

Discharges From Nursing Homes: Preliminary Data From the 1985 National Nursing Home Survey

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This report presents information on discharged residents of nursing and related-care homes based on preliminary estimates from the 1985 National Nursing Home Survey (NNHS). The 1985 NNHS is the third in an ongoing series of sample surveys designed to provide a variety of data on nursing homes in the conterminous United States and is conducted periodically by the National Center for Health Statistics (NCHS). Previous surveys were conducted in 1973-74 (NCHS, 1977) and 1977 (NCHS, 1979).

The data presented in this report were collected between August 1985 and January 1986 and deal specifically with demographic, health, and other characteristics of persons formally discharged from nursing homes during the 12-month period immediately prior to the survey date. Other reports already published present information on nursing home residents (NCHS, 1987a) and facilities (NCHS, 1987b) based on national estimates from the same survey. Two other reports resulting from the 1985 NNHS will provide information on registered nurses employed at nursing homes and on current and discharged nursing home residents. The latter report will be based on a followup survey of the next of kin of the sample population. A summary report presenting data from all five components of the survey also will be prepared by NCHS. Because data in this report are preliminary, they may differ slightly from those published later after further edits are conducted.

Facilities included in the 1985 NNHS were nursing and related-care homes in the conterminous United States that had three beds or more set up and staffed for use by residents and that routinely provided nursing and personal care services. A facility could be freestanding or could be a nursing care unit of a hospital, retirement center, or similar institution as long as the unit maintained financial and employee records separate from the parent institution. Facilities providing only room and

board were excluded, as were those serving only persons with specific health problems (for example, mental retardation or alcoholism).

The sampling frame for the 1985 NNHS consisted of the following components:

- The 1982 National Master Facility Inventory (NMFI) (NCHS, 1986), a census of nursing and related-care homes conducted by NCHS.
- Homes identified in the 1982 Complement Survey of the NMFI as "missing" from the 1982 NMFI.
- Nursing homes opened for business from 1982 through June 1984 and identified by the NCHS Agency Reporting System (NCHS, 1968).
- Hospital-based nursing homes identified in records of the Health Care Financing Administration.

The resulting frame contained about 20,500 nursing homes, and a sample of 1,220 homes was selected. In this report, the terms "nursing homes" and "nursing and related-care homes" are used interchangeably.

Estimates in this report are based on a sample of 6,023 discharges from the 1,079 nursing homes participating in the survey. A more detailed description of the survey design, data collection methodology, and estimation procedures for the NNHS has been published elsewhere (Shimizu, 1987). A brief discussion of the standard errors associated with these data is presented in the Technical notes to this report. For convenience, this report uses the terms "discharges" and "discharged residents" interchangeably.

Background and type of data

Data in this report were obtained from personal interviews conducted in the sample nursing homes with the employees

deemed most knowledgeable of the medical records of the discharged residents. In most cases the interviewee was either a nurse or medical records person who consulted with the available medical records of the discharged resident during the interview. As was true in the NNHS of previous years, no discharges were consulted personally in this component of the survey. The full sample consisted of six or fewer discharges from each nursing home whose discharge dates fell within the 12 months prior to the survey date.

The 12-month reference period from which the discharged residents' sample was drawn for the 1985 survey ended on the date immediately preceding the survey date. Previous survey reference periods for discharges were the calendar years 1972 and 1976. The reference period of the 1985 survey was changed in an attempt to obtain more current and readily available data and to provide information on the utilization of nursing homes by both residents and discharges over a more closely related period of time. However, data from the 1985 NNHS for the discharged resident population and current resident population differ in several major areas. These differences are discussed in more detail in other NCHS publications (NCHS, 1978). Briefly, while the discharged resident estimates represent all discharges over a 12-month period, the current resident population is estimated for a single night, that immediately prior to the survey date. The discharge sample, therefore, may underestimate those nursing home residents who tend to stay for very lengthy periods, while the current resident population may underestimate those persons with very short durations of stay. While the current resident file provides for what may be considered a "snapshot" of nursing home residents on any given day, the discharged resident file provides for some indication of the over-the-year changes in the nursing home population.

Because the methodology for counting discharged residents from the 1973-74 NNHS differed from that of the 1977 (NCHS, 1981) and 1985 surveys, no comparisons will be made in this report between estimates from the 1973-74 survey and those derived from the 1985 NNHS. The 1973-74 NNHS estimated the total number of discharges from each nursing home in the sample from one question in the facility component of the survey. The 1985 NNHS obtained a complete listing of all discharges from the sample nursing home. Comparisons will be presented of estimates from the 1977 and 1985 discharged resident components of the NNHS where appropriate.

Demographic characteristics, dependency, and duration of stay

The 1985 NNHS found that an estimated 1,223,500 persons were discharged from an estimated 19,100 nursing and related-care homes during the 12 months prior to the survey date. Because the survey was conducted between August 1985 and January 1986, the 12-month reference period could have fallen anywhere beginning August 1984 and ending January 1986. The preliminary 1985 estimate represents about a 9.5-percent increase over the 1,117,500 discharges estimated by the 1977 NNHS. Of the recent total, about 37 percent were men while 63 percent were women, roughly the same as was

found in the 1977 survey (see table 1). In contrast to the discharge population of 8 years earlier, however, the distribution of discharges in the 1985 survey was more heavily weighted with persons aged 85 years and over and by persons more dependent on the nursing home staff in terms of performance of selected activities of daily living.

Although nearly 9 of every 10 discharges in both surveys were aged 65 years and over, the proportion aged 85 years or over rose from 30 to 38 percent between 1976 and 1984-85. Partly as a result of the aging of the discharge population, the proportion of all discharges who were not dependent in either mobility or continence decreased during the 8-year period from 40 to 31 percent while the proportion who were dependent in both of these functions increased from 35 to 45 percent. The proportion of all discharges who were totally bedfast also rose between surveys from about 21 to 35 percent and the proportion who were chairfast remained about 25 percent. Although in both the 1977 and 1985 surveys older discharges tended to be more dependent than were younger discharges (NCHS, 1981), increased dependencies were evident in all major age groups between surveys (see tables 2 and 3).

In the 1977 and 1985 surveys, persons who were discharged at older ages were more likely to have had lengthier durations of stay in the nursing home than persons discharged at younger ages. This was as true for men as it was for women. The median duration of stay for all discharges was 82 days according to the 1985 survey; for persons aged 85 years and over, however, it was 145 days (see table 4). Women discharges, who tend to be older than discharged men (overall median ages, 83 and 79 years, respectively), also had a longer median duration of stay, 93 as compared with 66 days, according to the 1985 survey. Older women, however, also tended to stay longer in nursing homes than older men. At least half of all women over 84 years of age had been confined to the sample nursing home for more than 4 months according to the 1985 survey, while comparable older men had a median duration of stay of a little over 3 months.

Although the estimated overall median durations of stay for all discharges, as well as those for all men and all women in the 1985 survey show observable increases over comparable estimates from the 1977 survey, none of these increases is statistically significant (according to a *Z* test with 0.05 level of significance). Similarly, none of the differences between surveys in the proportional distribution of discharges by similar duration-of-stay categories was significant. Nearly two-thirds of all discharges in either survey had stays of less than 6 months. About 31 percent in the 1985 survey had been discharged within 1 month of their admission, while 32 percent were discharged after stays of 1 month to less than 6 months. The remaining 37 percent of discharges in the 1985 survey had been confined to the nursing home for 6 months or more (see table 4).

Because these data represent durations of stay in a nursing home identified with a single discharge, they tend to underestimate the overall duration of stay for persons who may have had a series of admissions and discharges to the same or multiple nursing homes over one episode or more of illness. Definitions of nursing home stays used in this report coincide with

those used in the 1977 NNHS. The 1985 NNHS also attempted collection of information on multiple stays in nursing homes of the discharged residents with histories of other nursing home stays. These data will be presented in forthcoming publications on the 1985 NNHS.

The 1985 NNHS was the first in the series to obtain race and Hispanic origin information on discharged residents. According to the 1985 survey, about 92.8 percent of all discharged residents were white persons, while only 6.7 percent were black persons. Another half percent were of other racial groups including Asian and Pacific Islander, American Indian, and Alaskan native. About 3 percent of the total were known to have been of Hispanic origin, an ethnicity designation distinct from race (see table 1). These distributions are similar to the distributions by race and Hispanic origin of current nursing home residents in the 1985 survey (NCHS, 1987a). Although differences in overall durations of stay are suggested in the median estimates of white and black discharged residents, these differences are not statistically significant at the 0.05 level of significance. Similarly, no statistically significant difference exists between the median duration of stay of Hispanic persons and that for all discharges in the 1985 survey. Discharged residents of Hispanic origin, however, had a male-to-female ratio nearly the reverse of that of the overall discharged population, 66 to 34 percent.

The distribution of discharged residents by marital status did not change appreciably between the 1977 and 1985 surveys. It appears, however, that factors associated with a person being married at the time of discharge impact favorably on shorter durations of stay in a nursing home. Other studies have also found that the availability of a spouse as home caregiver is one factor in decreasing the likelihood of admission to a nursing home (for example, Butler and Newacheck, 1981), and previous NNHS's have found similar favorable impacts on short durations of stay for nursing home discharges.

Widowed persons constituted the majority of all discharges, 55 percent in the 1985 survey. Their median duration of stay was 107 days (see table 4). By contrast, the median duration of stay of married discharges, who constituted the next largest marital group, 22 percent, was only 41 days. Discharges who were never married, however, as well as divorced or separated discharges also had relatively lengthy median stays (see table 4).

Not surprisingly, widowed discharged residents, noted above as having relatively long stays, were also the oldest of the marital groups, with an overall median age of 85 years. However, married discharged residents, who as a group had relatively short durations of stay, had an older median age, 78 years, than discharges who were divorced or separated, 70 years.

The effects of age do appear to explain many of the differences in the abilities of discharged residents to perform selected activities of daily living during their final week in the nursing home. While about 40 percent of persons who were aged 65–74 years at discharge had been dependent in both mobility and continence, about half of all discharges older than 84 years were dependent in both categories. In terms of specific dependencies, about one-third of discharges between ages 65 and 84 years were bedfast in their last week in the nursing

home, while about 4 in 10 aged 85 years or over were bedfast (see table 2).

Bladder and bowel incontinence was also related to age at discharge. About half of all discharges aged 75–84 years were incontinent of bladder in their last 7 days in the nursing home. Among persons aged 85 years and over, this proportion rises to about 59 percent. Similarly, while about 39 percent of discharges aged 65–74 years were incontinent of bowel in their last week in the nursing home, the comparable proportion rises to 52 percent for persons aged 85 years or over. As might be expected, median duration of stay was longer for discharges who were dependent in both continence and mobility, 108 days, than for those not dependent in either of these daily activities, 64 days.

Differences in functional statuses in selected activities of daily living for discharges in the 1977 and 1985 NNHS are summarized in table 3. As is noted above, discharges in the 1985 survey were generally less mobile and more likely to have been incontinent of bowel, bladder, or both in their last 7 days in the nursing home than were discharges in the 1977 survey. These general increases in dependencies are partially a function of the increased proportion of discharges aged 85 years and over, who as a group are more dependent in these activities than are younger discharges. However, there were also increases in the proportions of discharges who were dependent in both mobility and continence among those under 65 years, 65–74 years, and 75–84 years, as well as those aged 85 years and over (see table 3).

Living arrangements before admission and after discharge

The 1985 NNHS collected information on the living arrangements of all discharged residents for the periods immediately prior to admission and, for live discharges, immediately after discharge. The 1977 survey obtained comparable data only for the living arrangements after discharge. Information on both prestay and poststay living arrangements of discharged nursing home residents provides for a more comprehensive understanding from a wider perspective of the population that utilizes nursing homes.

A minority, about 28 percent of all discharged residents, had been admitted to the nursing home from a private or semi-private residence (see table 5). Slightly over half of these discharged residents had been living with family members at the time of their admission.

About 69 percent of all nursing home discharges had been admitted directly from another health facility, with 8 of every 10 of them representing transfers from general or short-stay hospitals. A slightly higher proportion of female discharges had been admitted from general or short-stay hospitals than had men, 57 versus 51 percent. However, another 7 percent of the male discharges had been admitted directly from a veterans hospital. About 1 in every 10 discharges who had been admitted from another health facility came from another nursing home. The proportions were about the same for both men and women.

The median duration of stay in the sample nursing home was far longer for those discharges who had been admitted from a private or semiprivate residence, 118 days, than for those admitted from a hospital, 57 days. This was partially due to the differences in ages of those in either group. Among those discharges admitted from a residence, about 42 percent were over age 84 years at their discharges. About 37 percent of those admitted from a hospital were aged 85 years or over.

Discharges who had originally been admitted from another nursing home also tended to have long durations of stay. According to the 1985 survey, their median duration of stay was 263 days. The proportion of those discharges over 84 was comparable to that of persons admitted from private or semiprivate residences, 43 percent.

The proportion of live discharges going to private or semiprivate residences immediately following their nursing home stay decreased between the 1977 and 1985 surveys from 37 to 30 percent (see table 6). As a corollary, the proportion of live discharges who were discharged to another health facility increased from 59 to 68 percent. The latter was almost entirely the result of an increase in the proportion of live discharges going to general or short-stay hospitals, from 41 to 49 percent. (Unknown living arrangements following discharge remained about 2–4 percent of the total.)

The increase in live discharges to hospitals, although partially a result of the increased proportion of older persons among all discharged residents, is not fully explained by this shift in demographics. While the proportion of discharges aged 85 years or over going directly to hospitals is slightly larger than is the comparable proportion for discharges aged 65–84 years in both the 1977 and 1985 surveys, the increase in either proportion between surveys is greater among the younger age group. Among live discharges aged 85 years or over, the proportion discharged to hospitals did not rise significantly between the 1977 and 1985 surveys. In 1977 it was 52 percent and in 1985 it was 54 percent. Among live discharges aged 65–84 years old, however, the proportion discharged directly to hospitals increased from 39 to 50 percent over the same period.

The median duration of stay was longer for those persons discharged to another health facility, 113 days, than for those discharged to a private or semiprivate residence, 36 days. Among the former, those who were discharged to a general or short-stay hospital had a median duration of stay of 130 days. In contrast, among those discharged to a private or semiprivate residence, those who went to live with family members had a median duration of stay of 34 days.

Primary source of payment at admission and discharge

For the first time, the 1985 NNHS collected information on the primary sources of payment for all discharges for the month in which they were admitted to the sample nursing home as well as for the month in which they were discharged. The 1977 NNHS obtained primary source of payment data only for the month of discharge from the nursing home. As might be expected, primary payment sources often differed depending

on whether the payment was for the admission or the discharge month. These differences generally are greater the longer the duration of stay. When observation is made of the total discharge population as a whole, much less shifting among various payment sources is evident, partially due to the large proportion of persons with relatively short durations of stay. However, patterns are evident in shifts of primary payment sources, especially among discharges who shift to medicaid at some time during their stay.

For the month of admission, own income or family support was the primary source of payment for the largest proportion of discharges regardless of their eventual durations of stay. About 4 of every 10 discharges relied primarily on this source to pay for nursing home care in the month of admission, a ratio that was the same whether the completed stay was of short, medium, or lengthy duration (see table 7). The median duration of stay for persons whose primary source of payment for their admission month was own income or family support, 77 days, was similar to that of the overall discharge population. Their distribution by duration of stay was also similar to that for all discharges.

According to the 1985 surveys, the proportion of all discharges who relied on medicaid as the primary payment source in their month of admission totaled about 35 percent. Medicaid coverage for nursing home care is divided into two categories, skilled and intermediate, depending on the certification status of the nursing home. While about 15.5 percent of all discharges relied on medicaid skilled funds in their admission month, another 19.6 percent relied on medicaid intermediate care funds. Unlike the proportion of discharges relying on own income to pay for care in their admission month, the proportion of discharges relying primarily on medicaid differed by the eventual durations of stay. Discharges whose completed stays were relatively lengthy were more likely to have relied on a type of medicaid in their admission month than were those whose stays were relatively short (see table 7).

For example, while 12 percent of all discharges whose stays were less than 1 month in duration relied primarily on medicaid skilled care funds to pay for their nursing home care, 19 percent of those whose stays were 6 months or longer relied primarily on this source in their admission months. Comparable proportions for discharges who relied on medicaid intermediate care funds were 11 percent among those whose stays were less than 1 month and 27 percent for those whose completed stays were 6 months or more.

The median durations of stay of discharges who relied on either medicaid skilled or medicaid intermediate funds to pay for nursing home care in their admission months were 145 and 187 days, respectively, each of which is significantly above the median for the discharge population as a whole.

Medicare accounted for a smaller proportion of all discharges' primary sources of payment in their admission months than either their own income or family support, or the combined total of medicaid. Medicare, however, varied quite widely as a primary admission month payment source according to eventual completed duration of stay. Unlike similar differences outlined above for those relying on medicaid, the proportion of all discharges relying on medicare as their primary source of

payment in their admission month was greater among discharges with relatively short durations of stay and smaller for those with longer completed stays. About 18 percent of all discharges relied primarily on medicare for payment for nursing home care in their admission months. But, while the proportion was 30 percent among discharges whose stays were less than 1 month, for discharges whose completed stays were 6 months or more, only 6 percent had relied primarily on medicare in their admission month. The median duration of stay was 29 days for all discharges whose primary source of payment in the month of admission was medicare, significantly below the median for all discharges.

All other sources of payment, including other government assistance or welfare, religious organizations, volunteer agencies, Veterans Administration contracts, initial payment-for-life care funds, and others accounted for about 5 percent of all discharges' primary sources of payment for month of admission. This proportion did not vary significantly by completed duration of stay. Discharges relying on these other sources, however, tended to be younger than those whose primary payment sources were medicare, medicaid, or own income. Only about 22 percent were over age 84 years at their discharges, which is significantly below the comparable proportion for all discharges.

For the month of discharge, own income or family support was also the primary source of payment for about 4 of every 10 discharges. Although some variability exists in this ratio by duration of stay, as many as 38 percent of all discharges whose stays were 6 months or more relied primarily on this source for payment of nursing home care in their discharge month as opposed to 45 percent among discharges whose stays were 1 month to less than 6 months in length.

Medicaid, skilled and intermediate care funds combined, accounted for another 40 percent of all discharges' primary payment sources in their discharge months. The overall proportion who relied primarily on medicaid, however, was larger for those with longer stays than for those with relatively short stays. For example, while a total of 22 percent of discharges with stays of less than 1 month relied on some form of medicaid as their primary payment source, among discharges whose stays were 6 months or longer, a total of 56 percent relied on medicaid in their discharge months. About 25 percent of those who stayed 6 months or longer relied on medicaid skilled care funds, and another 31 percent relied on medicaid intermediate care funds as the primary payment sources in their discharge months.

The proportion of discharges who relied on medicare as the primary payment source in their discharge month is a reflection of the limitations of coverage for nursing home care imposed by this Federal health care program. Medicare is limited to the first 100 days of nursing home care for residents who had been admitted directly from a general, short-stay hospital. The resident must also require specific medical assistance according to criteria established by the Federal Health Care Financing Administration (Health Care Financing Administration, 1986). Reliance on medicare as the primary source of payment for the discharge month, therefore, is restricted to discharges with relatively short durations of stay.

Among all discharges, about 12 percent used medicare as their primary source of payment in their discharge months. Among those whose stays were less than 1 month, however, about 29 percent relied primarily on medicare, as opposed to about 9 percent with stays of from 1 month to less than 6 months in length.

Changes in primary sources of payment between admission and discharge months are summarized in table 8 for all discharges with a duration of stay of 1 month or more. The percent distributions show that except for those entering with medicare as their primary payment source, more than 8 of every 10 discharges relied on the same primary source of payment in their discharge month as they had utilized in their admission month. For example, among persons using primarily their own income or family support in their admission month, 85 percent relied primarily on this source also in their discharge month. The comparable proportion for medicaid (skilled and intermediate combined) is about 90 percent, while about 87 percent who primarily used other sources in their admission month also relied on those other sources in their discharge month.

Among all persons with durations of stay of 1 month or more who utilized medicare as their primary payment source in their admission month, however, only about 37 percent relied primarily on medicare in their discharge month as well. This was largely the result of the 100-day limitation for medicare coverage of nursing home care. About 32 percent of discharges who used primarily medicare in their admission month shifted to their own income or family support as primary payment source in their discharge month, while another 28 percent shifted to some form of medicaid.

As noted above, while the overall proportion of discharges relying primarily on medicare decreased between admission and discharge months, the proportion using some form of medicaid rose. Shifts to medicaid as the primary source of payment varied by both duration of stay and primary payment source in admission month (see table 9). About 11 percent of persons who entered with other than medicaid as their primary payment source shifted to medicaid by the month of their discharge. The proportions of discharges shifting in this manner varied from 10 percent for those with stays of 1 month to less than 6 months to about 22 percent for those with stays of 6 months or more in duration.

Persons entering with medicare as the primary payment source in their admission month were more likely to shift to medicaid than persons entering with own income or family support. This was especially true for discharges whose durations of stay were beyond the 100-day limit imposed by the medicare program. About 10 percent of discharges who had used their own income in their admission month shifted to medicaid by their discharge month, while 15 percent of those relying primarily on medicare in the admission month converted to medicaid. About 8 percent of persons who entered using primarily their own income or family support and had stays of from 1 month to less than 6 months shifted to medicaid, as opposed to 19 percent of those with equal durations of stay who relied primarily on medicare in their admission month. Among discharges entering with medicare whose durations of

stay were 6 months or longer, 52 percent shifted to some form of medicaid by their discharge months.

It is not possible from the discharged resident data to pinpoint, however, when during a discharged resident's stay a shift from one payment source to another may have occurred. Differences in primary sources of payment in admission and discharge months are indicative only of a change between two points in time. While a pattern is suggested in the differential proportions of discharges shifting from one primary payment source to another, especially for discharges shifting to medicaid, it is not discernible from the data when these shifts occurred. Although the disaggregation of discharges who shift to medicaid by various duration of stay categories provides some evidence of a "spend down" to medicaid, more detailed data are required to determine when during a resident's stay this shift actually occurs and, for those with multiple stays, in which stay it occurred. Data on the latter issue are available from the next-of-kin component of the survey. Data from the next-of-kin component of the 1985 NNHS will be published in a forthcoming report from NCHS.

Summary and highlights of data

The 1.22 million nursing home discharges in the 1985 NNHS represent about a 9.5-percent increase from the 1977

survey. Dependencies in both mobility and continence were more prevalent among all age groups in the most recent survey while there was also an increase of from about 30 to 38 percent in the proportion of discharges aged 85 years and over. While the overall median duration of stay, as well as those of men and women, showed observed increases between the 1977 and 1985 surveys, none of these increases is statistically significant. The rise from 41 to 49 percent in the proportion of live discharges going to a hospital, however, is statistically significant. The increase is largely the result of increased hospitalization of live nursing home discharges aged 65 to 84 years, although the proportion of discharges to a hospital remains larger among those aged 85 years and over.

About 4 of every 10 discharges used own income or family support as primary payment source in both admission and discharge months. The proportion using medicaid, however, generally rose with duration of stay, while only discharges with relatively short stays relied primarily on medicare, due to the limitations on coverage for nursing home care by the medicare program.

More detailed information from the 1985 NNHS, especially on sources of payment, diagnoses at admission and discharge, and duration of stay by admission and discharge characteristics, will be forthcoming in subsequent publications from NCHS.

Symbols

- - - Data not available
 - . . . Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standard of reliability or precision (more than 30 percent relative standard error)
 - # Figure suppressed to comply with confidentiality requirements
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Table 1. Number and percent distribution of nursing home discharges by selected characteristics: United States, 1984-85 and 1976

Characteristic	1984-85 discharges		1976 discharges	
	Number ^{1,2}	Percent distribution	Number ^{1,2}	Percent distribution
Discharge status				
All discharges	1,223,500	² 100.0	1,117,500	² 100.0
Live discharges	877,400	71.7	825,500	73.9
Dead discharges	343,800	28.1	289,800	25.9
Sex				
Male	455,500	37.2	407,700	36.5
Female	768,000	62.8	709,800	63.5
Age at discharge				
Under 65 years	129,400	10.6	136,200	12.1
Under 45 years	33,400	2.7	33,900	3.0
45-54 years	29,200	2.4	33,500	3.0
55-64 years	66,800	5.5	68,800	6.2
65 years and over	1,094,100	89.4	981,300	87.8
65-69 years	63,500	5.2	81,300	7.3
70-74 years	119,400	9.8	122,300	10.9
75-79 years	196,500	16.1	204,600	18.3
80-84 years	255,700	20.9	241,200	21.6
85-89 years	233,900	19.1	210,100	18.8
90-94 years	155,900	12.7	90,500	8.1
95 years and over	69,200	5.7	31,100	2.8
Marital status at discharge				
Married	273,200	22.3	255,900	22.9
Widowed	669,200	54.7	628,400	56.2
Divorced or separated	84,800	6.9	75,200	6.7
Never married	151,800	12.4	127,200	11.4
Unknown	44,600	3.6	30,800	2.8
Race				
White	1,135,900	92.8	---	---
Black	82,000	6.7	---	---
Other	5,600	0.5	---	---
Hispanic origin				
Hispanic	35,500	2.9	---	---
Non-Hispanic	1,130,700	92.4	---	---
Unknown	57,400	4.7	---	---

¹Figures may not add to totals due to rounding.

²Total includes small number of unknowns.

Table 2. Number of nursing home discharges by sex and age at discharge, and percent distribution by type of dependency during last 7 days in nursing home, according to sex and age at discharge: United States, 1984-85

Sex and age	Discharges	Type of dependency				
		Total	Bedfast	Chairfast	Incontinent of bladder	Incontinent of bowel
Sex		Percent distribution				
Both sexes	Number					
Male	1,223,500	100.0	34.8	25.4	52.8	45.2
Female	455,500	100.0	33.2	26.9	54.8	46.3
	768,000	100.0	35.8	24.6	51.6	44.6
Age at discharge						
Under 65 years	129,400	100.0	23.9	22.6	40.4	30.2
65 years and over	1,094,100	100.0	36.1	25.8	54.2	47.0
65-74 years	182,900	100.0	32.8	24.5	45.5	39.1
75-84 years	452,300	100.0	32.9	27.7	52.8	44.7
85 years and over	458,900	100.0	40.6	24.3	59.1	52.4

Table 3. Number and percent distribution of nursing home discharges by partial index of dependency, according to age at discharge: United States, 1984-85 and 1976

Age	Discharges in 1984-85						Discharges in 1976						
	Total	Partial index of dependency					Total	Partial index of dependency					
		Total	Not dependent in mobility or continence	Dependent in mobility only	Dependent in continence only	Dependent in mobility and continence		Total	Total	Not dependent in mobility or continence	Dependent in mobility only	Dependent in continence only	Dependent in mobility and continence
			Percent distribution							Percent distribution			
All discharges	1,223,500	100.0	31.0	14.8	8.8	45.4	1,117,500	100.0	40.1	12.6	12.7	34.5	
Under 65 years	129,400	100.0	44.9	13.6	8.5	33.0	136,300	100.0	52.4	13.5	9.7	24.3	
65 years and over	1,094,100	100.0	29.3	15.0	8.8	46.9	981,200	100.0	38.4	12.5	13.1	35.9	
65-74 years	182,900	100.0	35.5	17.2	7.2	40.1	203,600	100.0	43.2	11.6	13.5	31.7	
75-84 years	452,300	100.0	30.3	15.7	9.2	44.9	445,800	100.0	40.9	12.7	13.5	32.9	
85 years and over	458,900	100.0	25.9	13.5	9.1	51.5	331,800	100.0	32.3	12.8	12.3	42.6	

Table 4. Percent distribution of nursing home discharges by duration of stay, according to selected demographic characteristics, with median duration of stay: United States, 1984-85

Characteristic	Duration of stay								Median duration of stay
	Total	Less than 1 month	1 month to less than 3 months	3 months to less than 6 months	6 months to less than 12 months	1 year to less than 3 years	3 years to less than 5 years	5 years or more	
Discharge status									
All discharges	100.0	31.0	20.6	11.2	11.2	15.1	5.2	5.7	82
Live discharges	100.0	32.3	23.1	12.2	11.2	13.9	3.8	3.6	70
Dead discharges	100.0	27.8	14.3	8.7	11.1	18.4	8.6	11.1	163
Sex									
Male	100.0	35.7	20.1	11.3	11.8	13.3	3.8	3.9	66
Female	100.0	28.2	20.9	11.1	10.9	16.2	6.0	6.8	93
Age at discharge									
Under 65 years	100.0	33.2	24.3	12.2	10.6	13.0	3.5	3.1	70
65 years and over	100.0	30.7	20.2	11.0	11.3	15.4	5.4	6.0	84
65-74 years	100.0	34.9	22.8	11.8	10.8	13.8	2.5	3.4	56
75-84 years	100.0	34.7	21.6	11.5	11.6	13.6	3.8	3.3	66
85 years and over	100.0	25.1	17.8	10.3	11.2	17.8	8.0	9.7	145
85-94 years	100.0	26.6	17.7	10.0	11.9	17.8	7.5	8.6	136
95 years and over	100.0	16.7	18.2	12.1	7.6	18.4	10.8	16.1	297
Marital status at discharge									
Married	100.0	44.1	21.3	9.3	10.5	10.5	2.3	2.0	41
Widowed	100.0	27.3	20.0	11.5	11.2	16.7	6.5	6.7	107
Divorced or separated	100.0	28.6	20.6	13.5	12.1	14.8	4.2	6.3	90
Never married	100.0	24.9	23.5	11.0	11.1	17.2	4.7	7.6	101
Unknown	100.0	31.2	15.6	13.2	14.6	13.2	*	*	125
Race									
White	100.0	31.1	20.6	11.0	11.1	15.1	5.2	5.8	82
Black	100.0	29.2	19.8	14.4	13.1	14.9	4.2	*	101
Other	100.0	*	*	---	*	*	*	*	44
Hispanic origin									
Hispanic	100.0	30.1	16.4	14.7	7.1	23.0	*4.9	*3.8	113
Non-Hispanic	100.0	30.7	20.9	11.3	*11.2	15.0	5.2	5.7	83
Unknown	100.0	37.4	18.4	*6.7	14.3	12.9	*4.2	*6.1	71

Table 5. Number of nursing home discharges and number and percent distribution of live discharges, by destination and living arrangement prior to admission: United States, 1984-85

<i>Living arrangement prior to admission</i>	<i>Live discharges</i>				
	<i>All discharges</i>	<i>Total</i>	<i>Destination</i>		
			<i>Total¹</i>	<i>Private or semiprivate residence</i>	<i>Other health facility</i>
	<i>Number</i>		<i>Percent distribution</i>		
All discharges	1,223,500	877,400	100.0	30.4	67.5
Private or semiprivate residence	340,700	238,100	100.0	40.5	58.1
Alone	110,200	77,500	100.0	38.1	60.1
With family members	185,100	128,400	100.0	41.8	57.3
With nonfamily members	23,300	16,300	100.0	46.4	51.9
Unknown if with others	22,100	16,000	100.0	35.4	61.4
Another health facility	848,700	616,400	100.0	27.0	70.8
Another nursing home	82,500	52,400	100.0	12.5	84.5
General or short-stay hospital, except psychiatric unit	674,300	489,200	100.0	30.0	68.6
Veterans hospital	33,000	26,800	100.0	18.9	75.4
Other health facility or unknown type	59,100	48,200	100.0	17.5	75.4
Unknown or other	34,100	22,800	100.0	15.2	74.9

¹Total includes small percent of unknown destinations.**Table 6. Number and percent distribution of live discharges by living arrangement after discharge, according to year of discharges: United States, 1984-85 and 1976**

<i>Living arrangement after discharge</i>	<i>Discharges in 1984-85</i>		<i>Discharges in 1976</i>	
	<i>Number</i>	<i>Percent distribution</i>	<i>Number</i>	<i>Percent distribution</i>
All live discharges	877,000	100.0	825,500	100.0
Private or semiprivate residence	266,400	30.4	306,700	37.2
Another health facility	591,500	67.5	484,200	58.7
Another nursing home	98,000	11.2	108,600	13.2
General or short-stay hospital, except psychiatric unit	430,200	49.1	339,500	41.1
Veterans hospital	20,800	2.4	- - -	- - -
Other health facility or unknown type	42,600	4.9	36,000	4.4
Unknown or other	19,000	2.2	34,700	4.2

Table 7. Number of all nursing home discharges by duration of stay and percent distribution by primary source of payment for admission and discharge months, according to duration of stay with median duration of stay and percent of persons ages 85 years and over: United States, 1984-85

Primary source of payment	Duration of stay				Median duration of stay	Persons ages 85 years and over
	All stays	Less than 1 month	1 month to less than 6 months	6 months or more		
All discharges	1,233,500	379,000	388,900	455,600	82	37.5
Primary source of payment for admission month	Percent distribution				Days	Percent
All sources	100.0	100.0	100.0	100.0	82	37.5
Own income or family support	41.9	42.5	40.9	42.3	77	42.9
Medicare	17.6	29.8	18.9	6.4	29	33.2
Medicaid						
Skilled	15.5	11.5	15.3	19.0	145	35.2
Intermediate	19.6	10.6	19.7	27.0	187	35.8
All other sources	5.4	5.6	5.2	5.4	104	22.3
Primary source of payment for discharge month						
All sources	100.0	100.0	100.0	100.0	82	37.5
Own income or family support	41.8	43.4	45.1	37.6	67	41.4
Medicare	12.1	28.5	8.8	*	19	30.4
Medicaid						
Skilled	18.9	12.2	18.0	25.2	178	39.2
Intermediate	21.3	9.9	21.2	30.9	220	37.1
All other sources	6.0	6.1	6.9	5.1	83	21.0

Table 8. Number and percent distribution of nursing home discharges with 1 or more months' duration of stay by primary source of payment for discharge month, according to primary source of payment for admission month: United States, 1984-85

Primary source of payment for admission month	All discharges	Discharges with 1 or more months' duration of stay	Primary source of payment for discharge month					
			All sources	Own income or family support	Medicare	Medicaid Skilled Intermediate	All other sources	
	Number		Percent distribution					
All sources	1,223,500	844,500	100.0	41.1	4.7	21.9	26.4	5.9
Own income or family support	512,600	351,500	100.0	84.8	*	5.9	7.9	*
Medicare	215,500	102,500	100.0	32.0	36.9	21.5	6.4	*
Medicaid								
Skilled	163,700	145,800	100.0	3.3	*	89.7	4.6	*
Intermediate	220,100	199,700	100.0	4.3	*	4.8	90.5	*
All other sources	54,900	45,100	100.0	*	*	*	*	86.6

Table 9. Number of nursing home discharges and percent shifting to medicaid by nonmedicaid primary source of payment for admission month, duration of stay, and source of payment with median duration of stay: United States, 1984–85

Source of payment	Nonmedicaid primary source in admission month		Duration of stay						Median duration of stay
			Less than 1 month ¹		1 month to less than 6 months		6 months or more		
	Number	Percent shifting to medicaid	Number	Percent shifting to medicaid	Number	Percent shifting to medicaid	Number	Percent shifting to medicaid	Days
All sources except medicaid ²	794,500	10.9	295,400	2.1	252,900	10.3	246,200	22.1	56
Own income or family support . . .	512,600	9.7	161,200	*	159,000	7.6	192,500	18.9	77
Medicare	215,500	15.3	112,900	3.9	73,600	18.5	29,000	51.9	29

¹Shifts may occur in stays of less than 1 month where admission and discharge are in different calendar months.

²Includes other sources not shown separately.

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Technical notes

Because the statistics presented in this report are based on a sample, they will differ somewhat from figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and procedures. The standard error is primarily a measure of the variability that occurs by chance because only a sample, rather than the entire universe, is surveyed. The standard error also reflects part of the measurement error, but it does not measure any systematic biases in the data. The chances are 95 out of 100 that an estimate from the sample differs from the value that would be obtained from a complete census by less than twice the standard error.

The standard errors used in this report were approximated using the balanced repeated-replication procedure. This method yields overall variability through observation of variability among random subsamples of the total sample. A description of the development and evaluation of the replication technique for error estimation has been published (NCHS, 1966, 1969).

Although exact standard error estimates were used in tests of significance, it is impractical to present exact standard error estimates for all statistics used in this report. Thus, a generalized variance function was produced for aggregated discharge estimates by fitting the data presented in this report into a curve using the empirically determined relationship between the size of an estimate X and its relative variance (rel var X). This relationship is expressed as

$$\begin{aligned} \text{rel var } X &= \frac{S_x^2}{X^2} \\ &= a + \frac{b}{X} \end{aligned}$$

NOTE: A list of references follows the text.

Table I. Standard errors of percents for discharges

Base of percent (discharges)	Estimated percent					
	1 or 99	5 or 95	10 or 90	20 or 80	40 or 60	50
	Standard errors in percentage points					
5,000	2.87	6.29	8.66	11.55	14.15	14.44
10,000	2.03	4.45	6.13	8.17	10.00	10.21
30,000	1.17	2.57	3.54	4.72	5.78	5.90
50,000	0.91	1.99	2.74	3.65	4.47	4.57
100,000	0.64	1.41	1.94	2.58	3.16	3.23
200,000	0.45	1.00	1.37	1.83	2.24	2.28
400,000	0.32	0.70	0.87	1.29	1.58	1.61
800,000	0.23	0.50	0.68	0.91	1.12	1.14
1,000,000	0.20	0.45	0.61	0.82	1.00	1.02
1,223,500	0.18	0.40	0.55	0.74	0.90	0.92

where a and b are regression estimates determined by an iterative procedure. Preliminary estimates of standard errors for the percents of the estimated number of discharges are presented in table I.

Preliminary estimates of relative standard errors are presented in figure I for estimated numbers of discharges. The formula for obtaining these standard error estimates is

$$RSE(N) = \sqrt{0.000797 + \frac{417.045}{N}} \times 100.0$$

where RSE is the relative standard error in percent and N is the estimated number of discharges.

The Z -test with a 0.05 level of significance was used to test all comparisons mentioned in this report. Not all observed differences were tested, so lack of comment in the text does not mean that the difference was not statistically significant.

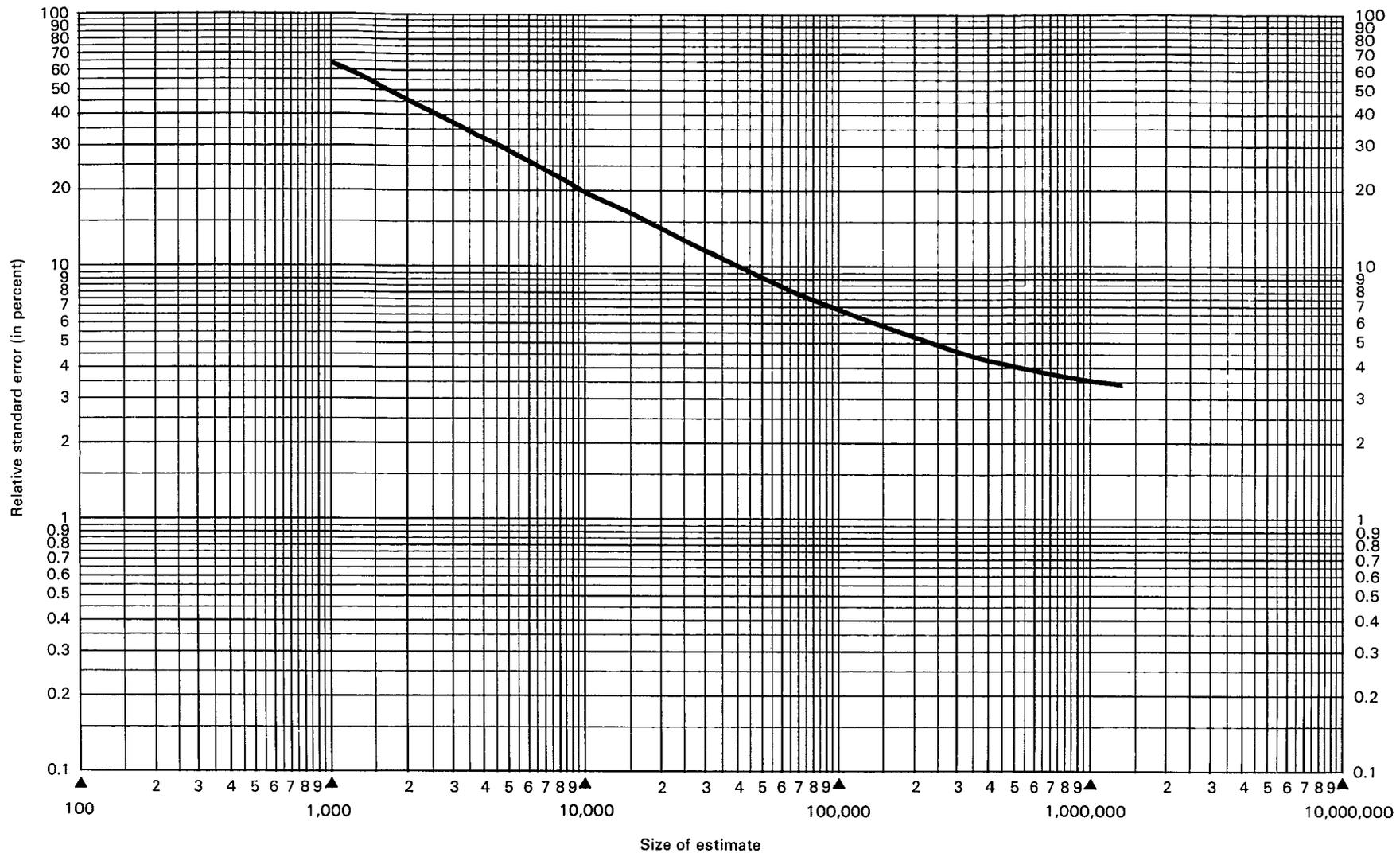


Figure 1. Provisional relative standard errors for estimated number of discharges: United States, 1984-85

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