# <u>Advance</u> Data

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## **Characteristics of Elderly Home Health Care Users: Data From the 1996 National Home and Hospice Care Survey**

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## Abstract

*Objective*— This report presents demographic characteristics, service utilization, and primary admission diagnoses of elderly users of home health care services. Included are home health care services used by both current and discharged clients (called patients). These services are provided by home health care agencies and hospices. The focus of the report is on services used by both current patients and discharges aged 65 years and over.

*Methods*— The data used for this report are from the National Center for Health Statistics 1996 National Home and Hospice Care Survey's (NHHCS) sample of current patients and discharges. The 1996 NHHCS is the fourth survey of home health care agencies and hospices and their current patients and discharges.

*Results*— The overall results of the survey indicate that, as in previous years, the elderly current patients and discharges were predominantly women, 75–84 years old, white, non-Hispanic, widowed, and most often lived in a private residence with members of their family. For elderly men and women, the most commonly used home health care service was skilled nursing services and the primary admission diagnosis was diseases of the circulatory system, including heart disease.

**Keywords:** National Home and Hospice Care Survey • long-term care • current patients • discharges • diagnoses

## Introduction

Home health care is a rapidly growing segment of the current U.S. health care system. The estimated number of persons served by home health care agencies rose from 1.2 million in 1992 to 2.4 million in 1996, doubling in less than 5 years (1–4). Home health care is provided to individuals and their families in their place of residence to promote, maintain, or restore health or to maximize the level of independence while minimizing the effects of disability and illness. Home health care also includes hospice care for terminal illness (1–5).

This report presents statistics on an estimated 1.75 million current patients and 5.14 million discharges of patients aged 65 years and older who used home health care services in the United States during the time period covered by the 1996 National Home and Hospice Care

Survey (NHHCS), a nationwide sample survey that was first conducted by the National Center for Health Statistics in 1992 (1-5). Service utilization information is provided for the delivery of assistance with activities of daily living (ADL) and instrumental activities of daily living (IADL). The ADL's, which reflect an individual's capacity for self-care, refer to five sociobiological functions: bathing, dressing, eating, transferring in or out of bed or chair, and using the toilet. IADL's, which involve more complex tasks that enable an individual to live independently in the community, include doing light housework, managing money, shopping for groceries or clothes, using the telephone, preparing meals, and taking medications. This report focuses on help provided by home health care agencies in relation to ADL's and IADL's. It does not include help provided by other sources. Information is also provided on continence status (6) and service utilization by types of services received and length of service in days. For current patients, types of service received refers to services being received at the time of the survey. However, for discharges, the time frame is the 30 days prior to discharge.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Center for Health Statistics



## **Methods**

A two-stage sample design was used for the 1996 NHHCS. At the first stage, 1,200 home health and hospice care agencies were selected. The second stage consisted of the selection of up to 6 current patients and 6 discharges from each agency. This resulted in information being obtained from the patients' medical records for about 5,438 current patients and 4,758 discharges (4,8). This report focuses on the data obtained for patients aged 65 years and over at the time of admission; estimates are based on information for 2,642 current patients and 2,128 discharges. Although the report examines only the home health care patients and services, data may have been obtained from both home health care agencies and hospices because both types of agencies could provide home health care services to their patients. Patients and discharges specifically identified as receiving hospice care services are excluded from this analysis. However, a report about hospice care users has been published (8). Data collection was conducted between July and December of 1996.

Statistics presented in this report are estimated numbers and percents of current home health care patients and discharges by various characteristics. Current patients are those who were on the rolls of the agencies as of midnight on the day immediately before the date of the survey. Discharges are those patients who have been removed from the rolls of the agencies (including those who have died) during a designated month (from October 1995-September 1996) that was randomly selected for each agency in the sample. Discharges represent discharge events, not discharged patients. Thus, the same patient could be included more than once if that person had multiple episodes of care (in one or more agencies) that ended during the designated month.

Data were collected by interviewing the staff member most familiar with the care provided to the patient. Although the survey included patients of all ages from hospices and home health care agencies, the data presented in this report are limited to home health care patients who were 65 years of age and over at the time they began using home health care services at the selected agency.

Patient characteristics included in this report are sex, age, race, Hispanic origin, marital status, living arrangements, functional status, services received, and primary diagnosis at time of admission onto the agencies' rolls. The latter is coded according to the *International Classification of Diseases*, 9th Revision, Clinical Modification (9).

The tests of significance used to test all comparisons mentioned in this report are based on the Bonferroni multiple comparisons using the *z*-test with an overall 0.05 level of significance. Not all differences were tested, so lack of comment in the text does not mean that the difference was not statistically significant. Estimates in this report have been rounded to the nearest hundred. Therefore, detailed figures may not add to totals. Percents were calculated using unrounded figures and may not agree with computations made from the rounded data.

### Results

# Elderly current home health care patients

In 1996, there were an estimated 1.75 million elderly people age 65 years and over using home health care services. Sociodemographic characteristics of elderly current home health care patients, as measured at the time of admission, are shown in table 1. Elderly current patients were predominantly women (70 percent), 75-84 years old (47 percent), white (69 percent), non-Hispanic (65 percent), widowed (47 percent), living in private residences (92 percent), and living with their family members (50 percent). For a large percent of elderly current patients, race and ethnicity were not recorded in their agencies' records and hence are reported here as unknown. The data also show that elderly women were more likely to be widowed (59 percent) than elderly men (19 percent), and the percent of elderly women living alone

was higher than that of elderly men (44 percent v. 27 percent).

The most frequent help received from the agencies by elderly patients in activities of daily living (ADL's) was bathing or showering (53 percent), followed by dressing (46 percent), transferring to or from a bed or chair (30 percent), and using the toilet room (23 percent) (table 2). Of all elderly current patients, 56 percent were reported as receiving help with at least one ADL. Assistance with walking is included in the table, but, strictly speaking, it is not considered an ADL.

The most common instrumental activity of daily living (IADL) for which assistance was received from the agencies by elderly patients was shopping for groceries or clothes (84 percent). Doing light housework (39 percent), taking medications (23 percent), and preparing meals (23 percent) were the next most common types of assistance received by elderly current patients. Fifty-one percent of women and 45 percent of men received help with at least one IADL. As shown in the bottom panel of table 2, 24 percent of elderly men and 29 percent of elderly women had difficulty controlling their bladder. Fifteen percent of the elderly had difficulty controlling their bowels. About 8 percent of elderly men and 5 percent of elderly women had an ostomy or an indwelling catheter, with 8 percent of men and 5 percent of women receiving help in caring for these devices.

Table 3 presents information on the types of services received by elderly home health care current patients at the time of the survey. In 1996, the most frequent service used by elderly current patients was nursing services. Eightyfive percent of men and 84 percent of women used these services. Substantial proportions of elderly patients also used homemaker and household services (28 percent) and physical therapy (20 percent). Other services, such as continuous home care, counseling, administering medications, occupational therapy, and social services were less frequently used.

For current patients, length of service was calculated from the day of admission to the agency's patient rolls

## Table 1. Number and percent distribution of elderly home health care current patients 65 years and over by selected demographic characteristics, according to sex: United States, 1996

|   | Both      | sexes <sup>1</sup>      | Male    |                         | Female    |                         |
|---|-----------|-------------------------|---------|-------------------------|-----------|-------------------------|
| Demographic characteristic                  | Number    | Percent<br>distribution | Number  | Percent<br>distribution | Number    | Percent<br>distribution |
| Total                                       | 1,753,400 | 100.0                   | 528,300 | 100.0                   | 1,224,800 | 100.0                   |
| Age   |           |                         |         |                         |           |                         |
| 65–74 years                                 | 527,900   | 30.1                    | 180,400 | 34.2                    | 347,500   | 28.4                    |
| 75–84 years                                 | 820,500   | 46.8                    | 253,500 | 48.0                    | 566,800   | 46.3                    |
| 35 years and over                           | 404,900   | 23.1                    | 94,400  | 17.9                    | 310,600   | 25.4                    |
| Race  |           |                         |         |                         |           |                         |
| White                                       | 1,215,300 | 69.3                    | 353,900 | 67.0                    | 861,400   | 70.3                    |
| Black and other                             | 214,000   | 12.2                    | 65,000  | 12.3                    | 149,100   | 12.2                    |
| Black                                       | 190,900   | 10.9                    | 56,200  | 10.7                    | 134,700   | 11.0                    |
| Unknown                                     | 324,000   | 18.5                    | 109,400 | 20.7                    | 214,400   | 17.5                    |
| Hispanic origin                             |           |                         |         |                         |           |                         |
| Hispanic                                    | 47,300    | 2.7                     | *17,200 | *3.27                   | *30,100   | *2.5                    |
| Non-Hispanic                                | 1,134,800 | 64.7                    | 320,000 | 60.6                    | 814,800   | 66.5                    |
| Jnknown                                     | 571,200   | 32.6                    | 191,000 | 36.2                    | 379,900   | 31.0                    |
| Marital status                              |           |                         |         |                         |           |                         |
| Married                                     | 510,600   | 29.1                    | 268,200 | 50.8                    | 242,200   | 19.8                    |
| Nidowed                                     | 820,200   | 46.8                    | 102,600 | 19.4                    | 717,700   | 58.6                    |
| Divorced or separated                       | 49,700    | 2.8                     | *18,800 | *3.6                    | *31,000   | *2.5                    |
| Never married/single                        | 144,100   | 8.2                     | *49,000 | *9.3                    | 95,100    | 7.8                     |
| Jnknown                                     | 228,700   | 13.0                    | 89,800  | 17.0                    | 138,900   | 11.3                    |
| Living quarters                             |           |                         |         |                         |           |                         |
| Private residence                           | 1,616,600 | 92.2                    | 496,800 | 94.1                    | 1,119,500 | 91.4                    |
| Rented room and board                       | *         | *                       | *       | *                       | *         | *                       |
| Retirement home                             | 37,700    | 2.2                     | *       | *                       | *32,300   | *2.6                    |
| Board and care or residential care facility | 62,900    | 3.6                     | *       | *                       | 49,800    | 4.1                     |
| lealth facility                             | *         | *                       | *       | *                       | *         | *                       |
| Other or unknown                            | *15,900   | *0.9                    | *       | *                       | *         | *                       |
| Living arrangement                          |           |                         |         |                         |           |                         |
| Family members                              | 881,700   | 50.3                    | 317,100 | 60.0                    | 564,400   | 46.1                    |
| Nonfamily members                           | 92,700    | 5.3                     | *24,100 | *4.0                    | 68,700    | 5.6                     |
| Alone                                       | 685,600   | 39.1                    | 143,100 | 27.1                    | 542,400   | 44.3                    |
| Other or unknown                            | *93,400   | *5.3                    | *       | 4.0                     | *49,300   | *4.0                    |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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.

<sup>1</sup>Includes a small number of patients with unknown sex.

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

to the day of the interview. It does not cover the complete episode of ongoing care. Table 4 indicates that 60 percent of the elderly current patients had been using the home health care service for more than 90 days. In 1996, the average length of service among elderly patients was 336 days, with elderly women having an average of 338 days and elderly men having an average of 331 days of service.

Primary admission diagnosis was collected from the current patients' medical records and coded according to the *International Classification of*  *Diseases, Ninth Revision, Clinical Modification,* (ICD–9–CM) (9). Table 5 shows that, for both elderly men and women, the most frequently listed primary admission diagnosis was diseases of the circulatory system (31 percent), including essential hypertension, heart disease, and cerebrovascular disease.

# Elderly home health care discharges

In this survey, as mentioned earlier, a discharge represents an event, not a person. The advantage of using discharge data is that it enables the complete episode of care, that is, from admission to discharge, to be reviewed. A discharge may occur in response to either an improvement or stabilization of a condition or worsening of a condition that led to a hospital or nursing home admission or to death. A discharge may also occur for other reasons such as the patient learning how to care for himself or herself, or relatives assuming care of the patient. When this occurs, home health care services are no longer needed and are sometimes referred to as "goals met." Figure 1 shows that in Table 2. Number and percent of elderly men and women home health care current patients 65 years and over receiving help with activities of daily living, walking, and instrumental activities of daily living, percent distribution of number of functional activities for which help was received, and percent with continence problem, according to sex: United States, 1996

| Functional status                                | Both sexes <sup>1</sup> | Male                 | Female    |
|--|-------------------------|----------------------|-----------|
|  |                         | Number               |           |
| otal   | 1,753,400               | 528,300              | 1,224,800 |
| Received personal help with the following ADL's  |                         | Percent              |           |
| athing or showering                              | 53.2                    | 50.9                 | 54.2      |
| ressing  | 45.8                    | 43.0                 | 47.1      |
| ating  | 9.3                     | 9.4                  | 9.2       |
| ransferring in or out of bed or chair            | 29.6                    | 30.2                 | 29.3      |
| sing toilet room                                 | 22.6                    | 19.7                 | 23.9      |
| elp with walking                                 | 30.6                    | 28.4                 | 31.6      |
| Functional status in ADL's                       |                         | Percent distribution |           |
| eceives no help from agency in ADL's             | 43.8                    | 45.9                 | 42.9      |
| eceives help from agency in 1 ADL                | 4.9                     | *4.8                 | 5.0       |
| Receives help from agency in 2 ADL's             | 13.8                    | 13.2                 | 14.1      |
| Receives help from agency in 3 ADL's             | 12.5                    | 12.7                 | 12.4      |
| Receives help from agency in 4 ADL's             | 9.2                     | 9.1                  | 9.2       |
| eceives help from agency in 5 ADL's              | 10.6                    | 10.0                 | 10.9      |
| eceives help from agency in 6 ADL's              | 5.2                     | *4.4                 | 5.6       |
| Received personal help with the following IADL's |                         | Percent              |           |
| Doing light housework                            | 38.9                    | 34.1                 | 41.0      |
| lanaging money                                   | 2.8                     | *                    | *2.8      |
| hopping for groceries or clothes                 | 84.3                    | 79.5                 | 85.8      |
| sing telephone                                   | 2.7                     | *                    | *3.1      |
| reparing meals                                   | 23.0                    | 20.1                 | 24.3      |
| aking medications                                | 23.4                    | 20.7                 | 24.6      |
| Functional status in IADL's                      |                         | Percent distribution |           |
| eceives no help from agency in IADL's            | 50.5                    | 54.9                 | 48.6      |
| eceives help from agency in 1 IADL               | 21.4                    | 20.9                 | 21.6      |
| eceives help from agency in 2 IADL's             | 11.1                    | 11.3                 | 11.0      |
| eceives help from agency in 3 IADL's             | 9.9                     | 8.1                  | 10.7      |
| eceives help from agency in 4 IADL's             | 4.7                     | *2.8                 | 5.6       |
| eceives help from agency in 5 IADL's             | 1.6                     | *                    | *         |
| eceives help from agency in 6 IADL's             | 0.8                     | *                    | *         |
| Continence status                                |                         | Percent              |           |
| bifficulty controlling bowels                    | 15.0                    | 14.6                 | 15.1      |
| ifficulty controlling bladder                    | 27.4                    | 23.5                 | 29.1      |
| ifficulty controlling both bowels and bladder    |                         | 23.5                 | 12.3      |
| , .  | 11.8                    | *7.8                 | 5.1       |
| lave an ostomy or an indwelling catheter         | 5.9                     |                      |           |
| Received help in caring for this device          | 5.8                     | *7.8                 | 4.9       |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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.

<sup>1</sup>Includes a small number of patients with unknown sex.

NOTE: ADL is activities of daily living and IADL is instrumental activities of daily living.

1996, the percent of older male discharges who were stabilized (16.2) was less than females (21.8) and that the percent of male discharges admitted to hospitals was greater (15.6) than females (11.4). Discharges as a result of death were also more frequent for older males (7.1 percent) than older females (4.5 percent).

There were 5,137,500 elderly discharges from home health care during 1996. Discharges in the age group

75–84 years at the time of admission comprised 40 percent of all elderly discharges (table 6). As with current home health care patients, elderly discharges were also predominantly women (67 percent), white (67 percent), and non-Hispanic (58 percent). Thirtyeight percent of the discharges were married and 35 percent were widowed. Discharges among the elderly occurred predominantly to those who lived in a private residence (90 percent) and had lived with family members (60 percent). For a large percent of elderly discharges, race and ethnicity were reported as unknown (25 percent for race and 41 percent for Hispanic origin). The proportions of discharges to patients who were widowed and who lived alone were higher among elderly women than elderly men.

Table 7 shows the percent of elderly home health care discharges who received help in walking, ADL's,

Both Service received Male Female sexes1 Number 1,753,400 528,300 1,224,800 Total Percent 5.7 \*4.5 6.3 2.3 \*2.5 \*2.1 30.3 Homemaker-household services ..... 28.1 23.0 9.8 7.5 10.8 \*1.7 \*2 0 Mental health services 84.2 84.8 83.9 Nutritional services 33 \*34 4.2 4.9 \*6.4 19.8 18.9 22.0 37 \*4 5 \*3.3 Physician services 10.6 10.1 10.8 Speech therapy and/or audiology \*1.6 \* \*1.0 Transportation ..... 10.7 11.8 10.2

Table 3. Number and percent of elderly men and women home health care current patients 65 years and over receiving services during the last 30 days: United States, 1996

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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 of over 30 percent.

<sup>1</sup>Excludes a small number of patients with unknown sex.

IADL's, and their continence status. The most common ADL's for which assistance was received by elderly discharges were bathing and showering (37 percent) and dressing (33 percent). These were followed by transferring in or out of bed or chair (25 percent) and using the toilet room (20 percent). Help with bathing or showering was received by 40 percent of elderly female discharges and 32 percent of elderly male discharges, help with dressing was received by 36 percent of elderly female discharges and 29 percent of male discharges, help with walking was received by 27 percent of female discharges and 24 percent of males, and help with transferring in or out of a bed or a chair by 26 percent of female discharges and 23 percent of elderly male discharges. As with current patients, elderly women discharges received more help in at least one ADL than elderly men discharges (45 percent v. 41 percent). The IADL for which assistance was received most by elderly discharges was shopping for groceries or clothes (75 percent). Assistance was also received in doing light housework (24 percent), taking medications (17 percent), and preparing meals (12 percent). Thirty-three percent of all elderly discharges received help with at

least one IADL. Twenty-one percent of all elderly discharges were reported as having difficulty controlling their bladder. Only 3 percent of elderly discharges had an ostomy or an indwelling catheter and received help in caring for this device.

The most frequent home health care services used by elderly persons (during the 30 days prior to discharge) were nursing services, with elderly men and women using them equally (88 percent) (table 8). Physical therapy (32 percent of men and 29 percent of women), homemaker-household services (19 percent for men and women), and social services (11 percent for men and 13 percent for women) were the next most frequently used services by the elderly.

For the discharge sample, the length of service refers to completed episodes of care, that is, from admission to discharge. The average length of service for elderly discharges was 107 days. Seventy percent of the elderly used home health care services for 60 days or less (table 9). For men, the average length of service was 104 days, and for women it was 109 days. Length of service for discharges of 181 days or more was reported for 15 percent of elderly women and for 9 percent of elderly men.

Table 10 presents the percent distribution of elderly home health care discharges by primary admission diagnosis. The most frequent primary admission diagnosis was diseases of the circulatory system (25 percent for men and 32 percent for women); heart disease is the most frequent first-listed diagnosis within that category. Diseases of the respiratory system were the second most cited primary diagnosis for men (13 percent), whereas injury and poisonings were the second most often cited for women (15 percent). Malignant neoplasms were the primary diagnosis for 11 percent of discharges of elderly men and 7 percent of women.

#### Summary and discussion.

Consistent with the previous three home and hospice care surveys, the results of this survey indicate that both elderly home health care current users and discharges were predominantly women, 75–84 years old at the time of admission, white, non-Hispanic, widowed, most often lived in a private residence, and lived with family members. In both the current and discharged patient samples, a greater Table 4. Number of elderly current home health care patients 65 years and over, average length of service since admission, and percent distribution, by length of service, according to sex and standard error: United States, 1996

| Length of service                 | Both sexes <sup>1</sup><br>(SE) | Male<br>(SE) | Female<br>(SE) |  |
|-----------------------------------|---------------------------------|--------------|----------------|--|
|                                   |                                 | Number       |                |  |
| Total                             | 17,153,400                      | 528,300      | 1,224,800      |  |
| Average length of service in days | 336 (22.9)                      | 331 (61.1)   | 338 (18.3)     |  |
|                                   | Percent distribution            |              |                |  |
| 0–14 days                         | 8.8 (1.1)                       | 10.3 (2.0)   | 8.2 (1.2)      |  |
| 15–30 days                        | 9.4 (1.0)                       | 9.6 (1.7)    | 9.3 (1.1)      |  |
| 31–60 days                        | 14.0 (1.3)                      | 15.7 (2.3)   | 13.3 (1.4)     |  |
| 31–90 days                        | 8.2 (0.9)                       | 9.6 (1.9)    | 7.7 (1.0)      |  |
| 1–180 days                        | 15.4 (1.2)                      | 13.2 (2.0)   | 16.3 (1.6)     |  |
| 181 days and more                 | 44.1 (2.1)                      | 41.5 (3.8)   | 45.2 (2.3)     |  |

<sup>1</sup>Excludes a small number of patients with unknown sex.

NOTE: SE is standard error.

## Table 5. Number and percent distribution of elderly current home health care patients 65 years and over by primary admission diagnosis, according to sex: United States, 1996

| ICD-9-CM diagnostic category and code <sup>1</sup>                           | Both sexes <sup>2</sup> | Male                 | Female    |
|--|-------------------------|----------------------|-----------|
|  |                         |                      |           |
| otal   | 1,753,400               | 528,300              | 1,224,800 |
|  |                         | Percent distribution |           |
| ōtal   | 100.0                   | 100.0                | 100.0     |
| nfectious and parasitic diseases   | *                       | *                    | *         |
| leoplasms  | 4.9                     | *5.5                 | 4.6       |
| Malignant neoplasms  | 4.5                     | *5.0                 | *4.2      |
| ndocrine, nutritional and metabolic diseases, and immunity disorders 240–279 | 10.4                    | 10.1                 | 10.6      |
| Diabetes mellitus  | 9.0                     | 9.3                  | 8.9       |
| viseases of the blood and blood-forming organs                               | 2.6                     | *                    | 2.9       |
| viseases of the nervous system and sense organs                              | 3.5                     | *4.5                 | 3.1       |
| viseases of the circulatory system   | 30.8                    | 30.4                 | 30.9      |
| Essential hypertension 401   | 5.7                     | *                    | 7.0       |
| Heart disease  | 13.8                    | 14.5                 | 13.5      |
| Cerebrovascular disease  | 9.0                     | 10.0                 | 8.5       |
| viseases of the respiratory system   | 9.3                     | *14.6                | 7.0       |
| Chronic obstructive pulmonary disease  | 5.7                     | *7.2                 | 5.0       |
| Diseases of the digestive system   | 2.4                     | *                    | *2.4      |
| viseases of the genitourinary system   | 2.3                     | *                    | *2.3      |
| Diseases of the skin and subcutaneous tissue                                 | 3.5                     | *4.2                 | *3.2      |
| iseases of the musculoskeletal system and connective tissue                  | 10.2                    | *6.2                 | 11.9      |
| ongenital anomalies  | *                       | *                    | *         |
| ymptoms, signs, and ill-defined conditions                                   | 8.2                     | *7.7                 | 8.5       |
| njury and poisonings   | 6.5                     | *4.7                 | 7.2       |
| Supplementary classification and unknown                                     | 4.7                     | *3.8                 | 5.1       |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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.

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

<sup>2</sup>Excludes a small number of patients with unknown sex.

percent of elderly women than elderly men were widowed and living alone. This is also true in the general population (10). A large increase in the estimates of both current patients and discharges is evident. The most striking difference between the two groups is in the average length of stay (336 days for current patients v. 107 days for discharges). This difference is indicative of the relatively healthier status of the latter group, as demonstrated by their lesser use of ADL's and IADL's and more use of physical therapy. However, it must be remembered that discharges are completed episodes of care, some of which may have occurred more than once to a given patient, whereas current patients can be included in the sample only once. Because of this difference in the sample selection procedures, and the fact that a large proportion of the current patient sample will eventually become discharges, conclusions about their difference need to be made very cautiously.

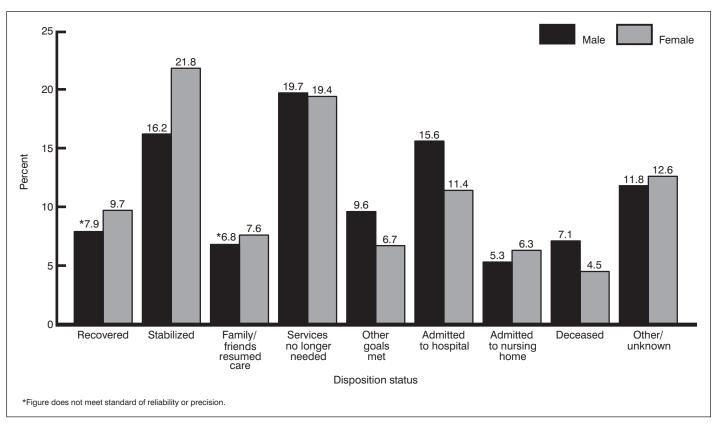


Figure 1. Disposition status of elderly home health care discharges: United States, 1996

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## Table 6. Number and percent distribution of elderly discharges 65 years and over from home health care agencies by selected demographic characteristics, according to sex: United States, 1995–1996

|   | Both sexes <sup>1</sup> |                         | Male      |                         | Female    |                         |
|---|-------------------------|-------------------------|-----------|-------------------------|-----------|-------------------------|
| Demographic characteristic                  | Number                  | Percent<br>distribution | Number    | Percent<br>distribution | Number    | Percent<br>distribution |
| Total                                       | 5,137,500               | 100.0                   | 1,716,000 | 100.0                   | 3,421,500 | 100.0                   |
| Age   |                         |                         |           |                         |           |                         |
| 65–74 years                                 | 1,864,900               | 36.3                    | 755,700   | 44.0                    | 1,109,300 | 32.4                    |
| 75–84 years                                 | 2,071,700               | 40.3                    | 689,900   | 40.2                    | 1,381,700 | 40.4                    |
| 85 years and over                           | 1,200,900               | 23.4                    | 270,400   | 15.8                    | 930,500   | 27.2                    |
| Race  |                         |                         |           |                         |           |                         |
| White                                       | 3,464,800               | 67.4                    | 1,106,500 | 64.5                    | 2,358,400 | 68.9                    |
| Black and other                             | 398,900                 | 7.8                     | 114,100   | 6.7                     | 284,700   | 8.3                     |
| Black                                       | 285,400                 | 5.6                     | *71,000   | *4.1                    | 214,400   | 6.3                     |
| Unknown                                     | 1,273,800               | 24.8                    | 495,400   | 28.9                    | 778,400   | 22.8                    |
| Hispanic origin                             |                         |                         |           |                         |           |                         |
| Hispanic                                    | 104,800                 | 2.0                     | *         | *                       | *64,000   | *1.9                    |
| Non-Hispanic                                | 2,954,200               | 57.5                    | 951,600   | 55.5                    | 2,002,500 | 58.5                    |
| Unknown                                     | 2,078,500               | 40.5                    | 723,600   | 42.2                    | 1,354,900 | 39.6                    |
| Marital status                              |                         |                         |           |                         |           |                         |
| Married                                     | 1,956,200               | 38.1                    | 1,099,900 | 64.1                    | 856,300   | 25.0                    |
| Widowed                                     | 1,813,200               | 35.3                    | 258,500   | 15.1                    | 1,554,700 | 45.4                    |
| Divorced or separated                       | 171,100                 | 3.3                     | *79,600   | *4.6                    | *91,500   | *2.7                    |
| Never married/single                        | 334,500                 | 6.5                     | *92,000   | *5.4                    | 242,500   | 7.1                     |
| Unknown                                     | 862,600                 | 16.8                    | *186,100  | *10.8                   | 676,500   | 19.8                    |
| Living quarters                             |                         |                         |           |                         |           |                         |
| Private residence                           | 4,598,700               | 89.5                    | 1,626,500 | 94.8                    | 2,972,200 | 86.9                    |
| Rented room and board                       | *                       | *                       | *         | *                       | *         | *                       |
| Retirement home                             | *59,500                 | *1.2                    | *         | *                       | *54,000   | *1.6                    |
| Board and care or residential care facility | 331,600                 | 6.5                     | *         | *                       | 261,900   | 7.7                     |
| Health facility                             | *                       | *                       | *         | *                       | *         | *                       |
| Other or unknown                            | *                       | *                       | *         | *                       | *         | *                       |
| Living arrangement                          |                         |                         |           |                         |           |                         |
| Family members                              | 3,066,900               | 59.7                    | 1,273,900 | 74.2                    | 1,793,000 | 52.4                    |
| Nonfamily members                           | 367,800                 | 7.2                     | *99,900   | *5.8                    | 268,000   | 7.8                     |
| Alone                                       | 1,452,000               | 28.3                    | 308,000   | 18.0                    | 1,144,000 | 33.4                    |
| Other or unknown                            | *250,700                | *4.9                    | *         | *                       | *216,500  | *6.3                    |
|   |                         |                         |           |                         |           |                         |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and is 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. <sup>1</sup>Includes a small number of patients with unknown sex.

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

Table 7. Number and percent of elderly home health care discharges 65 years and over receiving help with activities of daily living, walking, and instrumental activities of daily living, percent distribution of number of functional activities for which help was received, and percent with continence problem, according to sex: United States, 1995-96

| Functional status                                | Both sexes <sup>1</sup> | Male                 | Female    |
|--|-------------------------|----------------------|-----------|
|  |                         | Number               |           |
| otal   | 5,137,500               | 1,716,000            | 3,421,500 |
| Received personal help with the following ADL's  |                         | Percent              |           |
| Bathing or showering                             | 36.9                    | 32.3                 | 39.2      |
| ressing  | 33.2                    | 28.8                 | 35.5      |
| ating  | 6.8                     | *8.2                 | *6.0      |
| ransferring in or out of bed or chair            | 25.2                    | 23.4                 | 26.1      |
| sing toilet room                                 | 18.7                    | 18.6                 | 18.8      |
| elp with walking                                 | 25.9                    | 23.7                 | 27.0      |
| Functional status in ADL's                       |                         | Percent distribution |           |
| eceives no help from agency in ADL's             | 55.9                    | 58.6                 | 54.6      |
| eceives help from agency in 1 ADL                | 5.8                     | *8.0                 | 4.7       |
| eceives help from agency in 2 ADL's              | 11.8                    | 10.1                 | 12.6      |
| eceives help from agency in 3 ADL's              | 6.3                     | *5.2                 | 6.9       |
| eceives help from agency in 4 ADL's              | 7.0                     | 4.3                  | 8.4       |
| eceives help from agency in 5 ADL's              | 8.7                     | 0.9                  | 8.8       |
| eceives help from agency in 6 ADL's              | 4.5                     | *5.1                 | 4.1       |
| Received personal help with the following IADL's |                         | Percent              |           |
|  | 00.7                    |                      | 00.4      |
| ping light housework                             | 23.7                    | 18.2                 | 26.4      |
| anaging money                                    |                         | ÷== 0                |           |
| nopping for groceries or clothes                 | 75.2                    | *78.3                | 73.8      |
| sing telephone                                   | *1.5                    | *                    | *         |
| reparing meals                                   | 12.4                    | *11.0                | 13.1      |
| aking medications                                | 16.6                    | 17.9                 | 16.0      |
| Functional status in IADL's                      |                         | Percent distribution |           |
| eceives no help from agency in IADL's            | 67.2                    | 71.7                 | 64.9      |
| eceives help from agency in 1 IADL               | 18.2                    | 14.6                 | 20.0      |
| eceives help from agency in 2 IADL's             | 5.1                     | *5.0                 | 5.2       |
| eceives help from agency in 3 IADL's             | 3.8                     | *2.8                 | 4.3       |
| eceives help from agency in 4 IADL's             | 4.4                     | *                    | *4.1      |
| eceives help from agency in 5 IADL's             | *                       | *                    | *         |
| eceives help from agency in 6 IADL's             | *                       | *                    | *         |
| Continence status                                |                         | Percent              |           |
| ifficulty controlling bowels                     | 9.5                     | 11.6                 | 8.5       |
| ifficulty controlling bladder                    | 20.8                    | 18.0                 | 22.3      |
| ifficulty controlling both bowels and bladder    | 6.7                     | 6.9                  | 6.6       |
| lave an ostomy or an indwelling catheter         | 2.9                     | *4.7                 | *1.9      |
| Received help in caring for this device          | 2.5                     | *4.3                 | *1.6      |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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. <sup>1</sup>Includes a small number of patients with unknown sex.

NOTE: ADL is activities of daily living and IADL is instrumental activities of daily living.

Table 8. Number and percent of elderly home health care discharges 65 years and over who received services during the 30 days prior to discharge: United States, 1995–96

| Service received                | Both<br>sexes <sup>1</sup> | Male      | Female    |
|---------------------------------|----------------------------|-----------|-----------|
|                                 |                            | Number    |           |
| Fotal                           | 5,137,500                  | 1,716,000 | 3,421,500 |
|                                 |                            | Percent   |           |
| Continuous home care            | 3.6                        | *1.6      | 4.7       |
| Counseling                      | *1.6                       | *         | *         |
| Homemaker-household services    | 18.8                       | 19.0      | 18.7      |
| Medications                     | 7.2                        | *6.6      | 7.4       |
| Nental health services          | *                          | *         | *         |
| lursing services                | 87.7                       | 87.5      | 87.8      |
| Nutritional services            | *1.9                       | *         | *2.0      |
| Occupational therapy            | 5.6                        | *4.6      | 6.0       |
| Physical therapy                | 29.7                       | 32.3      | 28.4      |
| Physician services              | 2.5                        | *         | *2.1      |
| Social services                 | 12.3                       | 11.0      | 13.0      |
| Speech therapy and/or audiology | *1.7                       | *         | *         |
| ransportation                   | *                          | *         | *         |
| /olunteers                      | *                          | *         | *         |
| Other services                  | 8.2                        | 11.2      | 6.7       |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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 of over 30 percent.

<sup>1</sup>Excludes a small number of patients with unknown sex.

## Table 9. Number of elderly home health care discharges, average length of service, and percent distribution by length of service, according to sex and standard error: United States, 1995–96

| Length of service                 | Both sexes <sup>1</sup><br>(SE) | Male<br>(SE) | Female<br>(SE) |  |  |
|-----------------------------------|---------------------------------|--------------|----------------|--|--|
|                                   | Number                          |              |                |  |  |
| Total                             | 5,137,500                       | 1,716,000    | 3,421,500      |  |  |
| Average length of service in days | 107 (10.3)                      | 104 (22.5)   | 109 (9.0)      |  |  |
|                                   | Percent distribution            |              |                |  |  |
| 0–14 days                         | 20.2 (2.0)                      | 22.2 (3.5)   | 19.2 (2.3)     |  |  |
| 15–30 days                        | 20.6 (1.7)                      | 24.3 (3.4)   | 18.7 (2.0)     |  |  |
| 31–60 days                        | 28.7 (2.0)                      | 27.0 (3.4)   | 29.6 (2.5)     |  |  |
| 61–90 days                        | 8.6 (1.1)                       | 10.0 (2.1)   | 7.9 (1.5)      |  |  |
| 91–180 days                       | 9.2 (1.1)                       | 7.9 (1.8)    | 9.8 (1.4)      |  |  |
| 181 days and more                 | 12.7 (1.5)                      | 8.7 (1.6)    | 14.8 (1.9)     |  |  |

<sup>1</sup>Excludes a small number of patients with unknown sex.

NOTE: SE is standard error.

## Table 10. Number and percent distribution of home health care discharges 65 years and over by primary admission diagnosis, according to sex: United States, 1995–96

| ICD-9-CM diagnostic category and code <sup>1</sup>                            | Both sexes <sup>2</sup> | Male                 | Female    |
|---|-------------------------|----------------------|-----------|
|   |                         | Number               |           |
| ōtal  | 5,137,500               | 1,716,000            | 3,421,500 |
|   |                         | Percent distribution |           |
| ōtal  | 100.0                   | 100.0                | 100.0     |
| nfectious and parasitic diseases  | *                       | *                    | *         |
| leoplasms   | 8.7                     | 11.3                 | 7.4       |
| Malignant neoplasms   | 8.5                     | 10.6                 | 7.4       |
| Endocrine, nutritional and metabolic diseases, and immunity disorders 240–279 | 7.2                     | *4.8                 | 8.5       |
| Diabetes mellitus   | 5.5                     | *4.2                 | 6.1       |
| Diseases of the blood and blood-forming organs                                | *1.7                    | *                    | *         |
| Diseases of the nervous system and sense organs                               | 3.0                     | *5.1                 | *2.0      |
| Diseases of the circulatory system  | 29.8                    | 24.5                 | 32.4      |
| Essential hypertension 401  | 4.9                     | *                    | 6.6       |
| Heart disease   | 16.4                    | 14.8                 | 17.2      |
| Cerebrovascular disease   | 5.7                     | *5.8                 | 5.7       |
| Diseases of the respiratory system  | 8.9                     | 13.0                 | 6.9       |
| Chronic obstructive pulmonary disease   | 4.5                     | *6.4                 | *3.6      |
| Diseases of the digestive system  | 3.6                     | *                    | *4.3      |
| Diseases of the genitourinary system  | *2.0                    | *                    | *         |
| Diseases of the skin and subcutaneous tissue                                  | 1.8                     | *                    | *0.7      |
| Diseases of the musculoskeletal system and connective tissue                  | 8.2                     | *7.4                 | 8.5       |
| Congenital anomalies  | *                       | *                    | *         |
| Symptoms, signs, and ill-defined conditions                                   | 7.3                     | *11.4                | 5.3       |
| njury and poisonings  | 12.4                    | 8.2                  | 14.6      |
| Supplementary classification and unknown                                      | 4.0                     | *                    | 4.3       |

\*Figure does not meet standard of reliability or precision (sample size is less than 30) and 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. <sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (9).

<sup>2</sup>Excludes a small number of patients with unknown sex.

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