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# The Changing Profile of Nursing Home Residents: 1985-1997



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## Highlights

- **In 1997, over one-half of elderly nursing home residents were 85 years of age or older. In 1985, 45 percent of elderly residents were age 85 or older.**
- **Nursing home residents are predominantly white women. The proportion female remained the same from 1985 to 1997, while black residents increased from 6 to 10 percent.**
- **Circulatory diseases and cognitive and mental disorders were the most common admission diagnoses in both 1985 and 1997.**
- **More residents required assistance with activities of daily living (ADL's) such as bathing, dressing, and eating in 1997 than in 1985.**
- **Demand for nursing home and other health-care services for the elderly will increase significantly as the baby-boomers age, presenting formidable challenges.**

## Overview

Nursing homes are an important component of health services for the elderly population. Specifically, nursing homes or skilled nursing facilities provide 24-hour nursing care to sick or disabled individuals who do not require expensive inpatient hospital services, but cannot be cared for at home through home health care or other community options. Patients who have been critically ill or have undergone surgery will often be admitted to a nursing home for a short stay until they are well enough to return to the community. Other short stay residents may be too ill to be cared for at home and will enter the nursing home for a short period before death. Some patients admitted to nursing homes are not acutely ill, but are too disabled to care for themselves. These patients may have had family or other informal caregivers who could no longer care for them as cognitive impairment, incontinence, or other disabilities worsened. These residents may remain in the nursing home for a longer stay, perhaps years.

The goal of this report is to examine the characteristics of the Nation's nursing home residents and how they have changed over the period 1985-1997. Knowledge of the trends seen in nursing home residents over the past decade may help policy makers, planners, and researchers make more effective policy and programmatic decisions concerning nursing home care, home health care, and other options increasingly available to the elderly population.

**This new series of reports features information to help monitor the health of our aging population.**

Older Americans can expect to live longer than ever before. Under existing conditions, women who live to age 65 can expect to live about 19 years longer, men about 16 years

continued

longer. Whether the added years at the end of the life cycle are healthy, enjoyable, and productive depends, in part, upon preventing and controlling a number of chronic diseases and conditions.

This report is one of a series undertaken by the National Center for Health Statistics, with support from the National Institute on Aging, to help meet the challenge of extending and improving life. By monitoring the health of the elderly, using information compiled from a variety of sources, we hope to help focus research on the most effective ways to use resources and craft health policy.

## Who are the residents of nursing homes, and how are they changing?

### The nursing home population became older and more racially diverse between 1985 and 1997

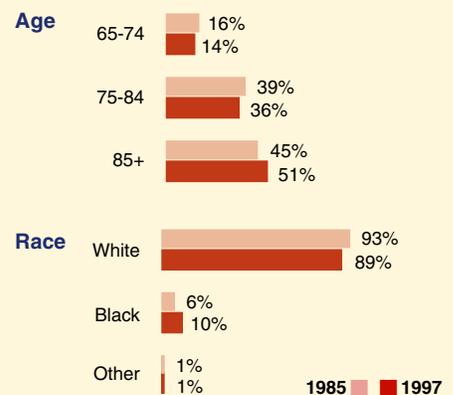
In 1997, the average age at admission among nursing home residents 65 years of age and older was 82.6 years. This was an increase from 1985 when the average age of admission for elderly residents was 81.1 years.

Among current residents 65 years of age and older, a larger percent of residents were 85 years of age and older in 1997 (51 percent) than in 1985 (45 percent).

Residents of nursing homes were mostly women. The ratio of women to men, about three elderly women for every elderly man, stayed roughly the same; however, racial composition changed. In 1985 white residents comprised 93 percent of the population, but by 1997 this proportion had decreased to 89 percent.

About 58 percent of nursing home residents in 1997 were admitted directly from a hospital or different nursing home and about 33 percent came from private homes. Of the people who entered nursing homes from the community, the majority were living with family members, although approximately 40 percent of this group were living alone. The vast majority of entering residents were widowed at the time of admission. These percents remained stable across the decade.

#### Shifting age and racial composition in nursing homes among residents 65 years of age and older



#### Place of residence immediately before nursing home admission, 1985 and 1997

	1985	1997
Hospital or other nursing home	59%	58%
Community	37	33
with family	19	18
nonfamily	4	2
alone	15	13
Other	4	8

## The average length of stay in nursing homes grew shorter between 1985 and 1997

Elderly persons stayed longer in nursing homes in 1985 than in 1995 or 1997. In 1985, only 18 percent of residents were discharged from nursing homes back to the community, and in 1997, 30 percent of residents were discharged because they had recuperated or stabilized. The mean length of stay of these groups dropped from 89 days in 1985 to 45 days in 1997.

This decrease may be related to the large increase in the use of home health care in the early 1990's, or it may reflect an increase in patients moved from short-stay hospitals to nursing homes for rehabilitation and then discharged back to the community. Patients who were discharged to another hospital or nursing home and patients who died in the nursing home also had shorter lengths of stay in 1997 than in 1985.

### Reasons for nursing home discharge, 1985 and 1997

	1985	1997
Recuperated/ back to community .....	18% .....	30%
Moved to hospital or other nursing home .....	49 .....	36
Death .....	31 .....	25
Unknown/ other .....	3 .....	9

### Average number of days residents lived in nursing homes, 1985 and 1997

	1985	1997
<b>Current resident:</b>		
from admission to interview .....	1026 .....	903
<b>Discharged residents:</b>		
to community/recuperated .....	89 .....	45
to a hospital/other nursing home .....	400 .....	284
death .....	653 .....	562

## Circulatory diseases and cognitive and mental disorders led the list of conditions present at admission throughout the 1985-1997 period

Almost all residents had more than one condition present at admission. More than half had three or more admitting diagnoses. The most common diagnoses at admission did not change from 1985 to 1997 nor did their ranking in order of importance. The top conditions present at admission were:

- Cardiovascular diseases, including hypertension, which were listed for approximately two-thirds of entering residents in both 1985 and 1995. Stroke and its effects were an important subcategory affecting approximately 17 percent of residents in both 1985 and 1995.
- Mental and cognitive disorders, which were almost as common and included cognitive disorders, depressive disorders, anxiety disorders, and organic brain damage.
- Disorders of the endocrine system, most commonly type II diabetes or hypothyroidism.

<sup>1</sup> Tomiak M, Berthelot JM, Guimond E, Mustard CA. Factors associated with nursing-home entry for elders in Manitoba, Canada. *J Gerontology*. 55A:M279-M287, 2000.

<sup>2</sup> Thom DH, Haan MN, Van Den Eeden SK. Medically recognized urinary incontinence and risks of hospitalization, nursing home admission and mortality. *Age Ageing*. 26:367-374, 1997.

<sup>3</sup> Black BS, Rabins PV, German PS. Predictors of nursing home placement among elderly public housing residents. *Gerontologist*. 39:559-568, 1999.

<sup>4</sup> Tomiak M, Berthelot JM, Guimond E, Mustard CA. Factors associated with nursing-home entry for elders in Manitoba, Canada. *J Gerontology*. 55A:M279-M287, 2000.

<sup>5</sup> Black BS, Rabins PV, German PS. Predictors of nursing home placement among elderly public housing residents. *Gerontologist*. 39:559-568, 1999.

<sup>6</sup> Lyness JM, Caine ED, Conwell Y, King DA, Cox C. Depressive symptoms, medical illness and functional status in depressed psychiatric inpatients. *Am J Psychiatry*. 150:910-915, 1993.

### Mental health was an important factor in nursing home admission

Although cardiovascular diseases were the most common diseases present at admission, they were not necessarily the main reasons for admission. Cognitive impairment, incontinence, and functional decline were all strong factors in whether someone entered a nursing home.<sup>1,2,3</sup> When cognitive impairment becomes moderate or severe, behaviors such as hitting, wandering, or being unable to keep oneself out of danger (e.g., not touching the stove) can become too much for a caregiver to manage. Social factors such as marital status and whether one was living in one's own home were also related to nursing home admission.<sup>4</sup> In both 1985 and 1997, a little over half of nursing home residents were cognitively impaired.

Alzheimer's disease and cerebrovascular disease were two of the main sources of cognitive difficulties. Other common mental disorders in nursing home residents were mood/anxiety disorders. The rate of mood/anxiety disorders remained stable over the decade, 17 percent in 1985 and 19 percent in 1997. As these disorders can impair functioning and even mimic cognitive decline, it is important that they be diagnosed and treated appropriately.<sup>5,6</sup>

### More residents needed help with activities of daily living (ADL's) in 1997 than in 1985

Activities of daily living (ADL's) are a measure of functional ability in basic self-care tasks. They measure whether a person needs assistance in any of the following six tasks: bathing, dressing, eating, transferring from a bed to a chair, toileting (including being able to get oneself to the bathroom), and walking. The amount of help a person requires to perform ADL's is a measure of his or her ability to live independently and also of the level of care the person will need in the nursing home.

Bathing is often the first ADL with which people need help. In 1985, 92 percent of nursing home residents needed help with bathing. In 1997, the number had risen to 96 percent. Eating is generally the ADL that people can do independently the longest. In 1985, 40 percent of nursing home residents needed help with eating. In 1997, the level had risen to 45 percent.

The mean number of ADL's with which residents need help is a good measure of the level of care that they require. In 1985, the mean number of ADL's with which nursing home residents needed help was 3.8 (out of 6); in 1997 it had grown to 4.4.

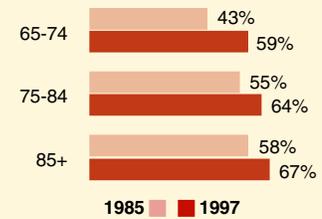
These increases in the level of disability likely reflect differences in patient mix between 1985 and 1997. Those admitted in the 1990's may have had a higher level of disability at admission, a result of being able to stay at home longer because of new medical technology or home health care. Some evidence also suggests an increase in the number of acute care patients who moved from short-stay hospitals to nursing homes for rehabilitation and then were discharged back to the community. These patients would need a very high level of care, but for a shorter amount of time.

<sup>7</sup>Thom DH, Haan MN, Van Den Eeden SK. Medically recognized urinary incontinence and risks of hospitalization, nursing home admission and mortality. *Age Ageing*. 26:367-374, 1997.

### Incontinence has increased over the decade

Incontinence, while not specifically related to an ADL, may contribute to institutionalization<sup>7</sup> because of the burden it puts on the caretaker. Roughly 55 percent of all nursing home residents in 1985 were incontinent, that is, they had difficulty controlling their bowels or bladder. However, only about 43 percent of those 65-74 years of age had this difficulty. A decade later, the proportion of incontinent people had grown to almost 65 percent, in large part because of the sharp increase in the proportion of younger elderly with this problem. Over the decade, the proportion of incontinent men ages 65-74 in nursing homes increased from 39 to 60 percent; for women, it rose from 45 to 59 percent.

**Percent of nursing home residents incontinent in each age group, 1985 and 1997**



### The need for help with the instrumental activities of daily living (IADL's) did not change

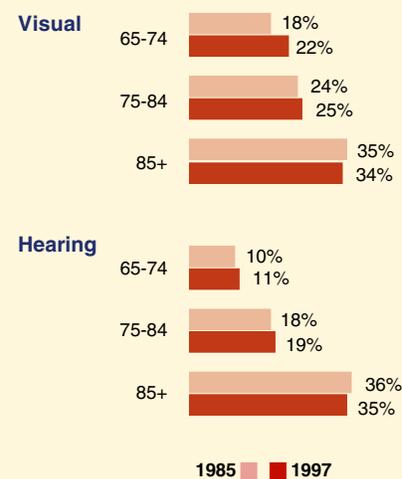
The instrumental activities of daily living (IADL's) were developed to measure a range of activities that are important for independent living but are more complex than ADL's. The inability to perform these activities represents less severe dysfunction. The IADL's include shopping, housekeeping, handling personal finances, securing personal effects, using the telephone, and taking medication.

The IADL's are more appropriate and informative when used to measure the status of community-dwelling elders and their ability to live in an independent setting. Residents in a nursing home may not be called upon to perform many of these IADL's. Nonetheless, the ability of nursing home residents to perform the relevant tasks, such as the ability to use the telephone and secure personal effects, remained stable from 1985 to 1997.

### The prevalence of reported visual or hearing problems remained about the same

In 1997, almost 30 percent of all current residents in nursing homes had difficulty seeing even with glasses, and slightly less than 10 percent were severely limited or completely blind. Problems increased with age, and women were slightly more likely than

**Percent of nursing home residents with visual and hearing impairment by age, 1985 and 1997**



<sup>8</sup> Manton KG, Corder LS, Stallard E. Estimates of change in chronic disability and institutional incidence and prevalence rates in the U.S. elderly population from the 1982, 1984, and 1989 National Long Term Care Surveys. *J Geront.* 48:S153-166, 1993.

<sup>9</sup> Manton KG, Stallard E, Corder LS. Changes in morbidity and chronic disability in the U.S. elderly population: evidence from the 1982, 1984, and 1989 National Long Term Care Surveys. *J Geront.* 50:S194-204, 1995.

<sup>10</sup> Gallagher RM. How long-term care is changing. *Am J Nurs.* 100:65-67, 2000.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

men to have some impairment. A decade earlier, the levels of difficulty and impairment were about the same.

Approximately 25 percent of all residents had difficulty hearing in 1997. About 5 percent had serious hearing deficits or were completely deaf. Hearing problems increased with age, but there were no important increases over the decade measured.

In 1985 and in 1997, nursing home staff reported that approximately 60 percent of residents used eyeglasses, a rate lower than that of the community-dwelling elderly. The use of hearing aids by nursing home residents increased from 7 percent to 11 percent from 1985 to 1997, but was still less than that of community-dwellers of similar ages.

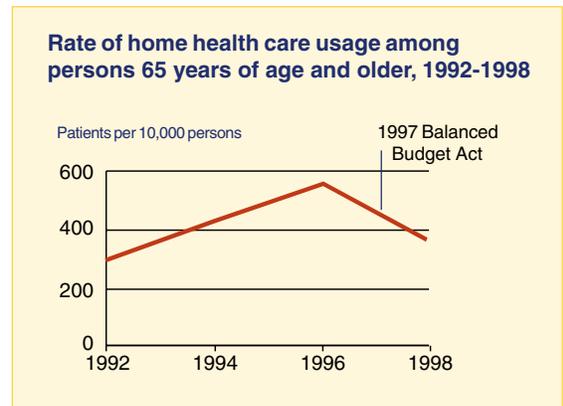
### The elderly will have more choices for care in the future, possibly delaying their entry into nursing homes

Preventing premature institutionalization is a major public health goal. When the elderly are able to remain in the community, their quality of life improves and society's economic burden is lowered. The trends in nursing home usage suggest that older persons may already be living in the community longer and entering nursing homes later and sicker than before. This may be due in part to healthy aging. Studies show that older persons are living longer and with fewer disabilities.<sup>8,9</sup>

These trends may also be due to growth in options such as home health care, assisted living, and continuing-care retirement communities.<sup>10</sup> A variety of alternative community-based settings such as light-care facilities and assisted living are now available.<sup>11</sup> Older persons with health problems can now remain in the community, making use of modern medical devices such as mobility aids and home-based renal dialysis.

Supplementing traditional informal caregiving with health services such as visiting nurses, hospice care workers, and physical therapy will also allow the elderly to remain at home longer. Many community-based or home-based long-term care options are staffed predominantly by nurses. The American Nurses Association believes that most long-term care can be provided by a community-based system.<sup>12</sup>

The use of home health care by persons 65 years of age and older changed dramatically in the 1990's. Between 1992 and 1996, the rate of home health-care usage among persons 65 years of age and older increased 78 percent (from 295 patients per 10,000 population to



<sup>13</sup> Gallager RM. How long-term care is changing. *Am J Nurs.* 100:65-67, 2000.

<sup>14</sup> Arkin SM. Elder rehab: a student-supervised exercise program for Alzheimer's patients. *Gerontologist.* 39:729-35, 1999.

<sup>15</sup> Clyburn LD, Stones MJ, Hadjistavropoulos T, Tuokko H. Predicting caregiver burden and depression in Alzheimer's disease. *J Geront.* 55:S2-13, 2000.

<sup>16</sup> Galluzi KE. Caring for the caregivers. *J Am Osteopathic Assoc.* 99:S17-20, 1999.

526 per 10,000 population). Between 1996 and 1998, the rate of home health care usage among persons 65 years of age and older fell to 378 patients per 10,000 population due to funding changes that were part of the 1997 Balanced Budget Act. In the fall of 1999, new funding legislation was passed, and use of home health care is expected to rise.<sup>13</sup>

### What may these trends mean for the future?

Despite more choices for care in the future, the challenge will be to meet the increasing and significant demands that the aging baby-boom population will make on services for the elderly.

Even with healthy aging and increasing alternatives to nursing-home care, the demand for care will increase as the baby boom ages. In 2030, close to 70 million Americans will be 65 years of age and older, and approximately 8.5 million will be 85 years of age and older.

At current usage rates, there would be approximately 3 million residents in nursing homes in the year 2030. This is roughly double the number of residents now in nursing homes. Even if the percent of elderly requiring nursing home care were reduced by one-third over the next 30 years, older persons would still need two million beds in traditional long-term care facilities, an increase over current levels.

Finally, although it is important to meet the demands for high-quality nursing-home care and formal alternatives such as assisted-living and home health-care services, it is the informal, unpaid caregivers—spouses, children, other relatives, and friends—that will continue to provide much of the day-to-day assistance to older persons in need. Flexible work schedules, respite care, information about community resources, and other means of support are programs that may help the caregiver avoid “caregiver burnout.”<sup>14,15,16</sup> These programs need to be monitored to determine the effects of informal care on the elderly and on the caregiver.

## About the Data

Data for this report came from the National Nursing Home Surveys (NNHS), a series of national surveys conducted periodically by NCHS of nursing and related care homes, their residents, and staff.

Five nursing home surveys have been conducted, in 1973-74, 1977, 1985, 1995, and 1997. These surveys were preceded by a series of surveys from 1963 through 1969, called the “residents places” surveys. Although each of these surveys emphasized different topics, they all provided some common basic information about nursing homes, their residents, and their staff.

The two most recent NNHS, conducted in 1995 and 1997, include data from a nationally representative sample of nursing homes. All nursing home facilities included in the survey were freestanding or were nursing-care units of hospitals, retirement centers, or similar institutions where the unit maintained financial and resident records separate from those of the larger institutions. Excluded were board and care homes and places with fewer than three beds.

The National Nursing Home Survey provides information on nursing homes from two perspectives—that of the provider of services and that of the recipient. Data about the facilities include characteristics such as size, ownership, Medicare/Medicaid certification, occupancy rate, days of care provided, and expenses. Data about recipients include demographic characteristics, health status, and services received.\*

The survey is based on self-administered questionnaires and interviews with administrators and staff in a sample of about 1,500 facilities.

\* Data about residents are obtained through interviews with the staff person most familiar with that resident. No residents are interviewed directly.

### Suggested Citation

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