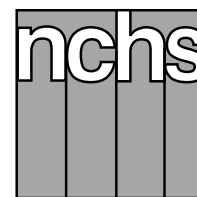


# Advance Data



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## Characteristics of Elderly Nursing Home Current Residents and Discharges: Data from the 1997 National Nursing Home Survey

by Celia S. Gabrel, M.S., Division of Health Care Statistics

### Abstract

*Objective*—This report presents data on the diversity of current nursing home residents and discharges in terms of gender, age, race, ethnicity, functional status, type of services used, and source of payment. It focuses on utilization of nursing home care among elderly persons 65 years and over.

*Methods*—Estimates in this report are from data collected between July and December 1997 for the 1997 National Nursing Home Survey. This survey is conducted periodically by the National Center for Health Statistics and collects information on a sample of providers and recipients of care from nursing home facilities. The major emphasis of the survey is to collect descriptive and utilization data on current residents and discharges. Current residents are persons in the nursing home on the day of the survey, and discharges represent completed episodes of care that ended during a one-year period prior to the survey.

*Results*—In 1997, approximately 1.5 million elderly residents lived in nursing homes on an average day in the United States. The majority of these residents were white, widowed, and functionally dependent females. There were 2.1 million elderly nursing home discharges from October 1996–September 1997 with the primary reasons for discharge being hospitalization or death. The most common primary diagnostic category for current residents and discharges was diseases of the circulatory system. The primary source of payment at admission for current elderly residents was Medicaid. Medicare was the primary source of payment at the time of discharge for elderly discharges.

**Keywords:** National Nursing Home Survey • long-term care • current residents discharges

### Introduction

Although long-term care services can be delivered in an institution, in a home or residence, or in a community

setting, and people of any age might experience some degree of functional limitations that requires long-term care, this report focuses on elderly nursing home residents, which is defined as

those age 65 years and over. With the substantial growth of the elderly population in the last decade, issues surrounding long-term care are becoming increasingly important. The needs of the elderly and the institutions and agencies through which services are delivered create problems for the elderly, their families, their health care providers, and policy makers who make decisions about the provision, use, and financing of long-term care.

This report provides data on facility characteristics, demographic characteristics, functional dependencies in activities of daily living (ADL's) and instrumental activities of daily living (IADL's), primary admission diagnosis, service utilization, and source of payment for elderly nursing home current residents and discharges. Information on all current nursing home residents and discharges has been published in a separate report (1).

Long-term care can be viewed as a program of health, personal care, and social services delivered over time to persons who have lost or never acquired some degree of functional capacity (2). These services may be provided in a variety of settings. While nursing home care comprises the most easily



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**Table 1. Number and percent distribution of elderly nursing home residents 65 years and over by selected facility characteristics, according to sex: United States, 1997**

Facility characteristic	Both sexes			Percent distribution		
	Both sexes	Male	Female	Both sexes	Male	Female
Total . . . . .	1,465,000	372,100	1,092,900	100.0	100.0	100.0
<b>Ownership</b>						
Proprietary . . . . .	948,400	242,400	706,100	64.7	65.1	64.6
Voluntary nonprofit . . . . .	399,700	87,600	312,000	27.3	23.6	28.6
Government and other . . . . .	116,900	42,100	74,800	8.0	11.3	6.8
<b>Certification</b>						
Certified by Medicare and Medicaid . . . . .	1,246,800	311,900	934,800	85.1	83.8	85.5
Certified by Medicare only . . . . .	46,200	*11,400	34,800	3.2	*3.1	3.2
Certified by Medicaid only . . . . .	135,700	37,000	98,700	9.3	9.9	9.0
Not certified . . . . .	36,400	11,800	24,600	2.5	3.2	2.3
<b>Bed size</b>						
Less than 50 beds . . . . .	57,000	15,100	41,900	3.9	4.1	3.8
50 - 99 beds . . . . .	364,600	95,000	269,600	24.9	25.5	24.7
100 - 199 beds . . . . .	766,700	185,400	581,300	52.3	49.8	53.2
200 beds or more . . . . .	276,700	76,600	200,100	18.9	20.6	18.3
<b>Census region</b>						
Northeast . . . . .	346,500	84,600	261,900	23.7	22.7	24.0
Midwest . . . . .	452,100	114,000	338,100	30.9	30.6	30.9
South . . . . .	477,400	122,200	355,200	32.6	32.8	32.5
West . . . . .	189,000	51,400	137,600	12.9	13.8	12.6
<b>Metropolitan Statistical Area (MSA)</b>						
MSA . . . . .	1,006,500	245,100	761,500	68.7	65.9	69.7
Not MSA . . . . .	458,500	127,000	331,400	31.3	34.1	30.3
<b>Affiliation<sup>1</sup></b>						
Chain . . . . .	821,500	210,000	611,400	56.1	56.4	56.0
Independent . . . . .	635,000	160,200	474,800	43.4	43.1	43.5

\* Data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Excludes unknown.

NOTES: Numbers may not add to totals because of rounding. Percents are based on unrounded figures.

recognized form of long-term care, home care and community services accommodate a much larger percent of the population using long-term care. In the family setting, the long-term care needs of the frail person are met by one (often the spouse) or more family members with or without support of medical and nonmedical home-care services (3). In the institutional setting, more than 90 percent of the elderly people live in nursing homes, while the remainder live in mental institutions or chronic disease hospitals (4). Nursing homes are defined as facilities with three or more beds that routinely provide nursing care services. Facilities may be certified by Medicare or Medicaid, or not certified but licensed by the state as a nursing home. These facilities may be free standing or a

distinct unit of a larger facility. In nursing homes, basic medical care for the long-term care needs of frail residents are provided by an organized staff.

Data presented in this report summarize nursing home utilization from two perspectives: utilization on any particular day in the data collection period July–December 1997 (current residents) and utilization during an entire year from October 1996 through September 1997 (discharges).

## Method

The 1997 National Nursing Home Survey (NNHS) is the fifth in a series of nationwide sample surveys of nursing home facilities, their current residents, and their discharges. It has been conducted periodically since 1973 by

the National Center for Health Statistics (NCHS). Data collection for NNHS was conducted from July through December 1997. The sampling frame for this survey was derived from a frame consisting of all nursing home facilities identified in the 1991 National Health Provider Inventory (NHPI) and updated through 1997 (5). These updated files were obtained from the Health Care Financing Administration (HCFA) and other private and national organizations. A sample consisting of 1,488 nursing homes was selected from the universe. Additional information on the data set, with information on the sample frame, sample design, data collection procedures, and sampling errors has been published in a previous NCHS report (1).

NNHS collects information from each participating facility on a number of facility characteristics including ownership, certification status, bed size, location, affiliation, and services provided. In addition, the survey also collects information on a sample of current residents and discharges in each facility. Data collection for current residents and discharges includes demographic characteristics (age, sex, race, marital status), date of admission, living arrangement prior to admission, primary and other diagnoses at admission and at time of survey or at discharge, source of payment, functional status (ADL's and IADL's), and reason for discharge.

Estimates in this report are based on the current resident and discharged resident samples. The sample of current residents was obtained by randomly selecting up to six residents who were on the rolls of the facility as of midnight the day prior to the day of the survey. Data were collected by interviewing the facility staff most familiar with the care provided to the resident. Discharges were obtained by randomly selecting up to six residents who had been removed from the rolls of the nursing home (including those whose care ended because of death) during a designated month (from October 1996 through September 1997). Discharges represent discharged events, not persons. Thus, the same resident could be included more than once if that person had multiple completed episodes

**Table 2. Number and percent distribution of elderly nursing home residents 65 years and over by selected demographic characteristics, according to sex: United States, 1997**

Resident characteristic	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	1,465,000	372,100	1,092,900	100.0	100.0	100.0
<b>Age</b>						
65–74 years . . . . .	198,400	80,800	117,700	13.5	21.7	10.8
75–84 years . . . . .	528,300	159,300	368,900	36.1	42.8	33.8
85 years and over . . . . .	738,300	132,000	606,300	50.4	35.5	55.5
<b>Race</b>						
White . . . . .	1,294,900	315,800	979,100	88.4	84.9	89.6
Black . . . . .	137,400	44,800	92,500	9.4	12.0	8.5
Other . . . . .	18,000	*7,400	*10,600	1.2	*2.0	*1.0
Unknown . . . . .	14,700	*	*10,600	1.0	*	*1.0
<b>Hispanic origin</b>						
Hispanic . . . . .	32,100	*11,100	20,900	2.2	*3.0	1.9
Non-Hispanic . . . . .	1,339,900	338,900	1,001,000	91.5	91.1	91.6
Unknown . . . . .	93,000	22,100	71,000	6.4	5.9	6.5
<b>Marital status</b>						
Married . . . . .	248,800	140,200	108,600	17.0	37.7	9.9
Widowed . . . . .	924,400	131,000	793,400	63.1	35.2	72.6
Divorced/separated . . . . .	98,200	34,600	63,600	6.7	9.3	5.8
Never married/single . . . . .	173,800	61,300	112,500	11.9	16.5	10.3
Unknown . . . . .	19,800	*	14,800	1.4	*	1.4
<b>Living arrangement prior to admission</b>						
Private residence . . . . .	472,100	114,600	357,500	32.2	30.8	32.7
Retirement home . . . . .	33,900	*	28,600	2.3	*	2.6
Board and care/residential facility . . . . .	67,300	15,300	51,900	4.6	4.1	4.8
Nursing home . . . . .	179,000	47,600	131,400	12.2	12.8	12.0
Hospital . . . . .	651,300	172,400	478,900	44.5	46.3	43.8
Mental health facility . . . . .	19,000	*5,900	13,100	1.3	*1.6	1.2
Other or unknown . . . . .	42,400	*11,000	31,500	2.9	*2.9	2.9

\* Data do not meet standard reliability or precision (sample size less than 30) and are therefore not reported. If asterisk precedes a number, data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

of care in one or more facilities that ended during the designated month assigned to the facility. When referring to the health status of and services received by discharges, the term “at the time of discharge” was used for live discharges, and “immediately prior to discharge” was used for persons discharged dead.

Although the survey included residents and discharges of all ages, data presented in this report are limited to those 65 years of age and over. This age group represents 91 percent of the nursing home residents and 89 percent of the discharges. The estimates in this report are based on responses for 7,363 current residents and 5,980 discharges age 65 years and over. The sample of both current residents and discharges is weighted to produce national estimates.

## Results

### Current residents

On an average day in 1997, there were an estimated 1,465,000 nursing home residents aged 65 years and over residing in the United States. Information on elderly nursing home residents by selected facility characteristics are shown in [table 1](#). The majority of elderly residents were in privately owned facilities (65 percent), and 27 percent lived in voluntary nonprofit facilities. Most elderly residents received care from facilities that were dually certified by Medicare and Medicaid. Only 3 percent of the residents received care from facilities that were not certified. Some regional differences existed in nursing home

utilization, with the Midwest and the South having a greater proportion of current residents than the Northeast and West. Fifty-six percent of elderly residents were in facilities affiliated with other nursing homes in a chain.

Of the 1.5 million elderly nursing home residents, about three-fourths were women and nearly 90 percent were white. Only 17 percent were married, and about 63 percent were widowed ([table 2](#)). The mean age at interview was 84 years (85 years for women and 81 years for men). Fourteen percent of the elderly residents were 65–74 years old, 36 percent were 75–84 years of age, and 50 percent were 85 years and over. While males were more likely to be in the 75–84 years age group, females were more likely to be in the oldest age group. The living arrangements of elderly nursing home residents prior to admission to a nursing home varied widely. Thirty-two percent of the admissions entered from a private residence, 45 percent were admitted from a hospital, and about 12 percent were admitted from another nursing home.

[Table 3](#) presents information on the type of aids used, continence status, and impairment of vision and hearing at the time of interview. The most frequently used aids were eye glasses (62 percent males and 68 percent females), wheelchairs (61 percent males and 63 percent females), and walkers (22 percent males and 26 percent females). Forty-four percent of the residents had difficulty controlling both the bowel and bladder, only 1 percent had difficulty controlling bowel only, and 13 percent had trouble controlling the bladder only. About one-fourth of the residents were visually or hearing impaired.

Most nursing home residents need assistance in performing the activities of daily living (ADL): the ability of the resident to bathe, dress, eat, transfer from bed to chair, and use the toilet ([table 4](#)). Seventy-five percent of the residents over the age of 65 needed assistance in three or more ADL's at the time of interview and only 3 percent did not need assistance with any ADL's at the time of interview. Bathing or showering (96 percent) was the ADL

**Table 3. Number and percent of elderly nursing home residents 65 years and over by use of selected aids, continence, vision and hearing status, and sex: United States, 1997**

Functional status	Both sexes		Female	Both sexes		Female
	Male	Female		Male	Female	
	Number			Percent		
Total	1,465,000	372,100	1,092,900	...	...	...
<b>Aids used</b>						
Glasses	973,400	230,100	743,200	66.5	61.9	68.0
Hearing aid	155,600	39,400	116,200	10.6	10.6	10.6
Transfer equipment	185,000	52,000	133,000	12.6	14.0	12.2
Wheelchair	913,300	227,500	685,800	62.3	61.2	62.7
Cane	95,400	34,000	61,300	6.5	9.2	5.6
Walker	369,100	82,600	286,500	25.2	22.2	26.2
Oxygen	84,500	28,100	56,500	5.8	7.5	5.2
Brace (any type)	46,200	12,200	34,100	3.2	3.3	3.1
Commode	121,600	25,400	96,200	8.3	6.8	8.8
Other aids or devices	250,100	69,800	180,300	17.1	18.6	16.5
<b>Continence status</b>						
Difficulty controlling both bowels and bladder	647,200	156,400	490,900	44.2	42.0	44.9
Difficulty controlling bowels	18,900	*6,600	12,200	1.3	*1.8	1.1
Difficulty controlling bladder	189,700	44,600	145,100	13.0	12.0	13.3
<b>Vision</b>						
Not impaired	959,200	254,200	705,000	65.5	68.3	64.5
Impaired	396,700	93,000	303,700	27.1	25.0	27.8
Unknown <sup>1</sup>	109,100	24,900	84,100	7.5	6.7	7.7
<b>Hearing</b>						
Not impaired	1,005,800	256,500	749,300	68.7	68.9	68.6
Impaired	347,600	90,800	256,800	23.7	24.4	23.5
Unknown <sup>1</sup>	111,600	24,800	86,800	7.6	6.7	7.9

... Category not applicable.

\* Data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Includes those for whom status could not be determined (e.g., comatose patients)

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

that residents most frequently required assistance, followed by dressing (87 percent). Another group of common activities that nursing home residents need assistance with are IADL's, which included using the telephone, caring for personal possessions, securing personal items, and money management. At the time of interview, elderly residents required the most assistance in taking care of personal possessions (77 percent) and securing personal items (76 percent). More than half of the elderly residents needed assistance in all the IADL's (54 percent) at the time of interview. On the other hand, 11 percent of the current residents were functional enough in the IADL's not to need assistance at the time of interview.

The leading admission diagnoses for both elderly male and female nursing home residents were diseases of the circulatory system, followed by mental disorders (table 5). The services received

by elderly nursing home residents are shown in table 6. The services most frequently received by the elderly while staying in a nursing home were nursing services (97 percent), prescribed or nonprescribed medicine (94 percent), medical and personal care services (91 percent each), and nutritional services (74 percent). Other services included social services (70 percent), equipment or devices (51 percent), and physical therapy (27 percent).

Table 7 shows, by various demographic characteristics, the length of time since admission for elderly nursing home residents. The average length of time since admission for current elderly nursing home residents since admission was 870 days. Women (907 days), unmarried persons (1,318 days), and those aged 85 years and over (932 days) had longer average stays than men (761 days), married persons

(596 days), and those slightly younger at age 75–84 years (789 days).

At the time of admission, Medicaid was the primary public funding source (38 percent) for elderly nursing home residents (table 8). Medicare was the source of payment for 30 percent of the current residents. Private insurance, own income, or family support paid for 28 percent of the residents. Because Medicare benefits for nursing home care are for a limited time period, table 9 shows the change that occurred by the time of the interview in the source of payment for elderly residents. The proportion of current elderly residents with a primary source of payment of Medicare decreased from 30 percent (at admission) to 15 percent (in the month prior to interview). Medicaid, on the other hand, increased from 38 percent at admission to 56 percent in month prior to interview.

## Discharges

The size of nursing homes increased from 75 beds per home in 1985 to 107 beds per home in 1997. This growth coincides with increased use of these facilities; the number of nursing home discharges rose from 1.2 million in 1984–85 (6) to 2.1 million in 1996–97. This increase can be attributed to the increasing number of nursing homes providing subacute care as well as rehabilitative care (7). Among all discharges in the survey, 73 percent were discharged alive. This proportion was about the same for men and for women. The most common reasons for discharge (figure 1) was admission to a hospital or death (27 percent each). Figure 2 shows the average length of stay by reason for discharge. As expected, the shortest length of stay was for discharges listed as stabilized or recovered (54.9 and 60.4, respectively) compared with those deceased (729 days) or admitted to the hospital (329.1 days). Older discharges (85 years and older) were more likely to be discharged dead, while discharges resulting in admission to the hospital were equally distributed across age groups (table 10).

The number and percent distribution of elderly nursing home discharges by

**Table 4. Number and percent of elderly nursing home residents 65 years and over by dependency in activities of daily living and instrumental activities of daily living and sex: United States, 1997**

Functional status	Both sexes		Female	Both sexes		Female
	Male	Female		Male	Female	
	Number			Percent		
Total	1,465,000	372,100	1,092,900	...	...	...
Received assistance with ADL's <sup>1</sup>						
Bathing or showering	1,409,300	351,400	1,057,900	96.2	94.4	96.8
Dressing	1,277,600	318,900	958,700	87.2	85.7	87.7
Eating	658,800	159,300	499,500	45.0	42.8	45.7
Transferring in or out of bed or chair	372,100	87,300	284,800	25.4	23.5	26.1
Using toilet room	822,600	196,300	626,300	56.2	52.8	57.3
Number of dependencies in ADL's <sup>1</sup>						
None	44,000	17,600	26,800	3.0	4.6	2.5
1	115,000	28,900	86,100	7.9	7.8	7.9
2	210,400	59,400	151,000	14.4	16.0	13.8
3	513,500	129,200	384,300	35.1	34.7	35.2
4	446,300	108,600	337,700	30.5	29.2	30.9
5	135,800	28,700	107,100	9.3	7.7	9.8
Received assistance with IADL's <sup>1</sup>						
Care of personal possessions	1,130,100	287,200	842,900	77.1	77.2	77.1
Managing money	1,057,900	266,500	791,400	72.2	71.6	72.4
Securing personal items	1,115,800	278,100	837,700	76.2	74.7	76.7
Using telephone	910,500	233,500	677,000	62.2	62.8	61.9
Number of dependencies in IADL's <sup>1</sup>						
None	161,700	42,500	119,200	11.3	11.7	11.2
1	110,400	29,000	81,500	7.7	8.0	7.6
2	138,300	32,700	105,600	9.7	9.0	9.9
3	253,600	65,200	188,400	17.7	18.0	17.7
4	766,700	193,800	572,800	53.6	53.4	53.7

... Category not applicable.

<sup>1</sup>ADL is activities of daily living, and IADL is instrumental activities of daily living.

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

facility characteristics is shown in [table 11](#). Sixty-six percent of all elderly discharges were from privately owned nursing homes. Voluntary nonprofit homes accounted for 29 percent of all discharges, and government and other types of nursing homes made up about 5 percent. Ninety-nine percent of these nursing homes were certified by either Medicaid and/or Medicare and the remaining 1 percent was not certified. The largest proportion of discharges were from facilities located in the Midwest (29 percent) and South (30 percent) and from nursing homes located in a metropolitan statistical area (76 percent). Facilities affiliated with other nursing homes in a chain accounted for more than half of all discharges (61 percent).

[Table 12](#) presents demographic characteristics of the 2.1 million discharges from nursing home care

during a one year period. The mean age for all elderly discharges at the time of discharge was 82 years. The average age of male discharges was 81 years and for females it was 83 years. The majority of the female discharges were 85 years and older (45 percent) and males were between the ages of 75–84 years (44 percent). Eighty-nine percent of all discharges were white, 7 percent were black, and about 3 percent were Hispanic. Overall, the majority of all elderly patients at the time of discharge were widowed (57 percent), and females accounted for 82 percent of them. By contrast, 26 percent of the discharges were married, and 62 percent were males. Prior to entering a nursing home, the majority of discharges (68 percent) were admitted from another health facility. Sixty-one percent of them were admitted from a hospital, and 7 percent had transferred from another nursing home.

[Table 13](#) displays information on types of aids used, continence status, and vision and hearing status of elderly patients at the time of discharge. The most frequently used aids were eye glasses (61 percent of males and 67 percent of females) and walker (55 percent of males and 54 percent of females). Thirty-three percent of discharges aged 65 years and over had difficulty controlling both bowels and bladder at the time of discharge. About one-fifth of all elderly discharges had some vision (23 percent) or hearing impairment (20 percent). At the time of discharge, 32 percent of elderly patients were dependent in four of the five listed ADL's. Only 5 percent did not need assistance in performing any ADL ([table 14](#)). The most common ADL's for which assistance was received by elderly discharges was bathing or showering (93 percent) and dressing (86 percent). For elderly discharges requiring assistance with IADL's, 66 percent received help with caring for personal possessions and securing personal items. Most elderly discharges were dependent in all four IADL's (46 percent), and 23 percent required no assistance in IADL's at the time of discharge. The proportion of discharges requiring assistance with ADL's and IADL's was similar for both males and females.

Data on primary diagnoses of nursing home discharges were collected in the 1997 NNHS at the time of admission ([table 15](#)) and time of discharge. The most frequent primary admission diagnosis for elderly discharges was diseases of the circulatory system (26 percent), followed by diseases of the respiratory system (11 percent) and mental disorders (7.0 percent).

Information on the services received (during the billing period that included the date of discharge) by elderly discharges is shown in [table 16](#). Most discharges received nursing services (98 percent), medical services (94 percent), prescribed or nonprescribed medicines (92 percent), personal services (89 percent), nutritional services (77 percent), and social services (74 percent). Other frequently used services were equipment and devices,

**Table 5. Number and percent distribution of elderly nursing home residents 65 years and over by primary diagnosis at admission, according to sex: United States, 1997**

Primary diagnosis at admission and ICD-9-CM Code <sup>1</sup>	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	1,465,000	372,100	1,092,900	100.0	100.0	100.0
Infectious and parasitic diseases . . . . . 1-139	12,600	*	*8,500	0.9	*	*0.8
Neoplasms . . . . . 140-239	30,100	14,000	16,100	2.1	3.8	1.5
Malignant neoplasms . . . . . 140-208,230-234	28,200	13,000	15,200	1.9	3.5	1.4
Endocrine, nutritional and metabolic diseases and immunity disorder . . . . . 240-279	92,900	25,000	67,900	6.3	6.7	6.2
Diabetes mellitus . . . . . 250	56,400	15,600	40,800	3.9	4.2	3.7
Diseases of the blood and blood-forming organs . . . . . 280-289	14,300	*	*11,200	1.0	*	*1.0
Mental disorders . . . . . 290-319	228,700	60,800	167,900	15.6	16.3	15.4
Diseases of the nervous system and sense organs . . . . . 320-389	191,400	49,700	141,700	13.1	13.4	13.0
Diseases of the circulatory system . . . . . 390-459	377,500	96,000	281,500	25.8	25.8	25.8
Essential hypertension . . . . . 401	53,300	*8,400	44,900	3.6	*2.3	4.1
Heart disease . . . . . 391-392.0,393-398, 402,404,410-416,420-429	151,300	35,000	116,300	10.3	9.4	10.6
Cerebrovascular diseases . . . . . 430-438	34,600	*10,100	24,400	2.4	*2.7	2.3
Diseases of the respiratory system . . . . . 460-519	92,400	32,400	60,000	6.3	8.7	5.5
Chronic obstructive pulmonary disease . . . . . 494-496	27,000	*10,600	16,300	1.8	*2.9	1.5
Diseases of the digestive system . . . . . 520-597	46,300	12,300	34,000	3.2	3.3	3.1
Diseases of the genitourinary system . . . . . 580-629	33,600	*10,100	23,500	2.3	*2.7	2.2
Diseases of the skin and subcutaneous tissue . . . . . 680-709	15,800	*	11,800	1.1	*	1.1
Diseases of the musculoskeletal system and connective tissue . . . . . 710-739	69,100	*7,800	61,300	4.7	*2.1	5.6
Congenital anomalies . . . . . 740-759	*	*	*	*	*	*
Symptoms, signs, and ill-defined conditions . . . . . 780-799	67,300	17,700	49,600	4.6	4.8	4.5
Injury and poisonings . . . . . 800-999	116,500	16,500	100,000	8.0	4.4	9.2
Supplementary classification and unknown . . . . . V01-V82, 00	74,700	18,100	56,600	5.1	4.9	5.2

\* Data do not meet standard of reliability or precision (sample size less than 30) and are therefore not reported. If shown with a number, data should not be assumed reliable because the sample size is between 30-59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (8).

NOTE: Numbers may not add to totals because of rounding.

**Table 6. Number and percent of elderly nursing home residents 65 years and over by services received and sex: United States, 1997**

Service received	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent		
Total . . . . .	1,465,000	372,100	1,092,900	...	...	...
Dental care . . . . .	267,200	73,300	193,900	18.2	19.7	17.7
Equipment or devices . . . . .	743,100	188,700	554,400	50.7	50.7	50.7
Medical services . . . . .	1,334,400	340,700	993,800	91.1	91.6	90.6
Mental health services . . . . .	242,200	69,200	173,000	16.5	18.6	15.8
Nursing services . . . . .	1,425,600	362,700	1,062,900	97.3	97.5	97.3
Nutritional services . . . . .	1,084,700	278,900	805,800	74.0	75.0	73.7
Occupational therapy . . . . .	277,500	75,800	201,600	18.9	20.4	18.5
Personal care . . . . .	1,333,600	339,000	994,500	91.0	91.1	91.0
Physical therapy . . . . .	399,100	110,400	288,700	27.2	29.7	26.4
Prescribed or nonprescribed medicines . . . . .	1,371,800	348,400	1,023,400	93.6	93.6	93.6
Social services . . . . .	1,029,200	258,900	770,400	70.3	69.6	70.5
Speech or hearing therapy . . . . .	118,700	37,000	81,700	8.1	9.9	7.5
Transportation . . . . .	282,400	79,900	202,600	19.3	21.5	18.5
Other services . . . . .	202,700	50,500	152,100	13.8	13.6	13.9

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

physical therapy, and occupational therapy.

The average length of stay for all discharges was 290 days (table 17). Females had a longer average length of stay than males (329 days vs. 215 days). Married (168 days) elderly discharges had shorter average stays than never

married/single (424 days). Whites (297 days) had a longer length of stay than blacks and other races (265 days).

The number and percent distribution of elderly nursing home discharges by primary source of payment in the month of discharge is detailed in table 18. Medicare (50 percent) was the primary

source of payment for all discharges 65 years and older, followed by Medicaid (25 percent). Private sources, which includes private insurance, own income, and family support, was the primary source of payment for 21 percent of elderly discharges. Government and other sources was the primary source of

**Table 7. Number and standard error of elderly nursing home residents 65 years and over by average length of time since admission, age, marital status, race, and sex: United States, 1997**

Demographic characteristic	Both sexes	Standard error	Male	Standard error	Female	Standard error
Total . . . . .	1,465,000	...	372,100	...	1,092,900	...
	Number in days					
Average length of stay in days . . . . .	870	15.1	761	28.7	907	16.8
Age						
65–74 years . . . . .	857	41.8	823	61.1	881	54.6
75–84 years . . . . .	789	24.2	759	51.6	801	25.5
85 years and over . . . . .	932	19.2	725	34.3	977	21.5
Marital status						
Married . . . . .	596	22.1	531	27.0	681	36.2
Widowed . . . . .	852	15.6	677	30.1	881	17.0
Divorced/separated . . . . .	911	58.3	867	91.2	936	75.0
Never married/single . . . . .	1,318	60.8	1,325	103.7	1,314	74.5
Race						
White . . . . .	874	16.1	770	32.9	907	17.5
Black and other . . . . .	844	43.7	723	63.0	906	53.4
Black . . . . .	827	45.2	695	62.9	891	55.9

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

payment for the remaining 4 percent of elderly discharges.

### Summary and Discussion

As more people live to the oldest ages, the number of elderly nursing home residents will continue to increase. Since many chronic debilitating illnesses, such as diabetes, dementia, and osteoporosis, increase with age, there will be greater demand from the health care system for services to assist people in performing the activities of daily living. In 1997, the majority of current nursing home residents and discharges were 85 years and over. Most of these residents and discharges were female and widowed. Because of the preponderance of the very old in nursing homes, many residents required assistance or did not perform the basic ADL's and IADL's needed for independent living. Three-fourths of the current residents and discharges required

**Table 8. Number and percent distribution of elderly nursing home residents 65 years and over by their primary source of payment at the time of admission, according to sex: United States, 1997**

Source of payment	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	1,465,000	372,100	1,092,900	100.0	100.0	100.0
Private insurance, own income, family support <sup>1</sup> . . . . .	413,600	97,000	316,600	28.2	26.1	29.0
Medicare . . . . .	435,600	107,000	328,600	29.7	28.8	30.1
Medicaid . . . . .	560,000	144,100	415,900	38.2	38.7	38.1
Government assistance, charity, and other <sup>2</sup> . . . . .	25,200	14,500	10,800	1.7	3.9	1.0
Unknown . . . . .	30,500	9,500	21,000	2.1	2.6	1.9

<sup>1</sup>Includes social security benefits, retirement funds.

<sup>2</sup>Includes supplemental security income, welfare, religious organizations, foundations, agencies, VA contract, pensions, or other compensation, payment source not yet determined, and other.

NOTES: Numbers may not add to totals because of rounding. Percents are based on unrounded figures.

**Table 9. Number and percent distribution of elderly nursing home residents 65 years and over by their primary source of payment in month before interview, according to sex: United States, 1997**

Source of payment	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	1,465,000	372,100	1,092,900	100.0	100.0	100.0
Private insurance, own income, family support <sup>1</sup> . . . . .	380,200	90,200	289,900	26.0	24.3	26.5
Medicare . . . . .	220,500	57,900	162,600	15.1	15.6	14.9
Medicaid . . . . .	822,400	204,600	617,800	56.1	55.0	56.5
Government assistance, charity, and other <sup>2</sup> . . . . .	28,600	13,800	14,800	2.0	3.7	1.4
Unknown . . . . .	13,400	*	*7,700	*0.9	*	*0.7

\* Data do not meet standard reliability or precision (sample size less than 30) and are therefore not reported. If asterisk precedes a number, data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Includes Social Security benefits, retirement funds.

<sup>2</sup>Includes supplemental security income, welfare, religious organizations, foundations, agencies, VA contract, pensions, or other compensation, payment source not yet determined and other.

NOTES: Numbers may not add to totals because of rounding. Percents are based on unrounded figures.

**Table 10. Number and percent distribution of elderly nursing home discharges by age and primary admission diagnosis, according to reason for discharge: United States, October 1996–September 1997**

Age and primary admission diagnosis	All reasons		Recovered	Stabilized	Deceased	Admitted to hospital	Admitted to nursing home	All other <sup>2</sup>
	Number	Percent distribution						
All discharges . . . . .	2,100,800	100.0	10.2	19.0	27.0	28.3	7.5	7.9
Age								
65–74 years . . . . .	406,000	100.0	13.0	24.2	17.0	28.7	6.7	10.4
75–84 years . . . . .	836,100	100.0	11.1	19.9	23.1	29.2	8.8	8.0
85 years and over . . . . .	858,600	100.0	8.0	15.8	35.6	27.3	6.7	6.5
Diagnosis and ICD–9–CM code <sup>1</sup>								
Infectious and parasitic diseases . . . . .001–139	*15,100	*100.0	*	*	*	*	*	*
Neoplasms . . . . .140–239	124,600	100.0	*	*	51.3	19.7	*	*
Malignant neoplasms . . . . .140–208,230–234	114,600	100.0	*	*	55.0	21.4	*	*
Endocrine, nutritional, and metabolic diseases and immunity disorders . . . . .240–279	109,000	100.0	9.5	13.2	21.8	39.2	5.7	10.3
Diabetes mellitus . . . . .250	69,700	100.0	*	*13.7	21.0	38.5	*	*
Diseases of the blood and blood-forming organs . . . . .280–289	*17,800	*100.0	–	*	*	*	*	*
Mental disorders . . . . .290–319	147,800	100.0	*	*6.3	34.1	38.1	10.4	*8.2
Diseases of the nervous system and sense organs . . . . .320–389	155,200	100.0	*	*13.5	37.5	27.8	*7.0	*11.1
Diseases of the circulatory system . . . . .390–459	536,200	100.0	6.5	20.0	30.7	29.2	7.9	5.7
Essential hypertension . . . . .401	41,200	100.0	*	*	*33.3	*29.4	*	*
Heart disease . . . . .391–392.0,393–398,402,404,410–416,420–429	229,200	100.0	*7.6	17.5	30.5	32.0	*6.8	*5.6
Cerebrovascular diseases . . . . .430–438	42,500	100.0	*	*	*26.9	*18.9	*	*
Diseases of the respiratory system . . . . .460–519	229,400	100.0	*9.6	*17.0	26.8	32.4	*6.3	*6.9
Diseases of the digestive system . . . . .520–579	65,900	100.0	*	*	*24.0	33.7	*	*
Diseases of the genitourinary system . . . . .580–629	67,900	100.0	*	*	28.9	43.9	*	*
Diseases of the skin and subcutaneous tissue . . . . .680–709	34,000	100.0	*	*	*	31.1	*	*
Diseases of the musculoskeletal system and connective tissue . . . . .710–739	104,500	100.0	*20.1	*23.7	21.3	20.9	*	*
Congenital anomalies . . . . .740–759	*	*	–	–	–	*	–	*
Symptoms, signs, and ill-defined conditions . . . . .780–799	115,800	100.0	*10.8	*24.3	19.5	27.9	*	*10.7
Injury and poisoning . . . . .800–999	215,500	100.0	24.2	29.0	14.3	18.9	*7.0	*6.6
Supplementary classification . . . . .V01–V82	161,200	100.0	21.5	27.5	10.4	17.9	10.8	11.7

\* Data do not meet standard of reliability or precision (sample size is less than 30) and are therefore not reported. If shown with a number, it should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

– Quantity zero.

<sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (8).

<sup>2</sup>Excludes unknown.

NOTES: Numbers may not add to total because of rounding. Percents are based on unrounded figures.

assistance in three or more ADLs. Discharges had better functional status than their current resident counterparts in that only 3 percent of current residents and 5 percent of discharges were independent in all five activities. They required less help with bathing, dressing and eating than current residents; however, discharges needed more assistance with transferring.

The most common reasons for discharge from a nursing home were admission to a hospital or death. Only a small percentage (10 percent) of the discharges were discharged because they recovered. Younger discharges were more likely to be discharged alive than older discharges. Current residents were more likely to have a primary diagnosis of diseases of the respiratory system

than were discharges. As with all discharges, elderly discharges with a diagnosis of diseases of the respiratory system were discharged because of death or hospitalization.

With Medicare's shift in payment strategies to the prospective payment system, hospital stays are now shorter and thus cause an increase in the need for rehabilitative and recuperative services such as nursing home and home health care. This increase is evident in shorter lengths of stays for nursing home discharges. The average length of stay in a nursing home for elderly discharges decreased from 416 days in 1985 to 290 days in 1997 with a median length of stay of 84 days and 63 days, respectively. At the time of discharge, Medicare was the primary

source of payment for twice as many discharges as any other source of payment. Other factors may also account for the decline in length of stay, such as increased use of alternative services, improved medical management of chronic diseases, the increase in number of discharges to hospitals as well as the change in population from old to very old.

## References

1. Gabrel C. An overview of nursing home facilities: Data from the 1997 National Nursing Home Survey. Advance data for vital and health statistics; no. 311, Hyattsville, Maryland: National Center for Health Statistics. 1997.



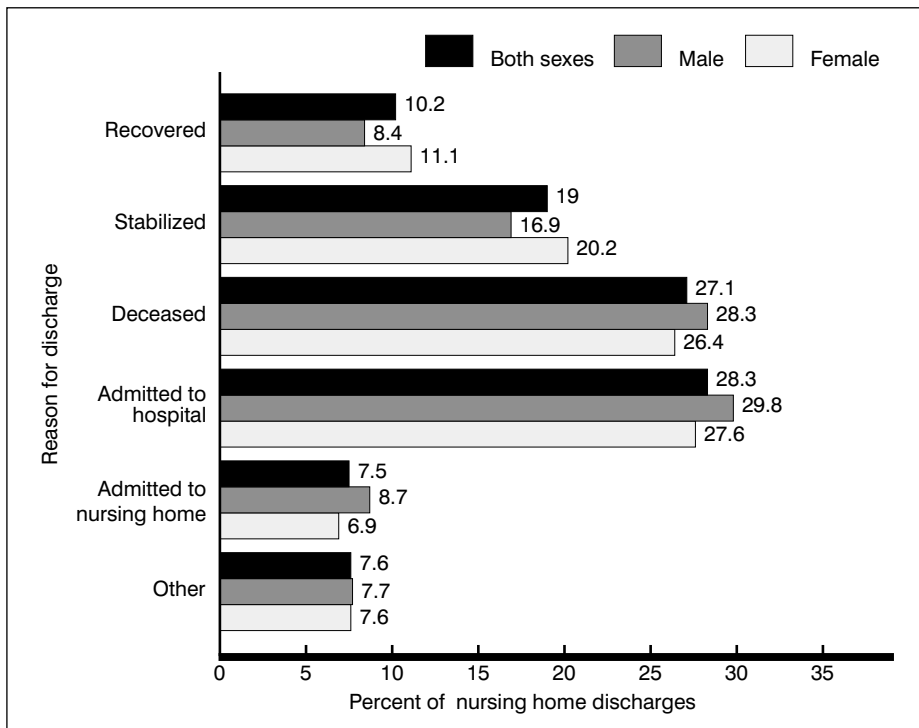


Figure 1. Percent distribution of elderly nursing home discharges by reason for discharge and sex: United States, October 1996–September 1997

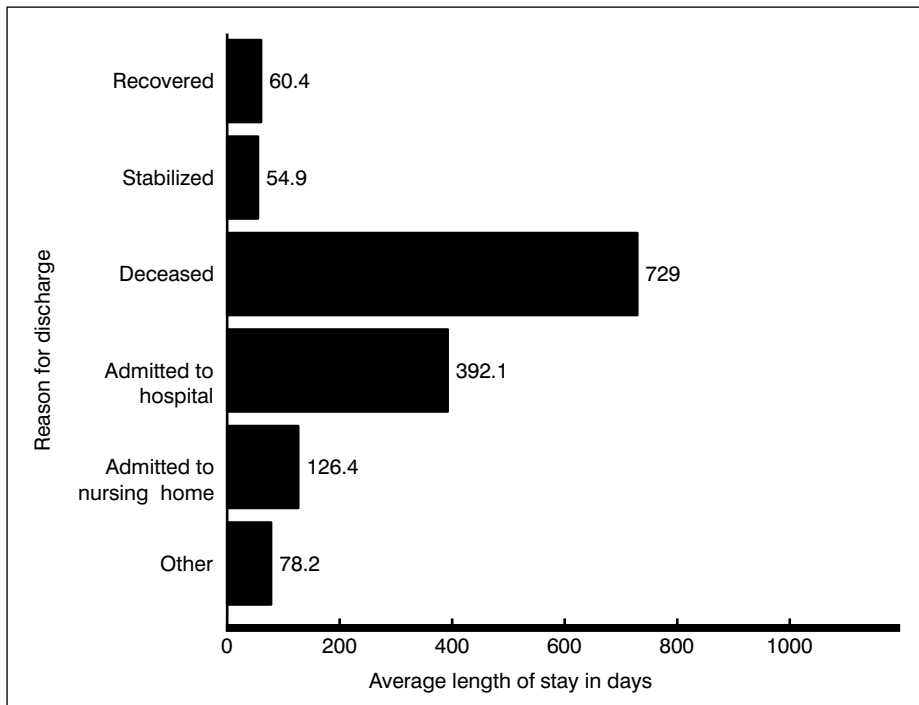


Figure 2. Average length of stay of elderly nursing home discharges by reason for discharge: United States, October 1996–September 1997

- McCullough LB, Wilson NL, eds. Long-term care decisions ethical and conceptual dimensions. In: Wilson NL eds. Long-term care in the United States: An overview of the current system. Baltimore: The Johns Hopkins University Press, 35–59. 1995.
- Wallace RB, Woolson RF. The epidemiologic study of the elderly. In: Foley DJ, eds. Epidemiologic research on nursing home populations. New York: Oxford University Press, 234–241. 1992.
- Williams ME. The American Geriatrics Society’s complete guide to aging and health. New York, New York: Harmony Books. 1995.
- National Center for Health Statistics: Development and maintenance of a national inventory of hospitals and institutions. Vital and Health Statistics 1(3):6–13. 1965.
- Hing E, Sekscenski E, Strahn G. The National Nursing Home Survey: 1985 Summary for the United States. National Center for Health Statistics. Vital Health Stat 13 (97). 1989.
- Hazzard WR, Blass JP, Ettinger WH Jr, Halter JB, Ouslander JG, eds. Principles of geriatric medicine and gerontology. In: Ouslander JG, Schnelle JF. Nursing home care. 4th edition. New York: McGraw-Hill, 509–528. 1999.
- Public Health Service and Health Care Financing Administration. International Classification of Diseases, 9th Revision, Clinical Modification, 4th ed. Washington: Public Health Service. 1991.

**Table 11. Number and percent distribution of elderly nursing home discharges 65 years and over by selected facility characteristics, according to sex: United States, October 1996–September 1997**

Facility characteristic	Both sexes			Both sexes		
	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Ownership						
Proprietary . . . . .	1,390,900	501,800	889,000	66.2	69.3	64.6
Voluntary nonprofit . . . . .	607,900	187,600	420,300	28.9	25.9	30.5
Government and other . . . . .	102,000	34,300	67,700	4.9	4.7	4.9
Certification						
Certified by Medicare and Medicaid . . . . .	1,803,100	643,400	1,159,800	85.8	88.9	84.2
Certified by Medicare only . . . . .	181,900	45,700	136,200	8.7	6.3	9.9
Certified by Medicaid only . . . . .	89,000	26,100	62,900	4.2	3.6	4.6
Not certified . . . . .	26,800	*8,600	18,200	1.3	*1.2	1.3
Bed size						
Less than 50 beds . . . . .	230,500	*58,100	172,300	11.0	*8.0	12.5
50–99 beds . . . . .	464,600	179,400	285,300	22.1	24.8	20.7
100–199 beds . . . . .	1,094,500	375,000	719,500	52.1	51.8	52.3
200 beds or more . . . . .	311,200	111,300	199,900	14.8	15.4	14.5
Census region						
Northeast . . . . .	386,700	125,700	261,000	18.4	17.4	19.0
Midwest . . . . .	599,200	180,900	418,300	28.5	25.0	30.4
South . . . . .	634,300	232,100	402,300	30.2	32.1	29.2
West . . . . .	480,500	185,100	295,500	22.9	25.6	21.5
Metropolitan Statistical Area (MSA)						
MSA . . . . .	1,600,100	554,200	1,045,900	76.2	76.6	76.0
Not MSA . . . . .	500,700	169,600	331,100	23.8	23.4	24.1
Affiliation <sup>1</sup>						
Chain . . . . .	1,287,000	460,800	826,200	61.3	63.7	60.0
Independent . . . . .	805,100	259,900	545,200	38.3	35.9	39.6

\* Data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Excludes unknown.

NOTE: Numbers may not add to totals because of rounding.

**Table 12. Number and percent distribution of elderly nursing home discharges 65 years and over by selected demographic characteristics, according to sex: United States, October 1996–September 1997**

	Number			Percent distribution		
	Both sexes	Male	Female	Both sexes	Male	Female
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Age						
65–74 years . . . . .	406,000	164,900	241,200	19.3	22.8	17.5
75–84 years . . . . .	836,100	318,600	517,600	39.8	44.0	37.6
85 years and over . . . . .	858,600	240,300	618,300	40.9	33.2	44.9
Race						
White . . . . .	1,864,300	631,200	1,233,100	88.7	87.2	89.6
Black . . . . .	147,400	61,700	85,600	7.0	8.5	6.2
Other . . . . .	48,100	*15,300	*32,800	2.3	*2.1	*2.4
Unknown . . . . .	41,100	*	25,500	2.0	*	1.9
Hispanic origin						
Hispanic . . . . .	66,500	32,900	33,700	3.2	4.5	2.4
Non-Hispanic . . . . .	1,810,600	617,400	1,193,200	86.2	85.3	86.7
Unknown . . . . .	223,600	73,500	150,100	10.6	10.2	10.9
Marital status						
Married . . . . .	550,300	343,100	207,200	26.2	47.4	15.1
Widowed . . . . .	1,191,300	219,900	971,500	56.7	30.4	70.6
Divorced/separated . . . . .	122,400	49,800	72,700	5.8	6.9	5.3
Never married/single . . . . .	194,900	94,900	100,000	9.3	13.1	7.3
Unknown . . . . .	41,900	*16,200	25,700	2.0	*2.2	1.9
Living arrangement prior to admission						
Private residence . . . . .	512,700	176,000	336,700	24.4	24.3	24.5
Retirement home . . . . .	40,300	*	28,500	1.9	*	2.1
Board and care/residential facility . . . . .	55,800	19,200	36,600	2.7	2.7	2.7
Nursing home . . . . .	143,500	40,600	102,800	6.8	5.6	7.5
Hospital . . . . .	1,280,900	448,200	832,800	61.0	61.9	60.5
Mental health facility . . . . .	*7,600	*	*	*0.4	*	*
Other or unknown . . . . .	60,000	25,300	34,600	2.9	3.5	2.5

\* Data do not meet standard reliability or precision (sample size less than 30) and are therefore not reported. If asterisk precedes a number, data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

**Table 13. Number and percent of elderly nursing home discharges 65 years and over by use of selected aids, continence, vision and hearing status, and sex: United States, October 1996–September 1997**

Functional status	Both sexes	Male	Female	Both sexes		
				Male	Female	Female
	Number			Percent		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Aids used						
Glasses . . . . .	1,365,600	445,200	920,400	65.0	61.5	66.8
Hearing aid . . . . .	235,200	79,200	156,000	11.2	11.0	11.3
Transfer equipment . . . . .	830,400	266,800	563,700	39.5	36.9	40.9
Wheelchair . . . . .	213,100	82,800	130,300	10.1	11.4	9.5
Cane . . . . .	1,137,000	400,300	736,700	54.1	55.3	53.5
Walker . . . . .	144,100	50,000	94,100	6.9	6.9	6.8
Brace (any type) . . . . .	*	*	*	*	*	*
Oxygen . . . . .	64,100	*18,300	45,800	3.1	*2.5	3.3
Commode . . . . .	373,400	145,900	227,500	17.8	20.2	16.5
Other aids or devices . . . . .	807,900	237,200	570,600	38.5	32.8	41.4
Continence status						
Difficulty controlling both bowels and bladder . .	683,200	237,900	445,400	32.5	32.9	32.3
Difficulty controlling bowels . . . . .	*17,400	*	*9,900	*0.8	*	*0.7
Difficulty controlling bladder . . . . .	177,000	69,200	107,800	8.4	9.6	7.8
Vision						
Not impaired . . . . .	1,398,800	496,300	902,500	66.6	68.6	65.5
Impaired . . . . .	479,200	149,500	329,600	22.8	20.7	23.9
Unknown <sup>1</sup> . . . . .	222,900	78,000	144,900	10.6	10.8	10.5
Hearing						
Not impaired . . . . .	1,436,600	479,100	957,500	68.4	66.2	69.5
Impaired . . . . .	415,400	158,000	257,300	19.8	21.8	18.7
Unknown <sup>1</sup> . . . . .	248,900	86,700	162,200	11.9	12.0	11.8

\* Data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Includes those for who status could not be determined (e.g., comatose patients)

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

**Table 14. Number and percent of elderly nursing home discharges 65 years and over by dependency in activities of daily living and instrumental activities of daily living and sex: United States, October 1996–September 1997**

Functional status	Both sexes			Both sexes		
	Male	Female	Both sexes	Male	Female	Both sexes
	Number			Percent		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Received assistance with ADL's <sup>1</sup>						
Bathing or showering . . . . .	1,944,000	673,600	1,270,500	92.5	93.1	92.3
Dressing . . . . .	1,797,600	629,500	1,168,100	85.6	87.0	84.8
Eating . . . . .	975,100	349,900	625,200	46.4	48.4	45.4
Transferring in or out of bed or chair . . . . .	674,000	227,900	446,100	32.1	31.5	32.4
Using toilet room . . . . .	1,104,400	379,500	724,900	52.6	52.4	52.6
Number of dependencies in ADL's <sup>1</sup>						
None . . . . .	98,500	29,900	68,600	4.7	4.2	5.0
1 . . . . .	107,100	32,700	74,400	5.1	4.5	5.4
2 . . . . .	284,100	96,600	187,600	13.6	13.4	13.7
3 . . . . .	764,600	268,000	496,600	36.5	37.2	36.2
4 . . . . .	667,100	236,500	430,600	31.9	32.8	31.4
5 . . . . .	171,500	56,900	114,600	8.2	7.9	8.4
Received assistance with IADL's <sup>1</sup>						
Care of personal possessions . . . . .	1,387,300	471,400	915,900	66.0	65.1	66.5
Managing money . . . . .	1,242,800	409,900	832,900	59.2	56.6	60.5
Securing personal items . . . . .	1,376,600	475,000	901,600	65.5	65.6	65.5
Using telephone . . . . .	1,040,700	362,700	678,000	49.5	50.1	49.2
Number of dependencies in IADL's <sup>1</sup>						
None . . . . .	459,900	158,900	301,000	23.1	23.3	23.0
1 . . . . .	142,500	54,500	88,000	7.2	8.0	6.7
2 . . . . .	174,600	63,200	111,400	8.8	9.3	8.5
3 . . . . .	298,500	85,500	212,900	15.0	12.5	16.3
4 . . . . .	915,100	320,400	594,600	46.0	47.0	45.5

<sup>1</sup>ADL is activities of daily living, and IADL is instrumental activities of daily living.

NOTES: Numbers may not add to totals because of rounding. Percents are based on the unrounded figures.

**Table 15. Number and percent distribution of elderly nursing home discharges 65 years and over by primary diagnosis at admission, according to sex: United States, October 1996–September 1997**

Primary diagnosis at admission and ICD–9–CM Code <sup>1</sup>	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Infectious and parasitic diseases . . . . . 1–139	*15,100	*	*	*0.7	*	*
Neoplasms . . . . . 140–239	124,600	61,400	63,300	5.9	8.5	4.6
Malignant neoplasms . . . . . 140–208,230–234	114,600	53,500	61,000	5.5	7.4	4.4
Endocrine, nutritional, and metabolic diseases and immunity disorder . . . . . 240–279	109,000	40,700	68,300	5.2	5.6	5.0
Diabetes mellitus . . . . . 250	69,700	23,000	46,700	3.3	3.2	3.4
Diseases of the blood and blood-forming organs . . . . . 280–289	*17,800	*	*11,200	*0.9	*	*0.8
Mental disorders . . . . . 290–319	147,800	50,600	97,200	7.0	7.0	7.1
Diseases of the nervous system and sense organs . . . . . 320–389	155,200	59,900	95,300	7.4	8.3	6.9
Diseases of the circulatory system . . . . . 390–459	536,200	188,500	347,700	25.5	26.0	25.3
Essential hypertension . . . . . 401	41,200	*9,600	31,700	2.0	*1.3	2.3
Heart disease . . . . . 391–392,0,393–398,402,404,410–416,420–429	229,200	69,500	159,700	10.9	9.6	11.6
Cerebrovascular diseases . . . . . 430–438	42,500	*14,100	28,400	2.0	*2.0	2.1
Diseases of the respiratory system . . . . . 460–519	229,400	90,500	138,900	10.9	12.5	10.1
Chronic obstructive pulmonary disease . . . . . 494–496	54,700	19,800	34,900	2.6	2.7	2.5
Diseases of the digestive system . . . . . 520–597	65,900	*18,900	47,000	3.1	*2.6	3.4
Diseases of the genitourinary system . . . . . 580–629	67,900	25,600	42,300	3.2	3.5	3.1
Diseases of the skin and subcutaneous tissue . . . . . 680–709	34,000	*19,800	*14,200	1.6	*2.7	*1.0
Diseases of the musculoskeletal system and connective tissue . . . . . 710–739	104,500	18,900	85,700	5.0	2.6	6.2
Congenital anomalies . . . . . 740–759	*	*	*	*	*	*
Symptoms, signs, and ill-defined conditions . . . . . 780–799	115,800	45,800	70,000	5.5	6.3	5.1
Injury and poisonings . . . . . 800–999	215,500	37,800	177,700	10.3	5.2	12.9
Supplementary classification and unknown . . . . . V01–V82, 00	161,200	51,500	109,700	7.7	7.1	8.0

\* Data do not meet standard of reliability or precision (sample size less than 30) and are therefore not reported. If shown with a number, data should not be assumed reliable because the sample size is between 30–59 or the sample size is greater than 59 but has a relative standard error over 30 percent.

<sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (8).

NOTE: Numbers may not add to totals because of rounding.

**Table 16. Number and percent of elderly nursing home discharges 65 years and over by services received during the billing period that included date of discharge, and sex: United States, October 1996–September 1997**

Service received	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Dental care . . . . .	190,200	63,300	126,900	9.1	8.8	9.2
Equipment or devices . . . . .	1,210,300	415,400	794,900	57.6	57.4	57.7
Medical services . . . . .	1,973,300	684,000	1,289,400	93.9	94.5	93.6
Mental health services . . . . .	241,500	82,900	158,600	11.5	11.5	11.5
Nursing services . . . . .	2,052,800	711,000	1,341,800	97.7	98.2	97.5
Nutritional services . . . . .	1,618,200	553,100	1,065,100	77.0	76.4	77.4
Occupational therapy . . . . .	832,000	297,200	534,800	39.6	41.1	38.8
Personal care . . . . .	1,876,700	647,400	1,229,300	89.3	89.4	89.3
Physical therapy . . . . .	1,067,200	371,600	695,600	50.8	51.3	50.5
Prescribed or nonprescribed medicines . . . . .	1,940,700	667,600	1,273,100	92.4	92.2	92.5
Social services . . . . .	1,558,900	527,200	1,031,700	74.2	72.8	74.9
Speech or hearing therapy . . . . .	240,000	113,100	126,900	11.4	15.6	9.2
Transportation . . . . .	358,800	136,100	222,700	17.1	18.8	16.2
Other services . . . . .	360,700	131,600	229,200	17.2	18.2	16.6

NOTE: Numbers may not add to totals because of rounding.

**Table 17. Number and standard error of elderly nursing home discharges 65 years and over by average and median length of stay, age, marital status, race, and sex: United States, October 1996–September 1997**

Demographic characteristics	Both sexes	Standard error	Male	Standard error	Female	Standard error
Total . . . . .	2,100,800	...	723,800	...	1,377,000	...
			Number in days			
Average length of stay in days . . . . .	290	15.3	215	15.0	329	19.5
Median length of stay in days . . . . .	63		51		69	
Age						
65–74 years . . . . .	146	14.4	153	18.8	142	19.3
75–84 years . . . . .	233	17.2	219	26.4	242	20.6
85 years and over . . . . .	413	24.7	254	23.0	475	30.9
Marital status						
Married . . . . .	168	12.6	152	14.1	195	22.5
Widowed . . . . .	323	19.6	243	21.6	341	22.7
Divorced/separated . . . . .	347	47.5	367	73.7	333	61.8
Never married/single . . . . .	424	53.7	312	57.9	530	83.3
Race						
White . . . . .	297	16.0	214	15.0	340	20.6
Black and other . . . . .	265	34.2	263	43.1	266	41.9
Black . . . . .	304	33.1	268	41.8	331	45.8

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

**Table 18. Number and percent distribution of elderly nursing home discharges 65 years and over by their primary source of payment at the time of discharge, according to sex: United States, October 1996–September 1997**

Source of payment	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent distribution		
Total . . . . .	2,100,800	723,800	1,377,000	100.0	100.0	100.0
Private insurance, own income, family support <sup>1</sup> . . . . .	441,600	142,900	298,700	21.0	19.8	21.7
Medicare . . . . .	1,053,700	378,100	675,600	50.2	52.2	49.1
Medicaid . . . . .	526,000	161,100	364,800	25.0	22.3	26.5
Government assistance, charity, and other <sup>2</sup> . . . . .	55,500	32,800	*22,700	2.6	4.5	*1.7
Unknown . . . . .	24,000	*	*15,200	1.1	*	*1.1

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>Includes social security benefits, retirement funds.

<sup>2</sup>Includes supplemental security income, welfare, religious organizations, foundations, agencies, VA contract, pensions, or other compensation, payment source not yet determined, and other.

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**National Center for Health Statistics**

Director  
Edward J. Sondik, Ph.D.

Deputy Director  
Jack R. Anderson

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U.S. DEPARTMENT OF  
HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention  
National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, Maryland 20782-2003

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