to be adopted, taught and implemented throughout the building and educational communities to eliminate perceived disabilities. The idea of designing to eliminate disabilities instead of designing to alleviate them provides a different way of looking at the design process. When the process is approached differently certain things are sure to happen:

- a. if taught early and as a basis for design, a more thoughtful design process is developed;
- b. as the "new" design process is accepted in the educational communities, those entering the work force will slowly change current design practices;
and
- c. future facilities will become more accessible to all possible users.

All products can be changed to a more user friendly design – from doors, packaging, internet web sites, buildings, and spaces. Universal Design is a worldwide movement that promotes design as a support for independence. Due to healthier living and advances made in the medical field it is now possible for people to live far longer lives as well as survive accidents and illnesses that were once thought of as fatal. People with disabilities and health conditions are now living longer and more fulfilling lives. As a result, the creation of a design or system that allows for the accommodation of this lifestyle is of utmost importance and of high-priority. Often, at the onset of health-related problems and physically limiting disabilities, it becomes necessary for these individuals to leave their homes and transfer into more accommodating and less-restrictive environments in which they can function more freely and independently. Factors such as continual health care attention and the need for social support are just examples of issues that compel this particular move. This, however, need not be the case. The point of contention here is that individuals should not have to relocate just because the home or dwelling is no longer conducive to fulfilling their needs. This is a case of a design flaw—a problem that can be rectified. The solution lies in Universal Design

The concept and beginnings of universal design began with the barrier-free movement (Knecht 2004) which started in Europe, Japan and the United States in the 1950s. The goal was to design for people with disabilities and to move away from institutional care to integrating the disabled into the community. The movement was established in response to demands by disabled veterans and advocates for people with disabilities.

While physical barriers in the environment were recognized as significant hindrances to people with mobility impairments, various groups, most notably the Veterans Administration, The President's Committee on Employment of the Handicapped, and the National Easter Seals Society agitated for the development of national standards for "barrier-free" buildings.

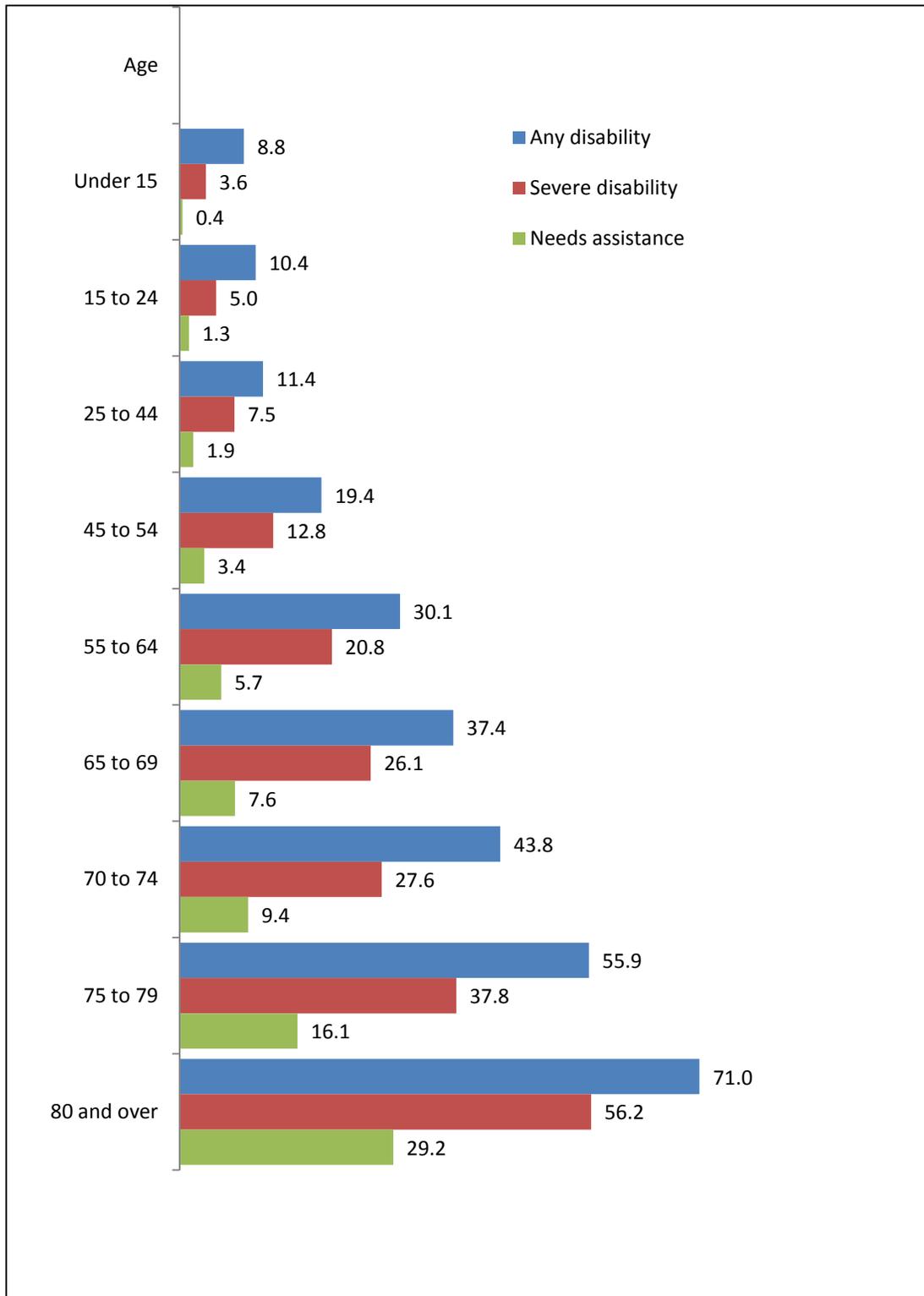
By the 1970s, parts of Europe and the United States began moving beyond special solutions tailored to individuals and toward the idea of total integration. Legal standards used the term accessible design. Beginning with section 504 of the Rehabilitation Act of 1973, the United States required developers to utilize accessible design as a condition for parties responsible for accessible design to those entities that receive federal financial assistance. In 1990, the Americans with Disabilities Act led by the disabled community established the most expansive legal requirements pertaining to accessible design, and gained most of its legal language directly from the Civil Rights Act of 1964.

Progress towards universal design has been fueled by three parallel tracks: legislation, barrier-free design and advances in rehabilitation engineering and assistive technology. The Civil Rights Movements of the 1960s inspired the subsequent Disabilities Rights Movement that greatly influenced the legislation of the 1970s, 1980s and 1990s. These new laws prohibited discrimination against people with disabilities and provided access to education, places of public accommodation, telecommunications, and transportation.

Advocates of barrier-free design recognized the legal, economic, and social power of a concept that addressed the needs of people with and without disabilities. During the early stages of implementation of standards, it became apparent that segregated accessible features were “special”, more expensive, and often times architecturally unappealing. But the attraction towards finding a system that is not only receptive to the needs of the disabled, but is also advantageous to those who are not was perceptible. Universal design is anchored in the belief that it can be implemented at a lower cost, be unlabeled, attractive and even marketable.

The parallel tracks of rehabilitative engineering and assistive technology combined with the legislation and Civil Rights Movements worked towards the idea of universal Design. It almost seems to become a matter of cause and effect. Within the rehabilitation engineering and assistive technology path that emerged in the middle of the 20th century efforts to improve the lives of those using prosthetics and orthotics intensified as thousands of disabled veterans returned from World War II.

Figure 7: Disability Prevalence and the Need for Assistance by Age: 2005 (percent)
 Source: Brault (2008). Disability Prevalence and the Need for Assistance by age: 2005



Assistive technology should also respond to the effects of the changing demographics of the user base. The population is getting older. No longer will the majority of users be young people with a single disability, but of an older population with multiple minor disabilities, some of whom may have a major disability.

Universal design is, overall a combination of the three paths, and a “gray” zone in which the barrier-free design and assistive design merge; a place where cross-over products are emerging and have become successful. One such group is that of the OXO brand of kitchen utensils. With thick grips, the items become easier to hold, more comfortable to grip and more user friendly to. The limitations imposed by products and environments designed and built without regard to the needs of all people are significant but often go unrecognized. As figure 7 shows a report by the U.S. Department of Commerce revealed that in 2005, 18.7 percent of the 291.1 million people had some level of disability, and 12.0 percent or 35 million people had a severe disability. Of the entire U.S. population aged 6 and older, 4.1 percent needed personal assistance with ADLs. Within the senior population of 18.1 million, 51.8 percent had a disability and 36.9 percent had a severe disability.

Currently the elderly have few options for when long term care needs emerge. The elderly can stay at home, move in with a family member, or move into a nursing home. Housing options should be a core part of long term care planning. Home modifications

are becoming more popular with the elderly to allow the aging population to maintain their life and social connections within their current housing unit, and for financial reasons. Currently, very few public dollars are available for private housing modification, because most public programs are aimed at new construction (Krout, Wethington, 2003). A solution to this might be to encourage public-private partnerships, in lieu of allowing a higher density development, the developer can agree to pay for some rehabilitation and modification costs to existing homes for the elderly. By having the developer pay for some modification costs, some elderly are capable of remaining in their home longer and this helps to keep the neighborhood from becoming gentrified.

The purpose of universal design is to reduce the physical and attitudinal barriers between people with and without disabilities. Some basic universal design examples are light switches with large flat panels rather than small toggle switches, walk-in bath tubs, large button controls that are easy to read on appliances, and multi-level countertops.

According to Michael Bednar, everyone's functional capacity is enhanced when environmental barriers are removed. Ron Mace further observed that universal design is not a new science or style of design, but an awareness to a commonsense approach to making everything either designed or produced usable by everyone to the greatest extent possible (Rose, Meyer, 2002).

The principle of universal design has seven guidelines that are used in the design process. The seven guidelines as created by advocates of universal design at North Carolina University, the Center for Universal Design in 1997 (Center for Universal Design, 1997) are as follows:

- Equitable use – the design is useful and marketable to people with diverse abilities. This makes the design appealing to all users.
- Flexibility in use – the design accommodates a wide range of individual preferences and abilities and thus provides a choice in the method of use.
- Simple and intuitive – use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level. Unnecessary complexity is eliminated.
- Perceptible information - The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- Tolerance for error - The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- Low physical effort - The design can be used efficiently and comfortably and with a minimum of fatigue.
- Size and space for approach and use - Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Examples of how Universal Design is incorporated within a home includes in at least one bedroom and bathroom are on the first floor; lever door handles and rocker-arm light switches help alleviate problems for arthritis sufferers; electrical outlets are raised to lessen the degree of bending over and electrical switches positioned slightly lower for easier access; and extra maneuvering space such as wider doors and hallways to allow for easier walker and wheelchair mobility.

The ability to age in place successfully is feasible only to those with the financial wherewithal to fund the necessary renovations (e.g., bathroom and kitchen upgrades). Those unable to independently afford such renovations from their own accounts may need access to innovative financial instruments. The provision of such instruments could provide societal benefits in that the elderly would not find it necessary to enter into expensive, long-term care facilities that may ultimately need to be taxpayer funded.

One option that was created in the mid 1970s is the reverse mortgage program. This option “unlocks” the equity in a homeowners’ home. The reverse mortgage is available to those aged 62 and over looking to supplement their income or provide a line of credit to be used at a later time. Beyond the age requirement, other conditions include, participants must not have existing mortgage(s), no pending bankruptcy, and before borrowing, the

applicants must seek financial counseling approved by the Department of Housing and Urban Development.

Once the loan is granted, a lien is placed on the home by the reverse mortgage lender and the homeowner decides between either receiving monthly payments, or a lump sum. The loan payment obligations are deferred until the homeowner moves out of the home sells the home or passes away.

There is a cap to the lending limit which is \$625,500. This was raised from \$417,000 in 2009. This lending limit is capped, no matter how much the house is appraised for, and is determined by a series of factors ranging from the age of the senior, to the interest rate determined by the U.S. Treasury one year T-Bill. There are some advantages to the reverse mortgage. It is a form of untaxed income, and is income that does not directly affect Social Security or Medicare benefits. However the income received by the reverse mortgage can affect eligibility for various public programs if the money sits in a bank account for longer than a month (Consumer Union, 1998).

There are high upfront costs ranging from mortgage insurance at two percent of the appraised value of the loan, title, as well as attorney and origination fees, which could amount to over \$6000. Lastly, since no monthly payments are made, compound interest is

accrued. Due to the compounding interest, the longer the reverse mortgage is outstanding the more likely all the home equity will be depleted when the loan is due (Medicare.gov, 2007).

Aging in place is an important issue in that it is related to how people think of housing. They live in homes that have been invested in, both in a financial as well as psychological way. With the use of a reverse mortgage for home modifications, neighborhoods retain their elderly population and remain age diversified.

The modification of a home can be the key factor in increasing the chances of older persons staying independently and injury free in their homes. According to the Center for Disease Control (Center for Disease Control, 2009) one in three adults 65 and older fall each year, and of those who fall, 20-30% suffer moderate to severe injuries. The American Association of Retired Persons put together a brief report on improvements one can make to a home that would provide an immediate impact on the quality and safety of the home which parallels the ideas promoted by universal design. Such modifications include installing grab bars in the shower, by the toilet, and the tub to assist the individual getting up and down on their own, an adjustable shower seat so those that can't stand unassisted can sit and shower and not have to worry about slipping and have an easier time standing up as opposed to sitting in the base of the tub, or the use of nightlights that provide enough illumination to navigate without turning on additional lighting, causing

temporary light blindness. These are some of the many cheap and easy modifications that improve the safety of an elderly person's home.

Many of these options are similar and are different almost only by name alone. The biggest problem is trying to predict what someone's lifestyle might be like ten, fifteen, or twenty years into the future, as one goal is to limit the amount of times one has to change living situations.

The need to leave one's home and into a nursing care facility is often sad. But what if that move was reinforced with increased social interaction, a home like feeling, comfort, and a feeling of being welcomed? An option known as the Eden Alternative may appeal to the elderly because of its social, economic and safety benefits.

The Eden Alternative

Nursing homes are not all bad; the benefits of nursing homes have been long established. There is no denying that they offer a wide-range of options to the elderly--from providing preventive and therapeutic care services to providing emotional and social support.

Patients in nursing homes may require preventive, therapeutic, and rehabilitative nursing care services for non-acute, long-term conditions. Specialized clinical and diagnostic services are obtained outside the nursing home. Most residents are frail and aged, but not bedridden, although they may use a cane, walker, or wheelchair. Stays are relatively long, and last the remainder of the person's life. Nursing homes also care for a smaller percentage of convalescent patients of all ages. These patients are in long-term recovery from acute illnesses, but no longer require hospitalization.

The reinvention of nursing homes has become the life work of Dr. William Thomas. In his design, the nursing home is changed into a home full of gardens of earthly delights, away from the "bleak housing" that one usually associates with nursing homes. Thomas observed that residents in nursing homes suffer from loneliness, and depression, and declining health. So he challenged the typical thinking of nursing care and thought that institutions should be seen as homes. The concept of companionship through animals and the opportunity to care for something such as gardens, or flower beds, coupled with variety and spontaneity create a lively community which can succeed where medications, traditional healthcare and therapies fail. This is the Eden Alternative.

The Eden Alternative pilot project began in 1991 at the Chase Memorial Nursing Home in New Berlin, New York, and surprising results were found. Residents in this nursing home took less medication, lived longer, and experienced less staff turnover (Clark,

2006). The Eden housing model has thus shown that the residential model works better than that of the sterile hospital model.

The Eden Alternative has 10 principles which form the foundation of nursing care facility practice. The underlining goal of these principles is to eliminate the feeling of boredom, loneliness and helplessness. The principles include committing to creating a human habitat where lives revolve around relationships to promote interaction within a traditional US nursing home between the elderly and children, animals, and plants. It also de-emphasizes the top-down bureaucratic authority in exchange for one where the elderly are given the maximum decision making control over their own lives.

Among the major prerequisites for successful transition into a retirement community is the ability to form a social connection and an attachment to place. This is what the Eden Alternative seeks to achieve. While some of the elderly may not be able to remain in their homes and age in place, the transition into an elderly care facility may be beneficial. It has been mentioned that the breaking of social ties may be stressful on some individuals and may cause depression. In general, relocation transitions are among the top 10 life stressors for people of any age (Mead, et al. 2005) and are associated with loss of social support systems and fear of the unknown (Drummet, et al. 2003). What is place attachment? And, what are the benefits of creating social involvement within a community setting?

Place attachment is a process that provides personal and group identity, fostering security and comfort with one's immediate surroundings (Brown & Perkins, 1992). Social support and networks appear to boost the immune system, reduce the likelihood of illness, speed up the recovery process, diminish the need for medication, reduce psychological strain and cognitive impairment and reduce the risk of death from heart disease (Larson, 1995; Sarafino, 1990).

For most people, the mention of a nursing home automatically conjures up a vision of a hospital-like setting. From the floor plan to the living spaces of the residents, the mental image seems sterile, even if one has never set foot in one. The nursing home institution in the U.S. has not really changed since the 19th century and no longer meets the needs of the elderly today. Nursing homes have become factories of services, where people are provided a service for the bottom line, money. The Eden Alternative is a transformation and improvement on the existing nursing home model that brings back compassion. Caring is no longer set aside for the bottom line, it is the bottom line!

Traditionally, when one moves into a nursing home, one gives up the free will and ability to make decisions for oneself. The amount of control that is given up is staggering. No longer can a person wake up in the middle of the night, go to the kitchen and get a snack.

What is lost in control over oneself is gained by the nursing facility. The traditional nursing facility gains control over when a resident wakes up, goes to sleep, eats, when they bathe, and what activities they do and who they do it with. The nursing home is run like a factory and residents become puppets in their own lives. Lives are managed as group wholes and for the convenience of the health care worker instead of managed for the individual resident's needs, wants and most importantly, their desires.

Conventionally, decisions are made from top down instead of bottom up. Those who pay for the service (although mostly indirectly by Medicaid and Medicare) rarely, if at all, get a say in what happens. Involving residents in simple decisions such as helping make a monthly food menu to deciding when they go to bed and when they wake up, could have a tremendous positive impact on the individual's life.

The physical environment of the space is also a concern that needs to be addressed. Spaces such as the dining room and lounges, to the more personal space of the inhabitant's room must move away from the sterile hospital, institutional feel and give way to a warm, inviting, home feel. Granted, elderly care facilities present special design challenges. For most residents, the nursing home is not just a facility, but indeed their home. The reality is that in most cases the residents will live there for the rest of their lives and, moreover, rarely leave the premises at all. The nursing home becomes their

entire world in a sense. The challenge is to design a nursing home that is sensitive and responsive to long-term human needs and well-being, both physically and emotionally.

The Eden Alternative is a replacement for the institutional nursing home; started by one man searching for an answer to a question. While working at a nursing home and tending to one of the residents, Dr. Bill Thomas asked the resident if there was anything he could do. A reply came from the resident that he could not stop thinking about. For days that turned into weeks he thought about what was said to him. He looked through his medical texts and still had no answer. What were these words that set Dr. Thomas on this path? “Doctor, I am so lonely” (<http://www.edenalt.org/about-us>). These are the words that began the idea of the Eden Alternative.

Dr. Thomas has said that, as an American society, we have a grim look towards our elders. We no longer have the feeling of responsibility of the past to care for the sick, poor and aged. As mentioned earlier, elderly care was expected to be provided by children, but times have changed since the splendor of antiquity. It is a mistake in which we see the vast knowledge and experiences of the elderly, not as a connection to our past, or understanding, but as a burden to our society. The stark outlook towards the elderly started in the 1950’s as teen heroes like James Dean emerged on the movie screens and America began its love with the automobile by breaking up the extended family for the more intimate immediate family.

The base for the Eden Alternative is to change the idea of nursing homes as well as remake the experience of aging and disabilities. By providing education and resources for improving quality of life, for the elderly and the caregivers, a recapturing of a meaningful work life is instilled.

With the Eden Alternative, Dr. Thomas seeks to change the way people look at the nursing care industry. By looking at the healthcare industry as more than curing the sick but, as the creation of a community which eliminates loneliness, helplessness and boredom. These are the sicknesses that attack the spirit, which is just as debilitating and deadly as any disease. A change of perspective from nursing care as an industry to one of caring about the elderly, becomes the new paradigm.

The concept is simple. No longer are nursing homes seen as “god’s waiting rooms”, but as places where humans live. Aging is viewed as a continued stage of development and growth. Life is still vibrant and vigorous and not one based only on a period of decline.

Nursing homes need to start addressing the emotional needs of the inhabitants as much as the physical and nursing care needs. The culture change initiative that the Eden

Alternative embraces does just that. In order to enliven the traditional American nursing home environment, Eden Alternative nursing homes take actions that “humanize” the habitat, by including companion animals, maintaining gardens and plants, “on-site” and “after school” care for children, family style dining, and other practical activities that bring the real world into the facility and link the facility with the surrounding community.

The foreseeable benefits extend past the residents and unto the children by a dissolution of the stigma of nursing homes as places where the elderly go to die into a place where the elderly regain social involvement with the community. In turn, this provides the elderly with a feeling of self-worth and a means for engagement with society.

Nursing facilities that promote the Eden lifestyle move away from the traditional model of rotating nursing staff. Traditionally, staff is moved through the entire facility in order to familiarize all staff with all residents. Within an Eden Alternative nursing facility, staff has a more consistent assignment. Nursing staff work and care for the same residents on a daily basis. Where the traditional nursing care model had nursing staff care for different residents every day then return to the beginning of the rotation once the care worker saw all the residents. This change in work design has shown to have a significant positive effect not only on staff retention but also on the health of the residents, including lower reports of pressure ulcers, falls and weight loss (Baldauf 2010).

The Eden Alternative employs teams made up of nurses' aides who take on greater responsibility in decision making regarding residents daily care. This change moves the power of decision making away from the top managers-hierarchical position, to one more closely related to the lives of the residents. The shift of power also gives the residents a feeling that they are being heard, that their voice does matter and that they still have some control over their life.

Another change that has been made within the culture of the traditional nursing home is the elimination of a large nursing station in exchange for a more home-like appearance and feel. The elimination of a single meal for all is replaced with buffet style dining and personalized meals made in advance and stored for the residents so they can eat when they want and not on a set schedule. Nursing staff also assist residents in determining their own daily schedule. This move provides the nursing staff with the power to design daily schedules with the residents. The move not only gives residents power but also leads to promotion of staff development, empowerment and a continued change in the top down management philosophy to a bottom-up philosophy.

The Eden Alternative also creates additional public and private space. This enhances a sense of place, and a sense of ownership and provides the users identification with the

preferred public spaces. In a sense, public space begins to belong to the permanent user. Without this feeling of connectedness, the lack of attachment makes one feel as though they do not belong. Public space is also provided in the Eden Alternative to promote interaction among residents (Lofland, 1998). These public spaces meet five goals – comfort, relaxation, passive engagement with the environment, active engagement with the environment, and discovery (Carr et al.1992):

- Comfort – a function of the length of time people remain in the space, and is related with a person’s sense of security and safety.
- Relaxation – a developed state of comfort of the body and mind.
- Passive engagement – performing activities within an environment such as watching others (people gazing), looking at views, reading, or resting with the environment that leads to a sense of relaxation.
- Active engagement – a direct experience with a place, and or with the people within the space.
- Discovery – represents the desire for stimulation through exploration as well as observing how others use the space.

Research on residents of nursing homes has shown that some of the disabilities among the residents of nursing home facilities is due to the lack of opportunities for exercise and social interaction (Fiatarone, 1996). By providing opportunity for physical activity that

promotes social interaction and exercise, a higher healthy living standard can be achieved within nursing homes.

Exercise among the elderly population can help relieve arthritis pain and disability, control type 2 diabetes, lower the risk of coronary heart disease, and lower blood pressure and the risk of hypertension by up to 50% (Rowe, Kahn 1997). It can also improve morale, confidence, enhance agility and mobility (Harber, 2003).

A current shortfall in determining the benefits of the Eden Alternative model of nursing care over the traditional model is the lack of actual scientific empirical data (Mueller 2008; Rahman 2008). Regardless of the lack of scientific research, there is an abundance of anecdotal evidence that praises Eden Alternative facilities. For example, Canadian Union of Public Employees (CUPE), the largest health care union in Saskatchewan states that “the Eden Alternative appears excellent in theory and is widely promoted as the solution for improving the quality of life for residents in long-term care.” Also noted in the report are the benefits for the workers within the Eden Alternative model of health care facilities: “better paid and like the increased autonomy and the opportunity to work with fewer residents” (CUPE, 2000). Coleman et al. (2002) also report of qualitative observations of a traditional run nursing home that was changed to the Eden Alternative model that showed both staff and residents had a positive reaction.

Older persons seldom wish to live with individuals that are unrelated to them. The elderly often have never experienced group living conditions such as the dormitory lifestyle provided in the traditional nursing home. Most of their lives have emphasized individuality and independence. As society has developed a stigma towards old age, the association with group living often reminds the aging population of their mortality.

Figure 8 shows one of the many traditional nursing home hallways; they look, feel and smell much like a typical hospital. Floors are linoleum for ease of cleaning; walls are painted white to create an image of a sterile environment.

Figure 8: Traditional US nursing home

Source: http://www.nursinghomeabuselawyerblog.com/southern_california_elder_abus/



Figure 9 depicts a more home like environment with the introduction of animals, kids, and carpeted floors. The hallways are usually filled with plants and carpeted for a homelike feel. Although there is additional work needed to maintain the animals, carpets and plants, this adds to the wellness and happiness of the residents and staff.

Figure 9: Eden Alternative nursing care facility
Source: <http://www.indiana.edu/~nca/ncpad/eden.shtml>



The nursing homes that we all envision in our mind have created a loss of control; a model of care that has provided too much assistance has led to a lack of autonomy which

produces a learned helplessness amongst the residents. Sandra Wright, an administrator of Somerset Patriot Manor in Somerset County Pennsylvania is quoted saying; "The problem with a nursing home is that everything is so traditional. There's a time to shower, a time for medicine, a time for bingo. Is that what we really want for ourselves?" (Rotstein 2002).

In the Eden Alternative houses, residents bring their own furniture to give a more comfortable and home-like personal touch to their rooms. This provides a feeling of belonging and ownership and eases the transition into a new home. The nurse's station is placed within a large kitchen style area, where residents hang out and watch food being prepared. The Eden housing is also kept small and intimate, about 30 residents, as a home-like feeling is lost with 80 people to a floor.

Many elderly care facilities such as The Mission Care Group in Visalia, California and the Rochester Presbyterian Home in Rochester, New York that have adopted the Eden Alternative model conclude that, "The Eden Alternative has the potential of remaking the experience of aging and disability across America and around the world, with the dedication to help others create living environments and the elimination of the plagues of Loneliness, Helplessness, and Boredom".

The concept is really simple. Change the perception of what elderly care is from a habitat of the frail, to one that is more caring and nurturing. A habitat in which human beings learn, enjoy life and live! The Eden Alternative creates an Elder-centered community in which the elderly are capable to give as well as receive care, and provide the chance to create loving companionship through the use of animals and the opportunity for chance encounters.

Interactive alternative programs such as pet, music, art, and exercise therapies add stimulation to daily routine and create more home-like feelings, while easing the transition period for residents moving into long term care facilities. Lopez notes that, “the theory behind alternative therapies is that such treatments balance the human mind and body, restoring the body’s protective immune system and relieving symptoms of illness and pain” (1996, p.51). As employees become active participants in these programs, the results are not only good for the residents but also can increase job satisfaction for the employees (Kongable, et al., 1990). Stimulation from alternative therapies and changing the internal culture of a long term care facility may help reduce the high turnover in healthcare and improve patients’ quality of care.

The Eden Alternative program leads to improved quality of care for the majority of the residents. This alternative program may also help the organization and the individual employees by focusing on employee participation, empowerment, the team approach, and

continuous training. These management approaches positively influence the morale, attitude, productivity, job satisfaction, and ultimately, the quality of resident care.

Changing the culture of long term care facilities is a never-ending process. Using short-term stimulation to enhance residents' lives only allows for short-term improvement. Our elderly deserve continuous stimulation in their lives. Shutting them off from animal, plant, and human stimuli is a cruel and debilitating life-style. Boredom, loneliness, and helplessness is not a pleasant way to end one's life. Elderly people in long-term care facilities deserve more. Residents have spent most of their lives caring for husbands, wives, children, grandchildren, gardens, pets and then suddenly, this stimulation is removed. When a "habitat for living" is added to high quality care, the residents' remaining years can be more fulfilling and rewarding.

The Eden Alternative, and other similar programs, hopefully brings that bio-diversity culture back into the residents' lives. With a well-trained staff, participating teams, residents and their families, and interaction with the community, the quality of care and overall well-being of the individual flourishes. Most would agree that adding stimulation to resident's daily activities is an improvement. At the same time, employees' attitudes and production improve. Employees gain self-management and team-building skills while becoming more self fulfilled in such a program.

The need for sensitivity to the transition from home to nursing care needs to be more prominent within society. The Eden Alternative provides a way to respond to the needs of the elderly and to ensure a high quality of care in their later years.

Chapter Five:

Conclusion

It has been suggested that the availability of nursing home beds will fall far short of possible needs in the near future. As the baby boom generation begins to turn 65 by the thousands starting in 2012, implementation of various elderly housing care options needs to be promoted.

Beginning with the Greek, Roman and Egyptian cultures, the care of the elderly was the responsibility of the children. There was no formal need for elderly care facilities, as the child was the care provider for the parent. But not all care was equal. Egyptian children would take in the mother while the father was given a stipend for food. Within the Greek and Roman cultures, little care was provided towards the elderly, what was provided was influenced by the Christian church, where it became the moral duty of the children to provide care for the parent.

Community hospitals which cared for the sick and the elderly were first seen in 369 CE and are credited with having begun in Byzantine society. Other institutions include hospitals, poor houses, orphanages and old people's homes. The beginning of modern

care started during the Renaissance which established the almshouses beginning in 1368 when Mr. John Stodie, Lord Mayor of London donated thirteen buildings to be used to alleviate the hardships and sufferings of the aged poor.

In the early years of America, families lived almost completely in self-sufficiency. Family members worked together to provide for the family as a whole. As family members got older, the children were expected to take over the tasks and responsibilities of the elderly and provide them with care. If the children were unable to care for the elderly, they could set up the elderly with a surrogate family to provide the care for a cost. If the elderly had no children or family then they became dependent on charity or public welfare by moving into a poorhouse in order to receive any needed care.

Concern over the attractiveness of public welfare for the indigent elderly led to making the life in a poorhouse as unappealing as possible to discourage its use. This ranged from referring to the inhabitants as inmates, requiring them to wear a uniform instead of their own clothes and a restriction from leaving the facility grounds. To further restrict interaction between those living within the poorhouse and the rest of society, poorhouses were built in the country and away from the rest of society. The inmates were required to work on the poorhouse farm for food and do other chores such as cook, sew and to maintain the facility to a livable standard.

With the westward migration to the west, families began to disperse and become scattered across America. This scattered migration toward the west made it less likely that many, if any children were around to provide care for the aging parent. In the 19th century, and in response to the poor conditions of poorhouses, numerous nonprofit organizations began building homes for the aged to provide respectable care and to avoid the degradation of the poorhouse. The homes that were set up by the nonprofit organizations were the beginning of “assisted living” care.

Aside from the poor elderly that needed care, those that had the financial means also needed care. The non-indigent frail lived in “proprietary” or privately-owned facilities called “rest houses” or “convalescent homes” that were no more than rented rooms in a family home that provided care for the aged. By the late 19th century, nursing emerged as a profession along with home health care. As the nursing profession continued to grow, so did the need and desire from wealthier families to employ them as live-in care providers. Convalescent homes progressed as an institution furnishing care for the aged and sick of all ages and was the forerunner of the modern nursing home.

The term nursing home formally gained the name in the late 1930’s to early 1940’s as the 1935 Social Security Act created the Old Age Assistance (OAA) program which gave cash payments to the poor elderly. The OAA later spawned the Medicaid program, which has now become the primary funding source for long term care today. Due to the Great

Depression, little real money circulated, and coupled with the fact that the OAA paid out cash, old age homes became a perfect “cottage” industry. Many of the care homes were “mom and pop” set-ups in order to make some financial gains in the desperate times. Some of the homes were run by unemployed nurses who provided basic care, and this gave rise to the term “nursing home”.

The surge in the development of long-term care in the recent years has been attributed to several factors, from the increasing elderly population due to medical advances to the changing attitudes of society towards institutionalized elderly care. While attitudes towards elderly care were changing, so were the restrictions on where care facilities could be built. Starting in 1899 and reaching the bases for American city planning in 1926 in the Euclid versus Ambler court case which separates land uses, group homes have been pushed to the outer limits of cities.

From the beginnings rooted in Egyptian, Roman and Greek care to America in the 1930's, formal institutional nursing care became the primary provider of elderly care. After World War II development of Accessory Dwelling Units of the early 20th century became a commonly seen feature on most properties, not only as a way for homeowners to supplement their income but also as a way to encourage aging in place.

Elder Cottage Housing Opportunity (ECHO) units or Accessory Dwelling Units (ADUs) offer a different option than moving into a nursing facility. ECHO units and ADUs offer the chance to age in place and maintain a sense of independence while having nearby support from either a healthcare professional living within the ADU, or by the elderly themselves taking residence within the unit on a family member's property.

The benefits of the ADU range from maintaining social ties, independence, and ability to supplement income, to the opportunity it provides the elderly to down size from a home that is too large for their needs. By providing alternative housing options within the community economic, social and health benefits are provided.

Accessory dwelling units are a viable option that provide the elderly with the opportunity to age in place, and also have the potential to slow gentrification and increase population density. Since the peak of ADU development after WWII, a steady decline of ADU and ECHO development coupled with zoning restrictions have almost killed off this living option, though the options are making a resurgence in California.

In 2001, California enacted Bill AB 1866 which changed local law to allow ADU and ECHO homes to be built if certain restrictions are met. The goal is to ultimately increase the housing stock but in the process will also lower property taxes – relieving financial

burden on many elderly homeowners, and prolong the often un-needed move into a nursing home to name but a few benefits.

Through this enactment of land use policy change, the exclusionary planning practice of rigid land use zoning is changing to a more inclusive, more neighborhood friendly practice. The elderly who choose to age in place can keep the social ties they have formed over the years, make neighborhoods more age-diverse, and still offer a valuable service to the community and neighborhood.

The benefit of ADUs allows for a continued bonding between older and younger generations within the community setting. If ADUs are considered as a housing alternative, they must be designed or rehabilitated to accommodate the present and future needs of the aging person(s). Through the use and incorporation of Universal Design into ADU housing, an easier, more affordable living option becomes available as an alternative to the traditional nursing home.

The basic concept of Universal Design is that the environment is designed to work for all possible users of the space, and to reduce the physical and attitudinal barriers between people with and without disabilities. Disabilities are defined through the prism of design, not by failing health. As advances in medicine and healthcare continue, the aging

population will continue to grow, which can lead to a larger population requiring assistance in activities of daily living from mobility assistance to bathing.

Universal Design started as the barrier-free movement around the 1950's, in response to demands by disabled veterans and advocates for people with disabilities. By the 1970's, parts of Europe and the United States began moving away from tailored solutions for specific problems to the idea of total integration of the disabled into society. In 1990, the Americans with Disabilities Act established the most extensive legal requirements pertaining to accessible design.

By incorporating Universal Design within the private home, the home that once worked against the elderly homeowner now becomes a home in which they can continue to age in place and retain social network and community ties. But home modifications are costly; very few public dollars are available for private home modification, as most public programs are aimed at new construction.

The ability to age in place successfully (through home modification) is feasible only to those with the financial means to incorporate the necessary home renovations. In the mid 1970's, the reverse mortgage program was created. By unlocking the equity in a homeowners' home, a line of credit becomes available to make such improvements or renovations to the home or to supplement one's income. Through the use of reverse

mortgages for home modifications, neighborhoods have a chance to retain their elderly population and forgo gentrification.

But when modifying the home is still not enough and the need to move into a nursing care facility is the only option, the option should be a move to one where the elderly are treated like persons and not patients. There is no telling as to when nursing home culture began to change, but the Eden Alternative is noted as one of the most recognized facilities that lead the change. Within the Eden Alternative, individuals are treated not only for their physical ailments, but are also helped to cope with the changes in their life, from the anxiety of having to move out of their home and into a new one to the depression of knowing they need more attentive care.

The Eden Alternative nursing design is a change of the entire traditional nursing home set-up. Nursing staff no longer rotate throughout the entire facility, spending limited time with all the inhabitants. Within Eden homes, nursing staff maintain daily contact with a smaller number of individuals and form closer relationships between the cared for and the care taker.

The power dynamics also changes. There is a dismantling of the top-down order of power. Nurses are given greater responsibility in decision making on day to day care. Residents also gain a voice in how they are cared for, and how they live their lives. The

Eden Alternative lifestyle moves away from the learned helplessness that is associated with traditional nursing care homes. No longer are there strict wake times, eating schedules, and rigidly organized group social events where the nursing staff tell the patients where they need to be at specified times during social hours.

The Eden Alternative core principles lie in relieving loneliness, helplessness and boredom. By incorporating pet therapy, music, art, and a more home like environment, residents adjust to the move into the care facility easier. The residents make their own schedules and are encouraged to live life, and to continue the life they led before moving into an Eden facility.

The benefits don't end with the residents, but also extend to the nursing staff. Children are brought to the facilities to mingle with the elderly. As a result of their exposure to the elderly the traditional concept of what it is like to live in a nursing home begins to dissolve to one where people regain social interactions, and continue engaging with life. Job satisfaction amongst the nursing staff is also increased from morale boost to productivity. Positive benefits are experienced all around through the change of nursing care culture.

In closing, changes need to begin happening from zoning to building practices to the perceptions of what nursing homes are. As Benjamin Franklin said, the only thing we

know for sure is death and taxes but death does not have to happen as soon as we begin to decline in health. The elderly can maintain semi active lifestyles by participating in public life through improved facility design and programming within these elderly facilities. The baby boom generation is here and will lead the charge for change, but change is an ever evolving, living thing. Taking appropriate measures to address the demographic shifts through more humane institutional care and modification of planning and zoning regulations is a first step in providing better care for the elderly.

Footnotes

1. U.S. Department of Health and Human Services -
http://www.longtermcare.gov/LTC/Main_Site/Understanding_Long_Term_Care/Basics/Basics.aspx accessed on - 6/9/2010
2. At the very highest levels of the Egyptian administration, officials had the option of never retiring or relinquishing their official incomes at all; instead an assistant was appointed to over take many of the duties associated with the office.

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