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# Vital and Health Statistics

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## National Hospital Discharge Survey: Annual Summary, 1987

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No. 99

This report presents statistics on the utilization of non-Federal short-stay hospitals based on data collected through the National Hospital Discharge Survey from a national sample of the hospital records of discharged inpatients. Estimates are provided by the demographic characteristics of patients discharged, conditions diagnosed, and surgical and nonsurgical procedures performed, and by geographic region, bed size, and ownership of hospitals that provided inpatient care. Measurements of hospital utilization are given by frequency, rate, percent, and average length of stay.

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**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
  - # Figure suppressed to comply with confidentiality requirements
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# National Hospital Discharge Survey

by Edmund J. Graves, Division of Health Care Statistics

## Introduction

This report provides national estimates on the utilization of non-Federal short-stay hospitals during 1987. Data are summarized for selected demographic characteristics of the patients discharged, characteristics of the hospitals where the patients were treated, conditions diagnosed, and surgical and nonsurgical procedures performed.

The statistics in this report are based on data collected by the National Center for Health Statistics (NCHS) by means of the National Hospital Discharge Survey (NHDS), which is a continuous voluntary survey in use since 1965. The data for the survey come from a sample of inpatient medical records that are obtained from a national sample of short-stay general and specialty hospitals located in the United States.

These 1987 statistics are based on two data collection procedures, an approach begun in 1985. The first is the traditional manual system of sample selection and data abstraction, and the second is an automated method that involves the purchase of data tapes from commercial abstracting services. In 1987, the automated method was used in 17 percent of the hospitals. Analysis of the automated system indicates that a greater number of nonsurgical procedures per patient are reported by hospitals using this system than by hospitals submitting data in the traditional mode. This has resulted in increases from 1984 through 1987 in the estimate for miscellaneous diagnostic and therapeutic procedures. It appears that approximately one-half of the increase in that category was because of the change in data collection methodology.

Approximately 181,000 medical records from 400 hospitals were included in the 1987 survey. A brief description of the sample design and the source of data can be found in appendix I. A detailed report on the design of NHDS was first published in 1970 (NCHS, 1977).

Types of hospital utilization measurements shown are frequencies, rates, and percent distributions of discharges, days of care, and average lengths of stay. The estimates are presented by age, sex, and race of the patients discharged and by expected source of payment, geographic region, bed size, and ownership of the short-stay hospitals (tables 1-6). Statistics on women with deliveries (tables 7-8), conditions diagnosed (tables 9-14), and procedures performed (tables 15-22) also are shown by patient and hospital characteris-

tics. Data for newborn infants are included only in the section "Newborn infant discharges." Because these data are based on a sample, they may not agree with data on births published in *Vital Statistics of the United States*.

Coding of medical data for patients hospitalized is performed according to the *International Classification of Diseases, 9th Revision, Clinical Modification*, or ICD-9-CM (Public Health Service and Health Care Financing Administration, 1980). Earlier data for 1970-78 were coded according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*, or ICDA (NCHS, 1967a). Differences between these two systems are discussed in appendix I in the section entitled "Medical coding and edit."

A maximum of seven diagnoses and four procedures may be coded for each medical record in the sample. Although diagnoses included in the ICD-9-CM section entitled "Supplementary classification of external causes of injury and poisoning" (codes E800-E999) are used by NHDS, they are excluded from this report. The conditions diagnosed and procedures performed are presented here by the major diagnostic chapters and procedure groups of the ICD-9-CM. Within these chapters and groups, some categories of diagnoses and procedures also are shown. These specific categories were selected primarily because of large frequencies or because they are of special interest. Residual categories of diagnoses and procedures, however, are not included in the tables. More detailed analyses of these data will be presented in later reports in Series 13 of the *Vital and Health Statistics* reports.

Familiarity with the definitions used in NHDS is important for interpreting the data and for making comparisons with statistical data on short-stay hospital utilization that are available from other sources. Definitions of the terms used in this report are presented in appendix II.

Information on short-stay hospital utilization also is collected through another program of the National Center for Health Statistics, the National Health Interview Survey. Estimates from this survey generally are different from those of NHDS because of differences in collection procedures, population sampled, and definitions. Data from the National Health Interview Survey are published in Series 10 of the *Vital and Health Statistics* reports.

# Highlights

- During 1987 an estimated 33.4 million patients, excluding newborn infants, were discharged from non-Federal short-stay hospitals, and an estimated 214.9 million days of care were used.
- The average length of stay for patients discharged from non-Federal short-stay hospitals was 6.4 days in 1987. The average length of stay has declined from 7.3 days in 1980—a decline of about 12 percent.
- The 1987 discharge rate was 138 per 1,000 population. This was the first time in the history of the survey that the discharge rate has fallen below 140 per 1,000.
- About 44 percent of all patients discharged during 1987 expected private insurance to pay for at least part of their hospitalization.
- Deliveries constituted the leading cause of hospitalization during 1987. Of the 33.4 million discharges during 1987, 3.9 million (or 12 percent) were for females with deliveries.
- Six procedures were each performed during 1987 more than 1 million times: procedures to assist delivery (2.9 million); computerized axial tomography, or CAT scan (1.6 million); diagnostic ultrasound (1.6 million); endoscopy of the digestive system (1.6 million); and arteriography and angiocardiology using contrast material (1.4 million); and biopsy (1.4 million).
- In 1987 approximately 17 percent of all patients who were hospitalized had a principal diagnosis of heart disease or malignant neoplasms, but about 44 percent of all deaths that occurred in short-stay hospitals were the result of these two diseases.
- The number of patients discharged from short-stay non-Federal hospitals for the first-listed diagnosis of cataract decreased from 481,000 in 1984 to 104,000 in 1986 and 63,000 in 1987—a drop of 78 and 87 percent, respectively.
- Approximately 62 percent of all patients discharged from short-stay non-Federal hospitals during 1987 had at least one procedure performed. In 1979 only 51 percent had at least one procedure performed.
- Of the 33.4 million patients discharged from non-Federal short-stay hospitals during 1987, 2.8 percent were known to have been discharged dead.

# Utilization by patient characteristics

The number and rate of hospital discharges have traditionally been on the rise. Since 1983, however, changes have been occurring. With a rate of 148 discharges per 1,000 population, 1985 marked the first time since 1971 that the discharge rate had fallen below 150 discharges per 1,000 population. In 1987, the discharge rate fell to 138 per 1,000 population, which was as low as any discharge rate since the inception of the survey.

Table A shows important measures of hospital utilization for 1965, 1987, and selected years in between. The number of discharges rose from 1965 to 1983 by about 35 percent, but it decreased approximately 14 percent in the next 4 years. In addition, the average length of stay for hospital patients dropped from 7.7 days in 1975 to 6.9 days in 1983 and to 6.6 days in 1984—a drop of 10 and 14 percent, respectively. Since 1984 the average length of stay has remained stable with 6.6 days in 1984, 6.5 days in 1985, and 6.4 days in 1986 and 1987, respectively.

The total number and rate of discharges and days of care did not change significantly from 1985 to 1987 (table B). The number of discharges and days of care and the rate of discharges and days of care showed no significant difference in any age group when 1987 data were compared with 1986 data. The average length of stay did not change for totals or for the four age groups.

The 33.4 million patients discharged from short-stay hospitals during 1987 included an estimated 13.6 million males and 19.8 million females (table 1). The rates per 1,000 population were 116 for males and 159 for females, making the rate for females about 37 percent higher than the rate for males. The number and rate of discharges always are higher for females than for males because of the large number of women in their childbearing years (15–44 years of age) who are hospitalized for deliveries and other obstetrical conditions. Excluding deliveries, the rate for

**Table B. Number and rate of patients discharged from short-stay hospitals and of days of care, and average length of stay, by age: United States, 1985, 1986, and 1987**

[Data for non-Federal short-stay hospitals. Excludes newborn infants]

Age	1985	1986	1987
Number of patients discharged in thousands			
All ages . . . . .	35,056	34,256	33,387
Under 15 years . . . . .	2,972	2,783	2,688
15–44 years . . . . .	13,966	13,458	13,142
45–64 years . . . . .	7,610	7,300	7,099
65 years and over . . . . .	10,508	10,716	10,459
Rate of patients discharged per 1,000 population			
All ages . . . . .	147.9	143.1	138.2
Under 15 years . . . . .	57.2	53.5	51.3
15–44 years . . . . .	125.1	118.9	115.1
45–64 years . . . . .	169.5	162.2	156.9
65 years and over . . . . .	368.3	367.3	350.5
Number of days of care in thousands			
All ages . . . . .	226,217	218,496	214,942
Under 15 years . . . . .	13,554	12,718	12,609
15–44 years . . . . .	67,397	65,174	63,576
45–64 years . . . . .	53,541	49,563	48,360
65 years and over . . . . .	91,726	91,041	90,397
Rate of days of care per 1,000 population			
All ages . . . . .	954.4	912.8	889.4
Under 15 years . . . . .	260.8	244.7	240.6
15–44 years . . . . .	603.6	575.7	556.9
45–64 years . . . . .	1,192.8	1,101.4	1,068.6
65 years and over . . . . .	3,215.1	3,120.7	3,029.9
Average length of stay in days			
All ages . . . . .	6.5	6.4	6.4
Under 15 years . . . . .	4.6	4.6	4.7
15–44 years . . . . .	4.8	4.8	4.8
45–64 years . . . . .	7.0	6.8	6.8
65 years and over . . . . .	8.7	8.5	8.6

**Table A. Selected measures of short-stay hospital utilization: United States, selected years 1965–87**

[Data from non-Federal short-stay hospitals. Excludes newborn infants]

Measure of utilization	1965	1970	1975	1980	1983	1987
Number of patients discharged in thousands . . . . .	28,792	29,127	34,043	37,832	38,783	33,387
Rate of patients discharged per 1,000 population . . . . .	150.3	144.3	159.2	167.7	167.0	138.2
Number of days of care in thousands . . . . .	225,011	226,445	262,389	274,508	268,337	214,942
Rate of days of care per 1,000 population . . . . .	1,174.3	1,121.6	1,227.3	1,217.0	1,155.2	889.4
Average length of stay in days . . . . .	7.8	7.8	7.7	7.3	6.9	6.4
Percent of patients with surgical and nonsurgical procedures . . . . .	138.2	139.7	141.7	52.2	54.7	60.2

<sup>1</sup>In comparing figures for 1965, 1970, and 1975 with those for later years, caution should be used because data for years prior to 1979 exclude nonsurgical procedures and the following obstetrical procedures: episiotomy, artificial rupture of membrane, internal version, and outlet and low forceps delivery.



females discharged was 128, only about 10 percent higher than the rate for males.

Except for children under 5 years of age and women in their childbearing years, annual rates of discharges increased consistently with each older age group for both males and females. This pattern of increase also applies to women in their childbearing years if those who were hospitalized only for deliveries are excluded from the rates. Discharge rates for older patients (65 years of age and over) were more than six times higher than those for younger patients (under 15 years of age) for both sexes.

In 1987 male patients used an estimated 94.2 million days of care in short-stay hospitals compared with 120.7 million days of care used by females (table 1). The rate of days of care per 1,000 population was 806 for males and 968 (about 20 percent higher) for females. Differences by sex were smaller for rates of days of care than for discharges, mainly because the average length of stay for the approximately 3.9 million women who were hospitalized for deliveries was only 3.1 days (table 7). In comparison, the average length of stay was 6.9 days for males and 6.8 days for females who were hospitalized for reasons other than a delivery.

The annual number of days of care per 1,000 population increased about 13 times with advancing age, from 241 for patients under 15 years of age to 3,030 for patients 65 years of age and over (table 1). The much higher increase in the rate of days of care than of discharges from the youngest to the oldest age group was the result of long average lengths of stay for persons 65 years of age and over (8.6 days). The average length of stay is longer for the aged because of the greater severity of illness in this group. This situation is indicated by larger proportions of older than younger patients with incapacitating chronic illness and by the fact that the proportion of patients with multiple diagnoses is highest among those 65 years and over, both of which result in long average lengths of stay and high annual rates of days of care.

In this report, the race of patients is shown as white or all other. In 1987, 24.4 million patients were identified on the face sheets of the medical records as white and 5.2 million as all other. However, race was not reported for an additional 3.8 million patients. Estimates of numbers and rates of discharges, days of care, and average lengths of stay are provided. However, all of the data by race should be used with caution because of the not-stated category, which for 1987 was approximately 11 percent of all discharges.

The number of days of care in 1987 totaled 159.1 million for white patients, 34.1 million for all other patients, and 21.8 million for patients with race not stated (table 2).

The average length of stay was 6.5 days for white patients, 6.6 for all other patients, and 5.7 for patients with race not stated (table 2).

The expected principal source of payment for all patients discharged from short-stay hospitals is presented in table 3. The expected source of payment recorded on the face sheet of the medical record may not have been the actual source of payment. For example, a patient admitted to a hospital following an automobile accident may have cited Blue Cross as the expected source of payment when, in fact, an automobile insurance company ultimately made restitution.

Private health insurance, which consists of Blue Cross and other private or commercial insurance, was the expected principal source of payment for approximately 14.6 million discharges from non-Federal short-stay hospitals in 1987, about 44 percent of all discharges. Of these 14.2 million discharges, 97.1 percent were under 65 years of age.

Medicare was the principal expected source of payment for 11.1 million discharges (33.3 percent). As expected, most of these discharges (9.8 million, or 87.8 percent) were 65 years of age and over. Together, private insurance and Medicare accounted for 25.8 million discharges (77.1 percent). Even though patients expecting to pay hospital costs through Medicare constituted only 33.3 percent of all discharges, they accounted for 44.8 percent of all days of care. This was the result of longer hospital stays for patients 65 years of age and over. This is reflected in the average length of stay—8.7 days for Medicare patients but only 5.2 days for patients who expected private insurance to pay for their hospital stays. The longest average length of stay was noted for Medicare patients 15–44 years of age and 65 years of age and over in the Northeast Region (10.1 and 10.6 days, respectively). Lengths of stay of 5 days or less were noted for private insurance patients under 45 years of age in all regions.

During 1987 there were approximately 3.9 million discharges for women with deliveries (tables 7 and 8). Of these, 33 percent were discharged from hospitals in the South Region, and 51 percent were discharged from hospitals with 300 beds or more. Variation in rates per 1,000 civilian population by region was significant only when comparing the Northeast Region rate (43.2) with the West Region rate (63.6). The rate for the Midwest was 48.4, and the rate for the South was 48.0.

The average length of stay for women with deliveries was 3.5 days in the Northeast Region, 3.3 days in the Midwest Region, 3.1 days in the South Region, and 2.5 days in the West Region.

# Utilization by hospital characteristics

Discharges from short-stay hospitals in 1987 ranged from 6.7 million in the West Region to 11.3 million in the South Region (table 3). Regional differences in the number of discharges are accounted for mainly by variations in population sizes (see appendix I, table III) and, to a lesser extent, by variations in the discharge rates.

The Midwest Region had the highest discharge rate (147 per 1,000 population). The rates for the other regions were 134 for the Northeast and 136 for the West and South.

The number of days of care was lowest in the West Region and highest in the South Region (table 4). The number of days of care ranged from 36.8 million in the West Region to 70.1 million in the South. The rate per 1,000 population was 749 days in the West Region, 845

days in the South, 977 days in the Midwest, and 998 days in the Northeast (table 5).

Average lengths of stay were 5.5 days in the West Region, 6.2 days in the South, 6.7 days in the Midwest, and 7.5 days in the Northeast (table 4).

The number of patients discharged from short-stay hospitals and days of care are shown by sex and age of the patients and by geographic region and bed size of hospitals in table 4. The percent distributions of these data (exclusive of geographic region) are shown in table C.

For patients of all ages, about 40 percent of discharges from short-stay hospitals were male and 60 percent female in every hospital bed-size group. Females with deliveries accounted for about 10 percent of the discharges in

**Table C. Number and percent distribution of patients discharged from short-stay hospitals and of days of care by sex and age of patient, according to bed size of hospital: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants]

<i>Sex and age</i>	<i>Number in thousands</i>	<i>All sizes</i>	<i>6-99 beds</i>	<i>100-199 beds</i>	<i>200-299 beds</i>	<i>300-499 beds</i>	<i>500 beds or more</i>
Number of patients discharged in thousands							
All patients discharged . . . . .	33,387	33,387	5,079	5,153	7,997	8,308	6,849
Percent distribution of patients discharged							
Both sexes . . . . .	33,387	100.0	100.0	100.0	100.0	100.0	100.0
Male . . . . .	13,568	40.6	39.1	42.1	40.1	41.0	40.9
Female, including deliveries . . . . .	19,818	59.4	60.9	57.9	59.9	59.0	59.1
Female, excluding deliveries . . . . .	15,908	47.6	51.5	48.8	47.8	46.0	45.7
Age							
All ages . . . . .	33,387	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	2,688	8.0	7.3	14.6	6.7	6.1	7.6
15-44 years . . . . .	13,142	39.4	37.9	35.6	38.7	41.0	42.1
45-64 years . . . . .	7,099	21.3	19.0	19.6	20.4	22.0	24.3
65 years and over . . . . .	10,459	31.3	35.7	30.3	34.1	31.0	26.0
Number of days of care in thousands							
All days of care . . . . .	214,942	214,942	25,137	32,458	49,186	57,954	50,208
Percent distribution of days of care							
Both sexes . . . . .	214,942	100.0	100.0	100.0	100.0	100.0	100.0
Male . . . . .	94,230	43.8	40.6	44.3	43.8	43.7	45.4
Female, including deliveries . . . . .	120,713	56.2	59.4	55.7	56.2	56.3	54.6
Female, excluding deliveries . . . . .	108,728	50.6	54.7	51.4	50.6	50.3	48.3
Age							
All ages . . . . .	214,942	100.0	100.0	100.0	100.0	100.0	100.0
Under 15 years . . . . .	12,609	5.9	4.6	12.0	4.3	4.2	6.0
15-44 years . . . . .	63,576	29.6	28.7	28.1	28.0	30.0	32.1
45-64 years . . . . .	48,360	22.5	19.2	20.4	21.3	23.1	26.1
65 years and over . . . . .	90,397	42.1	47.6	39.5	46.4	42.7	35.9

hospitals with less than 300 beds and 13 percent in hospitals with 300 beds or more. The largest percent of patients in hospitals with 300 beds or more was for patients ages 15–44 years while the largest percent of patients in hospitals with less than 300 beds were for those 15–44 years of age and 65 years of age and over. The smallest percent in each of the bed sizes was for those under 15 years of age.

Days of care were generally distributed by sex, age, and bed size of hospital in a fashion similar to that of discharges (table C). However, a smaller percent of days of care than of discharges was recorded for patients 15–44 years of age regardless of bed size; for patients 65 years and over, a larger percent of days of care than of discharges was recorded for all bed sizes. The differences for those aged 15–44 years were the result of short lengths of stay for females with deliveries. However, for those 65 years and over, the differences were the result of longer hospitalizations for older patients.

The average length of stay for patients discharged from short-stay hospitals in 1987 increased steadily from 4.9 days in the smallest hospitals (6–99 beds) to 7.3 days in the largest hospitals (500 beds or more), as shown in table D. The average length of stay was slightly longer for males than for females in all hospitals except the smaller ones. However, when females who were hospitalized for deliver-

ies are excluded, the average lengths of stay for both sexes were virtually the same. Except for patients under 45 years of age, the average length of stay increased as the age of the patient increased regardless of the size of the hospital.

Approximately 7 out of 10 patients in non-Federal short-stay hospitals were discharged from voluntary non-profit hospitals operated by church and other nonprofit groups during every year NHDS was conducted. In 1987, voluntary nonprofit hospitals provided medical care to an estimated 22.8 million patients, or 68 percent of all patients hospitalized. Hospitals operated by State and local governments cared for 6.9 million patients, or 21 percent of all discharges, and proprietary hospitals operated for profit cared for 3.7 million patients, or 11 percent of all discharges (table 6).

The estimated 214.9 million days of care utilized by patients in non-Federal short-stay hospitals during 1987 were distributed by ownership of hospitals in the following manner: voluntary nonprofit, 151.6 million days, or 71 percent; government, 41.5 million days, or 19 percent; and proprietary, 21.9 million days, or 10 percent. Average lengths of stay were 6.6 days in voluntary nonprofit hospitals, 6.0 days in government hospitals, and 5.9 days in proprietary hospitals.

**Table D. Average length of stay for patients discharged from short-stay hospitals by bed size of hospital and sex and age of patient: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants]

<i>Sex and age</i>	<i>All sizes</i>	<i>6–99 beds</i>	<i>100–199 beds</i>	<i>200–299 beds</i>	<i>300–499 beds</i>	<i>500 beds or more</i>
		Average length of stay in days				
Total . . . . .	6.4	4.9	6.3	6.2	7.0	7.3
Sex						
Male . . . . .	6.9	5.1	6.6	6.7	7.4	8.1
Female, including deliveries . . . . .	6.1	4.8	6.1	5.8	6.7	6.8
Female, excluding deliveries . . . . .	6.8	5.3	6.6	6.5	7.6	7.7
Age						
Under 15 years . . . . .	4.7	3.1	5.2	4.0	4.8	5.8
15–44 years . . . . .	4.8	3.7	5.0	4.4	5.1	5.6
45–64 years . . . . .	6.8	5.0	6.6	6.4	7.3	7.9
65 years and over . . . . .	8.6	6.6	8.2	8.4	9.6	10.1

# Utilization by diagnosis

## First-listed diagnosis

Diseases of the circulatory system ranked first in 1987 among the ICD-9-CM diagnostic chapters as a principal, or first-listed, diagnosis of patients discharged from non-Federal short-stay hospitals (table 9). These conditions accounted for an estimated 5.6 million discharges. Other leading ICD-9-CM diagnostic chapters were supplementary classifications, which include females with deliveries (4.3 million discharges); diseases of the digestive system (3.7 million discharges); injury and poisoning (3.0 million discharges); diseases of the respiratory system (3.0 million discharges); and diseases of the genitourinary system (2.5 million discharges). About two-thirds of the patients discharged from non-Federal short-stay hospitals had principal diagnoses in these six ICD-9-CM diagnostic chapters.

The diagnostic categories presented in this summary report were selected either because they appear as principal, or first-listed, diagnoses with great frequency or because the conditions are of special interest. Although many of these categories—such as malignant neoplasms; heart disease; psychoses; and fractures, all sites—are combinations of more detailed diagnoses, they are presented as single categories without showing the specific diagnostic inclusions.

The estimates for acute myocardial infarction as a first-listed diagnosis have increased substantially since 1981 because of a decision to reorder circulatory diagnoses involving acute myocardial infarction. In 1981, 60 percent of acute myocardial infarction diagnoses were first listed; by 1986, the proportion had increased to 87 percent because of reordering. This change is discussed more fully in appendix I.

Even though the total number of discharges showed no significant change from 1986 to 1987 (NCHS, 1988a), there were significant drops in some of the first-listed diagnoses. The most significant drop occurred in the first-listed diagnosis of cataract, for which the number of discharges decreased from 104,000 in 1986 to 63,000 in 1987—a drop of 39.4 percent. (The decrease from 1984 to 1987 was from 481,000 to 63,000—a drop of 86.9 percent.) Other significant decreases in first-listed diagnoses were sprains and strains of the back (including neck), for which the number of discharges decreased from 192,000 in 1986 to 159,000 in 1987—a drop of 17.2 percent; alcohol dependence syndrome, which decreased from 397,000 in 1986 to 336,000 in 1987—a drop of 15.4 percent; and chronic disease of the

tonsils and adenoids, which decreased from 255,000 in 1986 to 218,000 in 1987—a drop of 14.5 percent. The number of discharges increased for atherosclerotic heart disease (from 338,000 in 1986 to 369,000 in 1987—an increase of 9.2 percent) and psychoses (from 766,000 in 1986 to 814,000 in 1987—an increase of 6.3 percent). The number and rate of discharges, days of care, and average length of stay in 1987 are presented by selected first-listed diagnoses in table E. These categories accounted for 59 percent of all patients discharged during 1987 and include the most frequent first-listed diagnoses for each sex, age, race, region, and bed-size group. The most common first-listed diagnosis for most of these groups, as well as for all patients combined, was females with deliveries. Excluding this category, the two most frequent first-listed diagnoses for all groups except patients under 45 years of age were heart disease and malignant neoplasms.

For patients under 15 years of age, the most frequent first-listed diagnoses were pneumonia, all forms; acute respiratory infections, except influenza; asthma; and chronic disease of tonsils and adenoids. Other diagnoses for these patients were fractures, all sites; noninfectious enteritis and colitis; and diseases of the ear and mastoid process (table 9).

Excluding females with deliveries, the three most frequent first-listed diagnoses for patients 15–44 years of age were psychoses; fractures, all sites; and all abortions, including ectopic and molar pregnancies.

For patients of races other than white, the most frequent first-listed diagnosis besides deliveries was heart disease. Other common diagnoses for this group included malignant neoplasms; psychoses; pneumonia, all forms; fractures, all sites; asthma; cerebrovascular disease; and diabetes mellitus.

For hospitals with 6–99 beds, the most common first-listed diagnosis was heart disease, followed by females with deliveries. Other frequent diagnoses in these hospitals were pneumonia, all forms; fractures, all sites; malignant neoplasms; cerebrovascular disease; and psychoses.

The number and rate of patients discharged from short-stay hospitals and average length of stay, by ICD-9-CM diagnostic chapters, are presented by age for 1987 in table 9. Although the estimated rate of discharge from short-stay hospitals increased as the age of the patients increased, some decreases were observed. For patients under 15 years of age and for those 15–44 years of age the rates decreased for diseases of the respiratory

**Table E. Number and rate of patients discharged from short-stay hospitals and of days of care, and average length of stay, by selected first-listed diagnostic categories: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Diagnostic category and ICD-9-CM code	Discharged patients		Days of care		Average length of stay in days
	Number in thousands	Rate per 10,000 population	Number in thousands	Rate per 10,000 population	
All conditions <sup>1</sup> . . . . .	33,387	1,381.6	214,942	8,894.4	6.4
Females with deliveries . . . . . V27	3,911	161.8	11,985	495.9	3.1
Normal deliveries <sup>2</sup> . . . . .	1,107	45.8	2,546	105.3	2.3
Complicated deliveries <sup>2</sup> . . . . .	2,803	116.0	9,439	390.6	3.4
Heart disease . . . . . 391-392.0, 393-398, 402, 404, 410-416, 420-429	3,736	154.6	25,898	1,071.7	6.9
Acute myocardial infarction . . . . . 410	760	31.4	6,465	267.5	8.5
Atherosclerotic heart disease . . . . . 414.0	369	15.3	2,341	96.9	6.3
Other ischemic heart disease . . . . . 411-413, 414.1-414.9	1,040	43.0	5,374	222.4	5.2
Cardiac dysrhythmias . . . . . 427	521	21.6	2,973	123.0	5.7
Congestive heart failure . . . . . 428.0	605	25.0	5,080	210.2	8.4
Malignant neoplasms . . . . . 140-208, 230-234	1,879	77.8	16,262	672.9	8.7
Malignant neoplasm of trachea, bronchus, and lung . . . . . 162, 197.0, 197.3	305	12.6	2,706	112.0	8.9
Malignant neoplasm of breast . . . . . 174-175, 198.81	205	8.5	1,272	52.7	6.2
Fractures, all sites . . . . . 800-829	1,062	43.9	9,403	389.1	8.9
Pneumonia, all forms . . . . . 480-486	924	38.2	7,397	306.1	8.0
Cerebrovascular disease . . . . . 430-438	895	37.0	9,024	373.4	10.1
Psychoses . . . . . 290-299	814	33.7	11,138	460.9	13.7
Cholelithiasis . . . . . 574	522	21.6	3,665	151.6	7.0
Intervertebral disc disorders . . . . . 722	486	20.1	3,089	127.8	6.4
Arthropathies and related disorders . . . . . 710-719	484	20.0	3,777	156.3	7.8
Diabetes mellitus . . . . . 250	474	19.6	3,602	149.0	7.6
Asthma . . . . . 493	454	18.8	2,180	90.2	4.8
Benign neoplasms and neoplasms of uncertain behavior and unspecified nature . . . . . 210-229, 235-239	452	18.7	2,433	100.7	5.4
Acute respiratory infections, except influenza . . . . . 460-466	416	17.2	1,933	80.0	4.6
Noninfectious enteritis and colitis . . . . . 555-556, 558	388	16.1	1,884	77.9	4.9
Diseases of the central nervous system . . . . . 320-336, 340-349	383	15.8	3,758	155.5	9.8
Alcohol dependence syndrome . . . . . 303	336	13.9	3,667	151.7	10.9
Calculus of kidney and ureter . . . . . 592	314	13.0	1,101	45.5	3.5
All abortions, including ectopic and molar pregnancies . . . . . 630-639	301	12.4	659	27.3	2.2
Inguinal hernia . . . . . 550	301	12.4	789	32.6	2.6
Ulcers of stomach and small intestine . . . . . 531-534	292	12.1	2,012	83.3	6.9
Appendicitis . . . . . 540-543	275	11.4	1,293	53.5	4.7
Hyperplasia of prostate . . . . . 600	274	11.3	1,482	61.3	5.4
Volume depletion . . . . . 276.5	265	11.0	2,015	83.4	7.6

<sup>1</sup>Includes data for diagnostic conditions not shown in table.

<sup>2</sup>See appendix II for definition.

system. For patients 15-44 years of age and 45-64 years of age, rates decreased for appendicitis; and for patients 45-64 years of age and 65 years of age and over, rates decreased for the categories of alcohol dependence syndrome, calculus of kidney and ureter, intervertebral disc disorders, and sprains and strains of the back (including neck). Moreover, the rates generally decreased with increasing age for the category of chronic disease of tonsils and adenoids.

The average length of stay increased with increasing age for most chapters and categories of diagnoses. Overall it tended to be highest for fracture of neck of femur, malignant neoplasms, mental disorders (especially for psychoses and alcohol dependence syndrome), and cerebrovascular disease. For patients 65 years of age and over, average lengths of stay of more than 10 days were found for malignant neoplasm of large intestine and rectum; mental disorders; diseases of the central nervous system; diseases of the skin and subcutaneous tissue; arthropathies and related disorders; and fractures, all sites.

Short average lengths of stay occurred for patients under 45 years with a first-listed diagnosis of chronic disease of tonsils and adenoids and for patients 15-44 years who are admitted for inguinal hernia and for abortions, including ectopic and molar pregnancies.

Data on discharges, rates of discharges, and average lengths of stay for patients discharged from short-stay hospitals are presented by diagnostic chapters and selected categories of first-listed diagnosis, sex, and race in table 10.

Rates of discharges per 10,000 population were similar for the two sexes for most of the diagnostic chapters and categories shown. However, males had significantly higher rates than females for the categories of malignant neoplasm of trachea, bronchus, and lung; alcohol dependence syndrome; acute myocardial infarction; other ischemic heart disease; atherosclerotic heart disease; inguinal hernia; calculus of kidney and ureter; intervertebral disc disorders; intracranial injuries (excluding those with skull fracture); and lacerations and open wounds. Females had higher rates than men for the categories of benign neoplasms and

neoplasms of uncertain behavior and unspecified nature, diabetes mellitus, noninfectious enteritis and colitis, cholelithiasis, arthropathies and related disorders, and fracture of neck of femur.

Seventy-three percent of all patients discharged were reported to be white, 16 percent were reported to be all other races (including black), and 12 percent had no race mentioned in the medical record. However, the racial distribution of patients for some diagnostic categories differed significantly from the distribution for all patients combined. For example, the percent of white patients discharged was higher than average for the first-listed diagnoses of acute myocardial infarction (83 percent) and other ischemic heart disease (82 percent). For abortions and ectopic and molar pregnancies, the proportion was lower than average for white patients (60 percent) and higher than average for all other races.

Information on patients discharged from short-stay hospitals is shown by geographic region in table 11. The number of discharges ranged from 11.3 million in the South Region to 6.7 million in the West and Northeast Regions. The Midwest Region had 8.7 million discharges. The South Region had the largest number of discharges for most categories. One major exception is mental disorders, which accounted for 570,000 discharges in the Midwest Region and only 496,000 in the South. In 1987 the number of discharges per 1,000 population was 134 in the Northeast Region, 136 in the West and South, and 147 in the Midwest. Large variations in rates were noted for malignant neoplasms, alcohol dependence syndrome, and females with deliveries.

Average length of stay ranged from 7.5 days in the Northeast Region to 5.5 days in the West, with an average

of 6.7 days in the Midwest and 6.2 days in the South. The average length of stay was longest in the Northeast Region for most categories. However, one notable exception is mental disorders, for which the average length of stay was longer in the Midwest and South Regions.

The number of patients discharged from short-stay hospitals and the average lengths of stay during 1987 are shown by bed size of hospital and diagnostic category in tables 12 and 13, respectively. Females with deliveries and heart disease ranked as the highest categories for first-listed diagnosis in hospitals of all sizes.

The proportions of some diagnostic conditions treated in hospitals varied according to the size of the hospital. Greater than average proportions of patients were treated in the smallest hospitals (6-99 beds) for diseases of the respiratory system (table F). On the other hand, greater than average proportions of discharges were from the largest hospitals (500 beds or more) for congenital anomalies; neoplasms; and complications of pregnancy, childbirth, and the puerperium.

For the most part, the average length of stay for the diagnostic chapters and categories followed the same patterns as the overall average lengths of stay for each region and bed size of hospital. Short hospital stays were more common in the West Region; long stays occurred more frequently in the Northeast Region. Similarly, the average length of stay generally increased as the size of the hospital increased.

## All-listed diagnoses

An estimated 103 million diagnoses (table 14) were recorded for the 33.4 million inpatients of non-Federal

**Table F. Percent distribution of patients discharged from short-stay hospitals by bed size of hospital, according to diagnostic class: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Diagnostic class and ICD-9-CM	All sizes	6-99 beds	100-199 beds	200-299 beds	300-499 beds	500 beds or more	Percent distribution					
All conditions . . . . .	100.0	15.2	15.4	24.0	24.9	20.5						
Infectious and parasitic diseases . . . . .001-139	100.0	14.8	19.9	22.4	22.5	20.5						
Neoplasms . . . . .140-239	100.0	8.5	10.8	25.1	27.2	28.4						
Endocrine, nutritional, and metabolic diseases and immunity disorders . . . . .240-279	100.0	18.5	16.3	22.7	22.9	19.5						
Diseases of the blood and blood-forming organs . . . . .280-289	100.0	16.7	16.4	21.4	23.5	22.6						
Mental disorders . . . . .290-319	100.0	13.9	19.2	21.1	27.0	18.8						
Diseases of the nervous system and sense organs . . . . .320-389	100.0	12.6	14.9	22.1	25.5	25.0						
Diseases of the circulatory system . . . . .390-459	100.0	15.2	13.3	24.9	26.8	19.9						
Diseases of the respiratory system . . . . .460-519	100.0	20.3	21.5	21.7	21.3	15.2						
Diseases of the digestive system . . . . .520-579	100.0	19.3	17.1	24.1	22.4	17.1						
Diseases of the genitourinary system . . . . .580-629	100.0	16.9	16.2	25.3	22.6	18.9						
Complications of pregnancy, childbirth, and the puerperium . . . . .630-676	100.0	10.7	11.6	24.3	27.0	26.4						
Diseases of the skin and subcutaneous tissue . . . . .680-709	100.0	17.2	19.5	21.3	23.6	18.6						
Diseases of the musculoskeletal system and connective tissue . . . . .710-739	100.0	15.3	14.6	25.6	23.7	20.7						
Congenital anomalies . . . . .740-759	100.0	7.9	23.8	17.1	20.0	30.8						
Certain conditions originating in the perinatal period . . . . .760-779	100.0	8.3	23.1	22.3	22.3	24.0						
Symptoms, signs, and ill-defined conditions . . . . .780-799	100.0	14.7	16.2	26.9	22.2	19.8						
Injury and poisoning . . . . .800-999	100.0	15.7	16.0	23.0	26.0	19.3						
Supplementary classifications <sup>1</sup> . . . . .V01-V82	100.0	12.1	11.8	25.4	27.2	23.6						

<sup>1</sup>Females with deliveries are included under "supplementary classifications."

short-stay hospitals in 1987, for an average of 3.1 diagnoses per discharged patient. The average number of diagnoses per discharge increased beginning in 1979 because of changes in the way data are tabulated. Starting in 1979, up to seven diagnoses per discharge now are coded and tabulated on the NHDS data file; prior to that time, up to five diagnoses were coded. In addition, the ICD-9-CM, which is the classification scheme used for coding medical data since 1979, has inherent in it a certain amount of "double coding"; the classification used prior to 1979 does not. For example, females with deliveries all receive one additional diagnostic code that indicates the outcome of their delivery (single liveborn; twins, both liveborn; and so forth); however, this was not the case prior to 1979.

The average number of diagnoses per discharge varied only slightly by sex and race of the patient and by region

and bed size of the hospital. For each of these categories, the average was 2.9-3.2 diagnoses per patient. A larger variation occurred by age. The average numbers of diagnoses per discharge for the age groups under 15 years, 15-44 years, 45-64 years, and 65 years and over were 2.0, 2.5, 3.2, and 4.1, respectively.

Diseases of the circulatory system ranked first among the ICD-9-CM diagnostic chapters for all-listed diagnoses, with 20.6 million diagnoses. Other leading diagnostic chapters were supplementary classifications including women with deliveries (8.2 million), diseases of the digestive system (8.2 million), and diseases of the respiratory system (7.6 million). These four ICD-9-CM chapters accounted for 43 percent of all-listed diagnoses in 1987.

# Utilization by procedures

One or more procedures were performed for an estimated 20.7 million of the 33.4 million inpatients discharged from short-stay hospitals during 1987. In 1987, 39.1 million procedures were recorded (table 15), an average of 1.9 per patient who underwent at least one procedure.

These figures on the number of procedures performed are higher than those reported prior to 1979 because of changes in the tabulation and coding of data for NHDS. Beginning in 1979, more procedures, both in number per patient and in type of procedure, were coded. Specifically, starting in 1979 up to four procedures, instead of only three, were coded for each discharge. Furthermore, only figures for "surgical" operations were published in the past. However, since 1979 the total number includes many non-surgical procedures. (See the section entitled "Medical coding and edit" in appendix I and the section entitled "Surgical and nonsurgical procedures" in appendix II for

more information on the differences between coding the ICDA and the ICD-9-CM.)

Estimates for coronary artery bypass grafts (CABG's) may be misinterpreted. Data users have been equating all-listed CABG procedures with number of patients having the procedure. However, a physician may perform more than one CABG procedure on the same admission. In some cases mammary artery grafts (ICD-9-CM codes 36.15, 36.16) and saphenous vein CABG's were being done in addition to the CABG. In 1987 a total of 332,000 CABG procedures were performed but represented only 245,000 CABG discharges.

The number and percent of patients with any surgical or nonsurgical procedure in 1987 and the number and percent of patients with at least one surgical procedure are shown in table G. About 62 percent of the patients discharged had some procedure, including diagnostic and

**Table G. Number of patients discharged from short-stay hospitals with and without procedures and percent with procedures, by selected characteristics: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants]

Characteristic	All discharged patients	Patients without procedures	Patients with procedures			
			All patients with procedures	Patients with surgical procedures	All patients with procedures	Patients with surgical procedures
	Number in thousands		Percent			
All patients . . . . .	33,387	12,690	20,697	15,830	62.0	47.4
Age						
Under 15 years . . . . .	2,688	1,508	1,180	842	43.9	31.3
15-44 years . . . . .	13,142	4,269	8,872	7,665	67.5	58.3
45-64 years . . . . .	7,099	2,525	4,574	3,302	64.4	46.5
65 years and over . . . . .	10,459	4,388	6,071	4,022	58.0	38.5
Sex						
Male . . . . .	13,568	5,568	8,001	5,729	59.0	42.2
Female . . . . .	19,818	7,122	12,696	10,101	64.1	51.0
Race						
White . . . . .	24,376	9,175	15,201	11,543	62.4	47.4
All other . . . . .	5,174	1,976	3,198	2,405	61.8	46.5
Not stated . . . . .	3,836	1,539	2,298	1,881	59.9	49.0
Region						
Northeast . . . . .	6,699	2,283	4,416	3,127	65.9	46.7
Midwest . . . . .	8,718	3,487	5,231	4,069	60.0	46.7
South . . . . .	11,292	4,723	6,568	5,192	58.2	46.0
West . . . . .	6,678	2,197	4,481	3,442	67.1	51.5
Bed size of hospital						
6-99 beds . . . . .	5,079	2,893	2,187	1,762	43.1	34.7
100-199 beds . . . . .	5,153	2,413	2,740	2,021	53.2	39.2
200-299 beds . . . . .	7,997	2,678	5,319	3,972	66.5	49.7
300-499 beds . . . . .	8,308	2,819	5,490	4,240	66.1	51.0
500 beds or more . . . . .	6,849	1,888	4,961	3,834	72.4	56.0



nonsurgical procedures. Some variations in the proportion, however, occurred by age and sex of the patient, geographic region, and bed size of the hospital. Patients 15–44 years of age had the highest proportion with procedures of all the age groups (68 percent). Women had more procedures than men (64 percent, compared with 59 percent), primarily because of those relating to childbirth. The proportion of patients with one procedure or more increased with the size of the hospital, from 43 percent in hospitals with 6–99 beds to about 72 percent in hospitals with 500 beds or more.

Approximately 48 percent of the patients with procedures had only one operation or nonsurgical procedure during their hospitalization (table H). About 27 percent of the patients had two procedures, about 14 percent had three, and about 12 percent had four or more. Patients under 15 years of age had the lowest proportion of multiple procedures (37 percent) and those 45–64 years and 65 years of age and over had the largest proportions (57 percent). About 46 percent of the patients with procedures discharged from the smallest hospitals had more than one procedure; about 53 percent of the patients discharged from hospitals of all other sizes had two procedures or more during their hospitalization.

Procedures are grouped in the detailed tables of this report by the 16 major ICD–9–CM groups. Selected proce-

dures within these groups are presented by specific categories in the detailed tables as well as in the text tables. Some of these categories—such as repair of inguinal hernia, prostatectomy, and hysterectomy—are presented as single categories although they may be divided into more precise subgroups.

Although there were no significant changes in the total number of procedures from 1986 to 1987, significant decreases and increases occurred for specific procedures (NCHS, 1988a). The most significant drops occurred for insertion of prosthetic lens (pseudophakos), which decreased from 105,000 in 1986 to 69,000 in 1987 (a drop of 34.3 percent), and extraction of lens, which decreased from 122,000 in 1986 to 83,000 in 1987 (a drop of 32.0 percent). Other significant decreases occurred for esophagoscopy and gastroscopy (natural orifice), which decreased from 194,000 in 1986 to 153,000 in 1987 (a drop of 21.1 percent), and dilation and curettage of uterus, which decreased from 472,000 in 1986 to 379,000 in 1987 (a drop of 19.7 percent).

Compensating for the drop in some procedures was a significant increase in other procedures. The most significant increase occurred for removal of coronary artery obstruction, which increased from 133,000 in 1986 to 184,000 in 1987 (up 38.3 percent). Other significant increases occurred for direct heart revascularization, which increased from 284,000 in 1986 to 332,000 in 1987 (up 16.9 percent); diagnostic ultrasound, which increased from 1,411,000 in 1986 to 1,596,000 in 1987 (up 13.1 percent); and arteriography and angiocardiology using contrast material, which increased from 1,285,000 in 1986 to 1,448,000 in 1987 (up 12.7 percent).

Influences related to hospital admission policies, as well as hospital characteristics, could account for some of these changes. Examples include the introduction of the prospective payment system, technological advances, and, possibly, the shifting of patients from an inpatient setting to an outpatient setting.

Miscellaneous diagnostic and therapeutic procedures (10.3 million) ranked first among the surgical and nonsurgical procedures performed during 1987. Other leading ICD–9–CM groups were operations on the digestive system (5.8 million), obstetrical procedures (5.4 million), operations on the musculoskeletal system (3.5 million), and operations on the cardiovascular system (3.1 million). About 72 percent of the procedures performed in 1987 were included in these five major groups.

The number and rate of all-listed surgical procedures in 1987 are shown by selected ICD–9–CM categories in table J. The number and rate of all-listed nonsurgical procedures are shown in table K. The categories presented in these tables include the procedures that were performed most frequently during the year. Data on the diagnostic and nonsurgical procedures shown in table K were not published in NHDS reports on hospital use prior to 1979. These procedures include computerized axial tomography (CAT scan), diagnostic ultrasound, endoscopy of the digestive system, and arteriography and angiocardiology using contrast material. More than 1 million of each of these

**Table H. Percent distribution of patients discharged from short-stay hospitals with procedures by number of procedures, according to selected characteristics: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants]

Characteristic	Total with procedures	Number of procedures			
		1	2	3	4 or more
		Percent distribution			
All patients . . . . .	100.0	48.1	26.5	13.9	11.6
Age					
Under 15 years . . . . .	100.0	62.9	22.3	8.5	6.3
15–44 years . . . . .	100.0	52.4	27.2	12.3	8.1
45–64 years . . . . .	100.0	42.5	27.1	16.0	14.4
65 years and over . . . . .	100.0	43.0	25.8	15.6	15.6
Sex					
Male . . . . .	100.0	45.9	25.5	14.9	13.7
Female . . . . .	100.0	49.4	27.1	13.2	10.3
Race					
White . . . . .	100.0	46.9	26.7	14.1	12.2
All other . . . . .	100.0	48.8	26.1	14.3	10.9
Not stated . . . . .	100.0	54.6	25.1	11.9	8.4
Region					
Northeast . . . . .	100.0	47.1	26.3	14.3	12.3
Midwest . . . . .	100.0	48.3	25.9	13.7	12.1
South . . . . .	100.0	48.7	27.0	13.9	10.4
West . . . . .	100.0	47.8	26.4	13.8	12.0
Bed size of hospital					
6–99 beds . . . . .	100.0	54.2	27.1	11.5	7.2
100–199 beds . . . . .	100.0	52.6	26.6	12.2	8.6
200–299 beds . . . . .	100.0	47.3	26.7	13.8	12.1
300–499 beds . . . . .	100.0	45.5	26.5	14.7	13.2
500 beds or more . . . . .	100.0	46.5	25.7	15.0	12.8

NOTE: A maximum of 4 procedures were coded for each patient discharged.

**Table J. Number and rate of all-listed surgical procedures for patients discharged from short-stay hospitals, by selected surgical categories: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants. Procedure groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Surgical category and ICD-9-CM code	Number in thousands	Rate per 100,000 population
Surgical procedures <sup>1</sup> . . . . .	25,655	10,616.2
Procedures to assist delivery . . . . . 72-73	2,938	1,215.8
Biopsy <sup>1</sup> . . . . .	1,378	570.3
Cesarean section . . . . . 74.0-74.2, 74.4, 74.99	953	394.2
Cardiac catheterization . . . . . 37.21-37.23	866	358.2
Repair of current obstetric laceration . . . . . 75.5-75.6	660	273.1
Hysterectomy . . . . . 68.3-68.7	655	270.9
Operations on spinal cord and spinal canal structures except biopsies. . . . . 03-03.31, 03.39-03.9	588	243.4
Excision or destruction of lesion or tissue of skin or subcutaneous tissue . . . . . 86.2-86.4	568	235.1
Arthroplasty of joints . . . . . 81.3-81.8	556	230.2
Cholecystectomy. . . . . 51.2	536	221.9
Oophorectomy and salpingo-oophorectomy . . . . . 65.3-65.6	490	202.8
Open reduction of fracture . . . . . 76.79, 79.2-79.3, 79.5-79.6	481	198.9
Bilateral destruction or occlusion of fallopian tubes . . . . . 66.2-66.3	415	171.8
Prostatectomy . . . . . 60.2-60.6	410	169.7
Dilation and curettage of uterus . . . . . 69.0	379	157.0
Excision or destruction of intervertebral disc and spinal fusion . . . . . 80.5,81.0	352	145.7
Division of peritoneal adhesions . . . . . 54.5	339	140.3
Direct heart revascularization . . . . . 36.1	332	137.3
Puncture of vessel. . . . . 38.9	331	137.0
Repair of inguinal hernia. . . . . 53.0-53.1	329	136.2
Operations on muscles, tendons, fascia, and bursa . . . . . 82-83.1, 83.3-83.9	322	133.2
Partial gastrectomy and resection of intestine. . . . . 43.5-43.8, 45.6-45.8	308	127.3
Appendectomy, excluding incidental . . . . . 47.0	303	125.3
Tonsillectomy with or without adenoidectomy . . . . . 28.2-28.3	244	101.0

<sup>1</sup>See appendix II for ICD-9-CM codes in this category.

**Table K. Number and rate of all-listed nonsurgical procedures for patients discharged from short-stay hospitals, by selected nonsurgical categories: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants. Procedure groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Nonsurgical category and ICD-9-CM code	Number in thousands	Rate per 100,000 population
Nonsurgical procedures <sup>1</sup> . . . . .	13,463	5,571.1
Computerized axial tomography (CAT scan) . . . . . 87.03, 87.41, 87.71, 88.01, 88.38	1,646	681.3
Diagnostic ultrasound . . . . . 88.7	1,596	660.5
Endoscopy of the digestive system. . . . . 42.21-42.23, 44.11-44.13, 45.11-45.13, 45.21-45.24, 48.21-48.22, 51.11, 54.21	1,554	643.2
Arteriography and angiocardiology using contrast material . . . . . 88.4-88.5	1,448	599.2
Circulatory monitoring . . . . . 89.6	821	339.8
Radioisotope scan . . . . . 92.01-92.1	759	314.0
Endoscopy of the urinary system through natural orifice . . . . . 55.21-55.22, 56.31, 57.32, 58.22	637	263.6
Electrographic monitoring . . . . . 89.54	517	213.9
Injection or infusion of cancer chemotherapeutic substance . . . . . 99.25	457	188.9
Contrast myelogram. . . . . 87.21	420	173.6
Fetal monitoring . . . . . 75.34	405	167.8
Biliary tract x ray. . . . . 87.5	351	145.3
Pyelogram . . . . . 87.73-87.75	334	138.1

<sup>1</sup>See appendix II for ICD-9-CM codes in this category.

procedures were performed during 1987. As mentioned in the introduction, the use of commercial abstract service data for a sample of the discharges has resulted in recent increases in the estimates of these diagnostic procedures. (See appendix I.)

Data for the leading surgical operations are shown in table J. Some of the most frequently performed surgeries, of which 500,000 or more were performed in 1987, were cesarean section, cardiac catheterization, repair of current obstetric laceration, hysterectomy, operations on spinal cord and spinal canal structures except biopsies, excision or

destruction of lesion or tissue of skin or subcutaneous tissue, arthroplasty of joints, and cholecystectomy.

The estimated 39.1 million procedures performed in 1987 are presented for the ICD-9-CM major groups and selected categories by age, sex, race, and region in tables 15, 17, 19, and 20, respectively. The corresponding rates by age, sex, and region are shown in tables 16, 18, and 21, respectively.

Of the 39.1 million procedures performed during 1987, 40 percent were performed on patients 15-44 years of age, and only 5 percent were performed on patients under 15

**Table L. Number and rate of all-listed procedures for patients discharged from short-stay hospitals, by sex and age of patient: United States, 1987**

[Discharges from short-stay non-Federal hospitals. Excludes newborn infants]

Age	Both sexes	Male	Female
Number of procedures in thousands			
All ages . . . . .	39,118	15,716	23,402
Under 15 years. . . . .	1,866	1,102	764
15-44 years. . . . .	15,632	4,008	11,624
45-64 years. . . . .	9,252	4,672	4,581
65 years and over. . . . .	12,369	5,935	6,434
Rate of procedures per 1,000 population			
All ages . . . . .	161.9	134.4	187.7
Under 15 years. . . . .	35.6	41.1	29.9
15-44 years. . . . .	136.9	71.1	201.1
45-64 years. . . . .	204.4	215.9	193.9
65 years and over. . . . .	414.6	489.7	363.2

years of age. The most common procedure performed on patients under 15 years was tonsillectomy with or without adenoidectomy, and for those 15-44 years of age it was episiotomy with or without forceps or vacuum extraction. The most common procedure for the age group 45-64 years was arteriography and angiocardiology using contrast material. For those 65 years and over, the most common procedures were computerized axial tomography (CAT scan), diagnostic ultrasound, and arteriography and angiocardiology using contrast material.

The rate of procedures per 1,000 population increased with advancing age from a rate of 36 for patients under 15 years to 415 for patients 65 years of age and over (table L). Except for females 15-44 years of age, the rates for both sexes also increased as age increased. The rates for females 15-44 years and 45-64 years were about the same because of the large number of females 15-44 years of age operated on for obstetrical and gynecological conditions.

Of the 39.1 million procedures performed during 1987, about 15.7 million were for males and 23.4 million were for females. The corresponding rates per 1,000 population were 162 for both sexes, 134 for males, and 188 for females. Of the procedures shown in table 17, the most common for males were arteriography and angiocardiology using contrast material, CAT scans, diagnostic ultrasound, cardiac catheterization, and endoscopies through natural orifice. For females, the most frequently performed procedures were episiotomy with or without forceps or vacuum extraction, diagnostic ultrasound, and cesarean section.

The distribution of procedures by race is shown in table 19. Seventy-five percent of all procedures were performed on white patients, 15 percent were performed on all other races, and 10 percent were performed on patients with no race stated. The percent of procedures for white patients was higher than the overall proportion for direct heart revascularization and removal of coronary artery obstruction. The percents were lower, however, for repair of current obstetric laceration, bilateral destruction or occlusion of fallopian tubes, dilation and curettage of uterus, cesarean section, spinal tap, and episiotomy with or without forceps. The percent of procedures for all other patients was higher than average for dilation and curettage of uterus, bilateral destruction and occlusion of fallopian tubes, spinal tap, and repair of current obstetric laceration. The percents were lower for repair of cystocele and rectocele, direct heart revascularization, and arthroplasty and replacement of hip.

The number of procedures for patients discharged from short-stay hospitals is presented by procedure category and geographic region in table 20, and the corresponding rates are shown in table 21. The rate of procedures per 1,000 population was 173 in the West Region, 169 in the Northeast, 167 in the Midwest, and 147 in the South. The rate of 173 per 1,000 population recorded in the West Region for 1987 represented a sharp increase from the

**Table M. Percent distribution of all-listed procedures for patients discharged from short-stay hospitals by bed size of hospital, according to procedure category: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Excludes newborn infants. Diagnostic groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Procedure category and ICD-9-CM code	All sizes	6-99 beds	100-199 beds	200-299 beds	300-499 beds	500 beds or more
Percent distribution						
All procedures . . . . .	100.0	9.6	12.4	25.9	27.5	24.6
Operations on the nervous system . . . . . .01-05	100.0	6.8	13.8	21.8	28.6	29.0
Operations on the endocrine system . . . . . .06-07	100.0	*5.5	10.1	24.8	27.5	32.1
Operations on the eye . . . . . .08-16	100.0	14.7	8.0	21.1	25.8	30.6
Operations on the ear . . . . . .18-20	100.0	*4.0	18.2	30.7	26.7	20.5
Operations on the nose, mouth, and pharynx . . . . . .21-29	100.0	12.9	20.3	22.5	21.3	22.9
Operations on the respiratory system . . . . . .30-34	100.0	5.1	13.4	23.8	30.3	27.5
Operations on the cardiovascular system . . . . . .35-39	100.0	2.0	5.6	22.8	34.1	35.5
Operations on the hemic and lymphatic system . . . . . .40-41	100.0	5.0	11.8	23.4	28.4	31.7
Operations on the digestive system . . . . . .42-54	100.0	13.6	15.1	25.5	24.6	21.1
Operations on the urinary system . . . . . .55-59	100.0	10.8	14.4	25.3	26.7	22.7
Operations on the male genital organs . . . . . .60-64	100.0	12.2	14.7	28.5	24.5	20.2
Operations on the female genital organs . . . . . .65-71	100.0	14.4	13.9	27.5	24.1	20.0
Obstetrical procedures . . . . . .72-75	100.0	10.0	9.8	25.0	29.4	25.8
Operations on the musculoskeletal system . . . . . .76-84	100.0	15.0	13.6	24.9	25.2	21.2
Operations on the integumentary system . . . . . .85-86	100.0	12.7	12.6	23.9	25.8	25.1
Miscellaneous diagnostic and therapeutic procedures . . . . . .87-99	100.0	5.8	12.1	28.9	28.6	24.6

previous year's rate of 154 per 1,000. This was due largely to a 25-percent increase in the number of obstetrical and miscellaneous diagnostic procedures performed. The rates were highest for miscellaneous diagnostic and therapeutic procedures and operations on the digestive system.

The number of procedures in short-stay hospitals during 1987 for each ICD-9-CM category is shown in table 22 by bed size of hospital where the procedure was performed. Miscellaneous diagnostic and therapeutic procedures and operations on the digestive system ranked highest of all-listed procedures in hospitals for most bed sizes.

The percent distribution of the major groups of procedures is shown by bed size of hospital in table M. An estimated 45 percent of the patients hospitalized during 1987 were treated in hospitals with 300 beds or more, but about 52 percent of the procedures were performed in these hospitals. Procedures for which large percents were performed in hospitals with 300 beds or more were operations on the cardiovascular system (70 percent), operations on the hemic and lymphatic system (60 percent), and operations on the endocrine system (60 percent).

# Deaths in short-stay hospitals

In 1987, 95.9 percent of patients, excluding newborn infants, who were discharged from short-stay hospitals were discharged alive, 2.8 percent were discharged dead, and for 1.3 percent a discharge status was not ascribed. Of the estimated 940,000 patients who died, 51.2 percent were male and 48.8 percent were female (table N). As expected, patients 65 years and over accounted for the majority of hospital deaths—71.8 percent. Patients under 65 years of age accounted for 28.2 percent of the deaths. The 940,000 patients who were discharged dead from these hospitals represented about 44 percent of all persons who died during 1987 (NCHS, 1988b).

The hospital fatality rate is the number of deaths divided by the number of total discharges multiplied by 100.

This is a conservative rate because it is assumed in the formula that all patients whose discharge status was not stated were discharged alive. A fatality rate of 2.8 has been computed for patients in 1987. The rate for males (3.5) was higher than that for females (2.3).

The age group 65 years and over had a hospital fatality rate of 6.5 per 100 discharges. However, patients under 65 years of age had a fatality rate of 1.2.

The estimated number of hospital deaths and hospital fatality rates for patients under 65 years of age and for those 65 years and over are shown for selected conditions in table O. These data are not synonymous with data for underlying cause of death as reported in *Vital Statistics of the United States*. Of the estimated 940,000 deaths in

**Table N. Number of deaths and fatality rate of patients discharged from short-stay hospitals, by sex and age of patient: United States, 1987**

[Deaths in non-Federal short-stay hospitals. Excludes newborn infants]

Age	Both sexes			Both sexes		
	Male	Female	Rate per 100 discharges	Male	Female	Rate per 100 discharges
	Number in thousands			Rate per 100 discharges		
All ages	940	481	459	2.8	3.5	2.3
Under 65 years	265	148	116	1.2	1.7	0.8
Under 15 years	20	*10	*10	0.7	*0.6	*0.9
15-44 years	56	37	19	0.4	0.9	0.2
45-64 years	189	102	87	2.7	2.9	2.4
65 years and over	675	333	342	6.5	7.2	5.9

**Table O. Number of deaths and fatality rate of patients discharged from short-stay hospitals, by age and selected categories of first-listed diagnosis: United States, 1987**

[Deaths in non-Federal short-stay hospitals. Diagnostic groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Category of first-listed diagnosis and ICD-9-CM code	All ages			All ages		
	Under 65 years	65 years and over	Rate per 100 discharges	Under 65 years	65 years and over	Rate per 100 discharges
	Number in thousands			Rate per 100 discharges		
All deaths	940	265	675	2.8	1.2	6.5
Malignant neoplasms	184	74	110	9.8	7.9	11.6
Malignant neoplasm of trachea, bronchus, and lung	51	18	32	16.6	12.9	19.7
Heart disease	229	47	182	6.1	3.1	8.1
Acute myocardial infarction	105	19	86	13.9	5.9	19.8
Chronic ischemic heart disease	14	*	*10	1.0	*	*1.4
Cardiac dysrhythmias	40	13	27	7.7	7.2	7.9
Congestive heart failure	49	*	45	8.0	*	9.3
Cerebrovascular disease	82	16	65	9.1	7.2	9.8
Pneumonia, all forms	63	*9	53	6.8	*2.0	11.9
Nephritis, nephrotic syndrome, and nephrosis	17	*	14	14.6	*	24.8
Injury and poisoning	43	18	25	1.4	0.8	3.3

short-stay hospitals, 66 percent are accounted for by the diagnostic groupings shown in table O. Of these, heart disease and malignant neoplasms accounted for nearly one-half (413,000) of all deaths in short-stay hospitals.

For these specific diagnoses, the highest fatality rates were for malignant neoplasm of trachea, bronchus, and lung, with a rate of 16.6 per 100 discharges; nephritis, nephrotic syndrome, and nephrosis, with a rate of 14.6 per 100 discharges; and acute myocardial infarction with a rate of 13.9 per 100 discharges.

The average length of stay for patients discharged from short-stay hospitals is shown by discharge status, age, and

sex in table P. The average stay for all patients discharged was 6.4 days. Patients discharged alive had an average stay of 6.3 days, compared with an average stay of 11.2 days for patients who died in the hospital.

Patients under 65 years of age who were discharged alive stayed an average of 5.4 days; however, those who died had an average stay of 11.7 days. The hospital stay for patients 15–44 years of age who died was 2.6 times as long as the stay for those who were discharged alive (12.3 and 4.8 days, respectively). The difference in length of stay was much smaller for patients 65 years and over—8.5 days for those discharged alive and 11.0 days for those who died.

**Table P. Average length of stay of patients discharged from short-stay hospitals, by discharge status, sex, and age: United States, 1987**  
[Deaths in non-Federal short-stay hospitals. Excludes newborn infants]

Age	Discharge status					
	Alive			Dead		
	Both sexes	Male	Female	Both sexes	Male	Female
	Average length of stay in days					
All ages . . . . .	6.3	6.8	6.0	11.2	11.0	11.3
Under 65 years . . . . .	5.4	6.1	4.8	11.7	11.9	11.5
Under 15 years . . . . .	4.7	4.7	4.6	8.1	9.1	7.1
15–44 years . . . . .	4.8	6.3	4.2	12.3	12.9	11.2
45–64 years . . . . .	6.7	6.6	6.7	11.9	11.8	12.0
65 years and over . . . . .	8.5	8.1	8.8	11.0	10.7	11.2

# Newborn infant discharges

The number, percent distribution, and average length of stay of newborn infants discharged from short-stay hospitals are shown by sex and geographic region in table Q. Because these data are based on a sample, they may not agree with data on births published in *Vital Statistics of the United States*. The estimated 4.0 million newborn infants were equally divided between the sexes.

About 34 percent (1.3 million) of newborn discharges were from the South Region, 25 percent (1.0 million) from the West, 24 percent (0.9 million) from the Midwest, and 18 percent (0.7 million) from the Northeast. The average length of stay ranged from a high of 4.2 days in the Northeast Region to a low of 2.9 days in the West. The average length of stay was 3.7 days in the Midwest Region and 3.5 days in the South. About 61 percent of the 4.0 million newborn infants discharged from short-stay hospitals were "well" (table R). A well infant is defined as one who does not have an illness or risk-related diagnosis.

The estimated 1.5 million sick infants (39 percent of all newborns) had at least one diagnosis in addition to the newborn diagnosis. Some of these additional diagnoses are shown in table S. About 0.6 million (23 percent) of the diagnoses were for jaundice. The next three leading diagnoses were respiratory conditions, prematurity, and congenital anomalies. These four diagnoses accounted for about 51 percent of all sick newborn diagnoses.

Males accounted for 60 percent of the respiratory diagnoses and 53 percent each of the prematurity diagnoses, congenital conditions, and jaundice. Of the 1.5 mil-

lion sick newborn infants, there were 15 percent more boys than girls. Moreover, sick newborn boys had 20 percent more diagnoses than sick newborn girls had.

Well newborn infants had an average hospital stay of 2.5 days, and there was no difference in the length of stay by sex, as shown in table R. This table further documents that sick newborn infants stay twice as long as well infants (5.1 versus 2.5 days). Sick newborns account for 56 percent of the newborn patient days, although they constitute only 39 percent of newborn infants.

**Table R. Number and average length of stay of newborn infants discharged from non-Federal short-stay hospitals, by sex and health status: United States, 1987**

Health status	Both sexes	Male	Female
Number in thousands			
Total . . . . .	3,971	2,033	1,938
Well . . . . .	2,435	1,211	1,224
Sick . . . . .	1,536	821	715
Average length of stay in days			
Total . . . . .	3.5	3.6	3.5
Well . . . . .	2.5	2.6	2.5
Sick . . . . .	5.1	5.0	5.1

**Table S. Number of all-listed diagnoses for sick newborn infants discharged from short-stay hospitals, by sex and selected diagnostic categories: United States, 1987**

[Discharges from non-Federal short-stay hospitals. Diagnostic groupings and code number inclusions are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*]

Diagnostic category and ICD-9-CM code	Both sexes	Male	Female
Number in thousands			
Sick newborn infant diagnoses <sup>1</sup> . . . . .	2,636	1,437	1,200
Congenital anomalies . . . . . 740-759	226	120	106
Disorders relating to short gestation and unspecified low birthweight (prematurity) . . . 765	234	125	109
Respiratory distress syndrome and other respiratory conditions of fetus and newborn . . . . . 769-770	280	168	113
Hemolytic disease of fetus or newborn, due to isoimmunization and other perinatal jaundice . . . . . 773-774	608	320	288

<sup>1</sup>Includes data for diagnostic conditions not shown in table.

**Table Q. Number, percent distribution, and average length of stay for newborn infants discharged from non-Federal short-stay hospitals, by sex and geographic region: United States, 1987**

Sex and region	Number of discharges	Percent distribution	Average length of stay in days
All newborn infants . . . . .	3,971	100.0	3.5
Sex			
Male . . . . .	2,033	51.2	3.6
Female . . . . .	1,938	48.8	3.5
Region			
Northeast . . . . .	700	17.6	4.2
Midwest . . . . .	938	23.6	3.7
South . . . . .	1,341	33.8	3.5
West . . . . .	992	25.0	2.9

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TABLE 1. NUMBER, PERCENT DISTRIBUTION, AND RATE OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS AND OF DAYS OF CARE, WITH AVERAGE LENGTHS OF STAY, BY SEX AND AGE: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

SEX AND AGE	DISCHARGED PATIENTS			DAYS OF CARE			
	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	AVERAGE LENGTH OF STAY IN DAYS
BOTH SEXES							
ALL AGES.....	33,387	100.0	138.2	214,942	100.0	889.4	6.4
UNDER 15 YEARS.....	2,688	8.0	51.3	12,609	5.9	240.6	4.7
UNDER 1 YEAR.....	723	2.2	191.6	4,244	2.0	1,125.4	5.9
1-4 YEARS.....	804	2.4	55.5	2,917	1.4	201.4	3.6
5-14 YEARS.....	1,161	3.5	34.0	5,448	2.5	159.6	4.7
15-44 YEARS.....	13,142	39.4	115.1	63,576	29.6	556.9	4.8
15-19 YEARS.....	1,619	4.8	88.4	7,717	3.6	421.5	4.8
20-24 YEARS.....	2,476	7.4	129.1	10,039	4.7	523.3	4.1
25-34 YEARS.....	5,581	16.7	130.9	26,194	12.2	614.1	4.7
35-44 YEARS.....	3,465	10.4	101.8	19,626	9.1	576.8	5.7
45-64 YEARS.....	7,099	21.3	156.9	48,360	22.5	1,068.6	6.8
45-54 YEARS.....	3,050	9.1	131.2	19,550	9.1	841.2	6.4
55-64 YEARS.....	4,049	12.1	183.9	28,810	13.4	1,308.5	7.1
65 YEARS AND OVER.....	10,459	31.3	350.5	90,397	42.1	3,029.9	8.6
65-74 YEARS.....	4,963	14.9	280.9	40,534	18.9	2,294.4	8.2
75-84 YEARS.....	3,968	11.9	426.6	35,403	16.5	3,806.3	8.9
85 YEARS AND OVER.....	1,528	4.6	532.9	14,459	6.7	5,043.4	9.5
UNDER 17 YEARS.....	3,179	9.5	53.2	15,260	7.1	255.2	4.8
17-69 YEARS.....	22,183	66.4	137.0	128,603	59.8	794.2	5.8
70 YEARS AND OVER.....	8,024	24.0	402.3	71,079	33.1	3,563.4	8.9
MALE							
ALL AGES.....	13,568	100.0	116.0	94,230	100.0	805.7	6.9
UNDER 15 YEARS.....	1,537	11.3	57.3	7,242	7.7	269.9	4.7
UNDER 1 YEAR.....	416	3.1	215.2	2,395	2.5	1,240.2	5.8
1-4 YEARS.....	478	3.5	64.5	1,656	1.8	223.5	3.5
5-14 YEARS.....	644	4.7	36.8	3,191	3.4	182.5	5.0
15-44 YEARS.....	3,874	28.6	68.7	24,868	26.4	441.1	6.4
15-19 YEARS.....	505	3.7	54.5	3,173	3.4	342.1	6.3
20-24 YEARS.....	540	4.0	57.7	3,366	3.6	359.3	6.2
25-34 YEARS.....	1,416	10.4	67.1	9,314	9.9	441.8	6.6
35-44 YEARS.....	1,413	10.4	84.9	9,015	9.6	541.6	6.4
45-64 YEARS.....	3,528	26.0	163.1	23,784	25.2	1,099.1	6.7
45-54 YEARS.....	1,452	10.7	128.7	9,335	9.9	828.0	6.4
55-64 YEARS.....	2,077	15.3	200.4	14,448	15.3	1,394.1	7.0
65 YEARS AND OVER.....	4,629	34.1	381.9	38,336	40.7	3,163.3	8.3
65-74 YEARS.....	2,416	17.8	308.7	19,131	20.3	2,445.2	7.9
75-84 YEARS.....	1,714	12.6	491.2	14,876	15.8	4,263.7	8.7
85 YEARS AND OVER.....	499	3.7	619.1	4,329	4.6	5,371.4	8.7
UNDER 17 YEARS.....	1,725	12.7	56.4	8,407	8.9	274.6	4.9
17-69 YEARS.....	8,406	62.0	106.8	56,756	60.2	720.9	6.8
70 YEARS AND OVER.....	3,436	25.3	450.7	29,067	30.8	3,812.5	8.5
FEMALE							
ALL AGES.....	19,818	100.0	158.9	120,713	100.0	968.0	6.1
UNDER 15 YEARS.....	1,150	5.8	45.0	5,367	4.4	209.9	4.7
UNDER 1 YEAR.....	307	1.5	166.8	1,849	1.5	1,004.3	6.0
1-4 YEARS.....	326	1.6	46.1	1,261	1.0	178.3	3.9
5-14 YEARS.....	517	2.6	31.0	2,258	1.9	135.5	4.4
15-44 YEARS.....	9,268	46.8	160.3	38,708	32.1	669.7	4.2
15-19 YEARS.....	1,113	5.6	123.2	4,544	3.8	502.9	4.1
20-24 YEARS.....	1,936	9.8	197.3	6,673	5.5	680.0	3.4
25-34 YEARS.....	4,166	21.0	193.1	16,880	14.0	782.6	4.1
35-44 YEARS.....	2,052	10.4	118.1	10,612	8.8	610.6	5.2
45-64 YEARS.....	3,571	18.0	151.2	24,577	20.4	1,040.5	6.9
45-54 YEARS.....	1,598	8.1	133.6	10,215	8.5	853.7	6.4
55-64 YEARS.....	1,972	10.0	169.2	14,362	11.9	1,232.4	7.3
65 YEARS AND OVER.....	5,830	29.4	329.1	52,060	43.1	2,938.6	8.9
65-74 YEARS.....	2,547	12.9	258.8	21,404	17.7	2,174.3	8.4
75-84 YEARS.....	2,254	11.4	387.8	20,527	17.0	3,531.8	9.1
85 YEARS AND OVER.....	1,029	5.2	499.2	10,130	8.4	4,915.1	9.8
UNDER 17 YEARS.....	1,454	7.3	49.8	6,852	5.7	234.9	4.7
17-69 YEARS.....	13,777	69.5	165.6	71,847	59.5	863.5	5.2
70 YEARS AND OVER.....	4,588	23.1	372.2	42,013	34.8	3,408.7	9.2

TABLE 2. NUMBER, PERCENT DISTRIBUTION, AND RATE OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS AND OF DAYS OF CARE, WITH AVERAGE LENGTHS OF STAY, BY SEX, RACE, AND AGE: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

SEX, RACE, AND AGE	DISCHARGED PATIENTS			DAYS OF CARE			
	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	AVERAGE LENGTH OF STAY IN DAYS
BOTH SEXES							
ALL RACES, ALL AGES.....	33,387	100.0	138.2	214,942	100.0	889.4	6.4
UNDER 15 YEARS.....	2,688	8.0	51.3	12,609	5.9	240.6	4.7
15-44 YEARS.....	13,142	39.4	115.1	63,576	29.6	556.9	4.8
45-64 YEARS.....	7,099	21.3	156.9	48,360	22.5	1,068.6	6.8
65 YEARS AND OVER.....	10,459	31.3	350.5	90,397	42.1	3,025.9	8.6
WHITE, ALL AGES.....	24,376	73.0	119.2	159,060	74.0	777.9	6.5
UNDER 15 YEARS.....	1,814	5.4	42.9	8,264	3.8	195.7	4.6
15-44 YEARS.....	8,854	26.5	92.3	43,277	20.1	451.0	4.9
45-64 YEARS.....	5,358	16.0	135.9	35,987	16.7	913.0	6.7
65 YEARS AND OVER.....	8,350	25.0	310.8	71,532	33.3	2,662.6	8.6
ALL OTHER, ALL AGES.....	5,174	15.5	139.1	34,063	15.8	915.9	6.6
UNDER 15 YEARS.....	590	1.8	58.0	3,183	1.5	313.4	5.4
15-44 YEARS.....	2,677	8.0	146.9	13,641	6.3	748.6	5.1
45-64 YEARS.....	966	2.9	165.4	7,513	3.5	1,286.5	7.8
65 YEARS AND OVER.....	942	2.8	317.1	9,725	4.5	3,274.3	10.3
RACE NOT STATED, ALL AGES.....	3,836	11.5	...	21,820	10.2	...	5.7
UNDER 15 YEARS.....	284	0.9	...	1,161	0.5	...	4.1
15-44 YEARS.....	1,610	4.8	...	6,658	3.1	...	4.1
45-64 YEARS.....	775	2.3	...	4,860	2.3	...	6.3
65 YEARS AND OVER.....	1,167	3.5	...	9,140	4.3	...	7.8
MALE							
ALL RACES, ALL AGES.....	13,568	100.0	116.0	94,230	100.0	805.7	6.9
UNDER 15 YEARS.....	1,537	11.3	57.3	7,242	7.7	269.9	4.7
15-44 YEARS.....	3,874	28.6	68.7	24,868	26.4	441.1	6.4
45-64 YEARS.....	3,528	26.0	163.1	23,784	25.2	1,099.1	6.7
65 YEARS AND OVER.....	4,629	34.1	381.9	38,336	40.7	3,163.3	8.3
WHITE, ALL AGES.....	10,100	74.4	101.7	69,589	73.9	700.4	6.9
UNDER 15 YEARS.....	1,042	7.7	48.1	4,871	5.2	224.7	4.7
15-44 YEARS.....	2,688	19.8	56.3	16,967	18.0	355.1	6.3
45-64 YEARS.....	2,696	19.9	141.9	17,713	18.8	932.3	6.6
65 YEARS AND OVER.....	3,674	27.1	336.9	30,037	31.9	2,754.4	8.2
ALL OTHER, ALL AGES.....	1,974	14.6	112.2	15,271	16.2	867.5	7.7
UNDER 15 YEARS.....	341	2.5	66.3	1,727	1.8	335.3	5.1
15-44 YEARS.....	757	5.6	88.1	5,552	5.9	645.7	7.3
45-64 YEARS.....	448	3.3	169.7	3,653	3.9	1,384.1	8.2
65 YEARS AND OVER.....	428	3.2	352.3	4,339	4.6	3,574.4	10.1
RACE NOT STATED, ALL AGES.....	1,494	11.0	...	9,370	9.9	...	6.3
UNDER 15 YEARS.....	154	1.1	...	643	0.7	...	4.2
15-44 YEARS.....	429	3.2	...	2,349	2.5	...	5.5
45-64 YEARS.....	384	2.8	...	2,418	2.6	...	6.3
65 YEARS AND OVER.....	527	3.9	...	3,960	4.2	...	7.5
FEMALE							
ALL RACES, ALL AGES.....	19,818	100.0	158.9	120,713	100.0	968.0	6.1
UNDER 15 YEARS.....	1,150	5.8	45.0	5,367	4.4	209.9	4.7
15-44 YEARS.....	9,268	46.8	160.3	38,708	32.1	669.7	4.2
45-64 YEARS.....	3,571	18.0	151.2	24,577	20.4	1,040.5	6.9
65 YEARS AND OVER.....	5,830	29.4	329.1	52,060	43.1	2,938.6	8.9
WHITE, ALL AGES.....	14,276	72.0	135.8	89,471	74.1	851.2	6.3
UNDER 15 YEARS.....	772	3.9	37.5	3,393	2.8	165.0	4.4
15-44 YEARS.....	6,167	31.1	128.0	26,309	21.8	546.1	4.3
45-64 YEARS.....	2,662	13.4	130.4	18,274	15.1	894.9	6.9
65 YEARS AND OVER.....	4,676	23.6	293.0	41,495	34.4	2,599.9	8.9
ALL OTHER, ALL AGES.....	3,200	16.1	163.4	18,792	15.6	959.4	5.9
UNDER 15 YEARS.....	248	1.3	49.6	1,456	1.2	291.0	5.9
15-44 YEARS.....	1,920	9.7	199.5	8,089	6.7	840.4	4.2
45-64 YEARS.....	518	2.6	161.9	3,861	3.2	1,206.5	7.5
65 YEARS AND OVER.....	514	2.6	423.4	5,385	4.5	4,436.1	10.5
RACE NOT STATED, ALL AGES.....	2,342	11.8	...	12,450	10.3	...	5.3
UNDER 15 YEARS.....	130	0.7	...	518	0.4	...	4.0
15-44 YEARS.....	1,181	6.0	...	4,310	3.6	...	3.6
45-64 YEARS.....	391	2.0	...	2,442	2.0	...	6.2
65 YEARS AND OVER.....	640	3.2	...	5,180	4.3	...	8.1

TABLE 3. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY BY, PRINCIPAL EXPECTED SOURCE OF PAYMENT, GEOGRAPHIC REGION, AND AGE: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

REGION AND AGE	ALL PRINCIPAL EXPECTED SOURCES OF PAYMENT	PRIVATE INSURANCE	MEDICARE	MEDICAID	WGRKMEN'S COMPEN-SATION	OTHER GOVERNMENT PAYMENTS	SELF-PAY	OTHER PAYMENTS AND NO CHARGE
UNITED STATES								
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS								
ALL AGES.....	33,347	14,628	11,126	3,273	570	673	2,284	833
UNDER 15 YEARS.....	2,688	1,486	41	677	-	94	309	80
15-44 YEARS.....	13,142	7,985	385	1,976	342	402	1,508	543
45-64 YEARS.....	7,099	4,730	929	528	152	163	409	187
65 YEARS AND OVER.....	10,459	427	9,770	92	76	15	57	23
NORTHEAST								
ALL AGES.....	6,699	2,893	2,375	766	78	97	349	140
UNDER 15 YEARS.....	446	270	45	124	-	47	30	10
15-44 YEARS.....	2,540	1,546	53	484	53	64	246	93
45-64 YEARS.....	1,441	997	170	137	22	23	61	33
65 YEARS AND OVER.....	2,272	81	2,147	21	4	4	12	45
MIDWEST								
ALL AGES.....	8,718	3,917	3,032	865	189	122	440	153
UNDER 15 YEARS.....	674	398	11	186	-	16	49	14
15-44 YEARS.....	3,272	2,072	131	521	86	74	293	95
45-64 YEARS.....	1,928	1,355	239	137	46	29	87	35
65 YEARS AND OVER.....	2,845	93	2,650	20	58	4	11	49
SOUTH								
ALL AGES.....	11,292	5,057	3,566	1,135	212	185	1,023	113
UNDER 15 YEARS.....	1,148	601	16	294	-	29	197	11
15-44 YEARS.....	4,485	2,781	126	637	145	100	619	77
45-64 YEARS.....	2,393	1,554	350	171	58	52	185	22
65 YEARS AND OVER.....	3,266	121	3,075	33	49	4	22	4
WEST								
ALL AGES.....	6,678	2,760	2,153	508	89	270	472	426
UNDER 15 YEARS.....	420	218	10	73	-	42	33	45
15-44 YEARS.....	2,845	1,586	75	334	58	163	350	279
45-64 YEARS.....	1,338	825	171	83	26	59	77	97
65 YEARS AND OVER.....	2,076	132	1,897	18	45	46	12	46
UNITED STATES								
NUMBER OF DAYS OF CARE IN THOUSANDS								
ALL AGES.....	214,942	76,296	96,255	18,918	3,440	3,647	11,962	4,424
UNDER 15 YEARS.....	12,609	6,430	294	3,542	-	489	1,459	395
15-44 YEARS.....	63,576	36,652	3,372	10,243	1,692	1,941	7,030	2,648
45-64 YEARS.....	48,360	29,975	7,900	4,265	957	1,121	2,944	1,198
65 YEARS AND OVER.....	90,397	3,238	84,689	868	792	96	529	183
NORTHEAST								
ALL AGES.....	50,042	15,864	25,086	5,242	387	602	2,015	846
UNDER 15 YEARS.....	1,801	875	40	681	-	44	130	30
15-44 YEARS.....	13,101	7,213	537	2,990	244	359	1,247	511
45-64 YEARS.....	11,064	7,029	1,650	1,314	110	182	532	247
65 YEARS AND OVER.....	24,076	747	22,859	257	4	4	106	458
MIDWEST								
ALL AGES.....	58,005	21,946	25,380	5,191	1,360	806	2,564	758
UNDER 15 YEARS.....	3,503	1,980	67	1,043	-	105	221	87
15-44 YEARS.....	17,228	10,410	1,041	2,886	426	453	1,585	427
45-64 YEARS.....	13,333	8,814	2,025	1,113	312	224	652	191
65 YEARS AND OVER.....	23,942	742	22,247	148	622	4	106	452
SOUTH								
ALL AGES.....	70,118	26,071	29,678	6,023	1,198	959	5,429	760
UNDER 15 YEARS.....	5,430	2,758	102	1,448	-	96	962	64
15-44 YEARS.....	21,572	12,789	1,079	2,587	738	512	2,976	491
45-64 YEARS.....	15,884	9,593	2,874	1,286	368	326	1,258	179
65 YEARS AND OVER.....	27,232	931	25,623	303	492	4	233	4
WEST								
ALL AGES.....	36,777	12,415	16,111	2,462	495	1,279	1,954	2,060
UNDER 15 YEARS.....	1,876	817	85	370	-	243	146	214
15-44 YEARS.....	11,675	6,241	715	1,379	283	618	1,222	1,218
45-64 YEARS.....	8,080	4,539	1,351	551	166	390	502	580
65 YEARS AND OVER.....	15,147	818	13,960	161	446	429	84	448

TABLE 3. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY BY, PRINCIPAL EXPECTED SOURCE OF PAYMENT, GEOGRAPHIC REGION, AND AGE: UNITED STATES, 1987--CON.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

REGION AND AGE	ALL PRINCIPAL EXPECTED SOURCES OF PAYMENT	PRIVATE INSURANCE	MEDICARE	MEDICAID	WORKMEN'S COMPEN- SATION	OTHER GOVERNMENT PAYMENTS	SELF-PAY	OTHER PAYMENTS AND NO CHARGE
UNITED STATES								
AVERAGE LENGTH OF STAY IN DAYS								
ALL AGES.....	6.4	5.2	8.7	5.8	6.0	5.4	5.2	5.3
UNDER 15 YEARS.....	4.7	4.3	7.1	5.2	-	5.2	4.7	5.0
15-44 YEARS.....	4.8	4.6	8.8	5.2	5.0	4.8	4.7	4.9
45-64 YEARS.....	6.8	6.3	8.5	8.1	6.3	6.9	7.2	6.4
65 YEARS AND OVER.....	8.6	7.6	8.7	9.5	10.4	6.4	9.3	8.1
NORTHEAST								
ALL AGES.....	7.5	5.5	10.6	6.8	4.9	6.2	5.8	6.0
UNDER 15 YEARS.....	4.0	3.2	4.3	5.5	-	*6.6	4.3	3.0
15-44 YEARS.....	5.2	4.7	10.1	6.2	4.6	5.6	5.1	5.5
45-64 YEARS.....	7.7	7.1	9.7	9.6	5.1	7.9	8.7	7.6
65 YEARS AND OVER.....	10.6	9.3	10.6	12.3	*	*	9.0	*11.7
MIDWEST								
ALL AGES.....	6.7	5.6	8.4	6.0	7.2	6.6	5.8	4.9
UNDER 15 YEARS.....	5.2	5.0	6.1	5.6	-	6.5	4.5	6.1
15-44 YEARS.....	5.3	5.0	7.9	5.5	5.0	6.1	5.4	4.5
45-64 YEARS.....	6.9	6.5	8.5	8.1	6.8	7.8	7.5	5.5
65 YEARS AND OVER.....	8.4	8.0	8.4	7.2	10.8	*	9.8	*5.6
SOUTH								
ALL AGES.....	6.2	5.2	8.3	5.3	5.6	5.2	5.3	6.7
UNDER 15 YEARS.....	4.7	4.6	6.5	4.9	-	3.3	4.9	5.8
15-44 YEARS.....	4.8	4.6	8.6	4.7	5.1	5.1	4.8	6.4
45-64 YEARS.....	6.6	6.2	8.2	7.5	6.3	6.2	6.8	8.0
65 YEARS AND OVER.....	8.3	7.7	8.3	9.3	*9.9	*	10.7	*
WEST								
ALL AGES.....	5.5	4.5	7.5	4.8	5.5	4.7	4.1	4.8
UNDER 15 YEARS.....	4.5	3.8	8.5	5.1	-	5.8	4.4	4.8
15-44 YEARS.....	4.1	3.9	9.5	4.1	4.9	3.8	3.5	4.4
45-64 YEARS.....	6.0	5.5	7.9	6.6	6.3	6.6	6.6	6.0
65 YEARS AND OVER.....	7.3	6.2	7.4	9.1	*8.8	*5.0	6.9	*8.1

TABLE 4. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY, BY SEX, AGE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

AGE, REGION, AND BED SIZE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
	NUMBER OF PATIENTS DISCHARGED IN THOUSANDS			NUMBER OF DAYS OF CARE IN THOUSANDS			AVERAGE LENGTH OF STAY IN DAYS		
<b>ALL AGES</b>									
UNITED STATES, ALL SIZES.....	33,387	13,568	19,818	214,942	94,230	120,713	6.4	6.9	6.1
6-99 BEDS.....	5,079	1,988	3,091	25,137	10,212	14,925	4.9	5.1	4.8
100-199 BEDS.....	5,153	2,167	2,986	32,458	14,388	18,070	6.3	6.6	6.1
200-299 BEDS.....	7,997	3,204	4,794	49,186	21,519	27,667	6.2	6.7	5.8
300-499 BEDS.....	8,308	3,407	4,902	57,954	25,321	32,633	7.0	7.4	6.7
500 BEDS OR MORE.....	6,849	2,803	4,046	50,208	22,790	27,418	7.3	8.1	6.8
<b>NORTHEAST, ALL SIZES.....</b>	<b>6,699</b>	<b>2,816</b>	<b>3,883</b>	<b>50,042</b>	<b>21,607</b>	<b>28,434</b>	<b>7.5</b>	<b>7.7</b>	<b>7.3</b>
6-99 BEDS.....	656	301	355	4,369	1,912	2,457	6.7	6.4	6.9
100-199 BEDS.....	782	326	456	5,532	2,327	3,206	7.1	7.1	7.0
200-299 BEDS.....	1,492	644	849	10,758	4,677	6,082	7.2	7.3	7.2
300-499 BEDS.....	2,515	1,009	1,506	19,018	7,789	11,230	7.6	7.7	7.5
500 BEDS OR MORE.....	1,252	536	717	10,364	4,903	5,461	8.3	9.2	7.6
<b>MIDWEST, ALL SIZES.....</b>	<b>8,718</b>	<b>3,602</b>	<b>5,117</b>	<b>58,005</b>	<b>25,683</b>	<b>32,322</b>	<b>6.7</b>	<b>7.1</b>	<b>6.3</b>
6-99 BEDS.....	948	369	580	4,730	1,813	2,916	5.0	4.9	5.0
100-199 BEDS.....	1,099	436	663	6,532	2,791	3,741	5.9	6.4	5.6
200-299 BEDS.....	1,763	724	1,039	11,273	4,866	6,406	6.4	6.7	6.2
300-499 BEDS.....	2,463	1,073	1,391	17,233	8,057	9,175	7.0	7.5	6.6
500 BEDS OR MORE.....	2,445	1,000	1,445	18,238	8,155	10,083	7.5	8.2	7.0
<b>SOUTH, ALL SIZES.....</b>	<b>11,292</b>	<b>4,537</b>	<b>6,755</b>	<b>70,118</b>	<b>30,620</b>	<b>39,499</b>	<b>6.2</b>	<b>6.7</b>	<b>5.8</b>
6-99 BEDS.....	2,177	849	1,328	11,029	4,469	6,560	5.1	5.3	4.9
100-199 BEDS.....	2,500	1,072	1,429	15,421	6,896	8,525	6.2	6.4	6.0
200-299 BEDS.....	2,317	892	1,425	14,071	6,263	7,808	6.1	7.0	5.5
300-499 BEDS.....	1,874	740	1,135	12,859	5,439	7,421	6.9	7.4	6.5
500 BEDS OR MORE.....	2,424	986	1,438	16,737	7,552	9,185	6.9	7.7	6.4
<b>WEST, ALL SIZES.....</b>	<b>6,678</b>	<b>2,614</b>	<b>4,064</b>	<b>36,777</b>	<b>16,319</b>	<b>20,458</b>	<b>5.5</b>	<b>6.2</b>	<b>5.0</b>
6-99 BEDS.....	1,298	470	828	5,010	2,017	2,993	3.9	4.3	3.6
100-199 BEDS.....	771	333	439	4,972	2,374	2,597	6.4	7.1	5.9
200-299 BEDS.....	2,426	945	1,481	13,083	5,713	7,371	5.4	6.0	5.0
300-499 BEDS.....	1,456	585	870	8,843	4,036	4,807	6.1	6.9	5.5
500 BEDS OR MORE.....	727	281	446	4,869	2,179	2,690	6.7	7.7	6.0
<b>UNDER 15 YEARS</b>									
UNITED STATES, ALL SIZES.....	2,688	1,537	1,150	12,609	7,242	5,367	4.7	4.7	4.7
6-99 BEDS.....	373	201	172	1,157	616	541	3.1	3.1	3.1
100-199 BEDS.....	751	432	319	3,906	2,288	1,618	5.2	5.3	5.1
200-299 BEDS.....	539	310	229	2,134	1,252	883	4.0	4.0	3.9
300-499 BEDS.....	505	291	215	2,420	1,351	1,069	4.8	4.6	5.0
500 BEDS OR MORE.....	519	304	216	2,991	1,735	1,256	5.8	5.7	5.8
<b>NORTHEAST, ALL SIZES.....</b>	<b>446</b>	<b>268</b>	<b>178</b>	<b>1,801</b>	<b>1,050</b>	<b>711</b>	<b>4.0</b>	<b>4.1</b>	<b>4.0</b>
6-99 BEDS.....	36	22	15	101	62	39	2.8	2.8	2.7
100-199 BEDS.....	48	30	19	164	106	58	3.4	3.6	3.1
200-299 BEDS.....	134	83	51	474	300	174	3.5	3.6	3.4
300-499 BEDS.....	125	74	50	481	274	207	3.9	3.7	4.1
500 BEDS OR MORE.....	103	59	43	581	348	233	5.7	5.9	5.4
<b>MIDWEST, ALL SIZES.....</b>	<b>674</b>	<b>382</b>	<b>292</b>	<b>3,503</b>	<b>1,904</b>	<b>1,599</b>	<b>5.2</b>	<b>5.0</b>	<b>5.5</b>
6-99 BEDS.....	78	43	36	269	142	126	3.4	3.3	3.5
100-199 BEDS.....	142	80	62	788	473	315	5.6	5.9	5.1
200-299 BEDS.....	108	65	43	387	233	154	3.6	3.6	3.6
300-499 BEDS.....	175	94	81	965	468	497	5.5	5.0	6.2
500 BEDS OR MORE.....	171	100	71	1,094	588	507	6.4	5.9	7.2
<b>SOUTH, ALL SIZES.....</b>	<b>1,148</b>	<b>660</b>	<b>488</b>	<b>5,430</b>	<b>3,166</b>	<b>2,264</b>	<b>4.7</b>	<b>4.8</b>	<b>4.6</b>
6-99 BEDS.....	184	99	85	611	319	292	3.3	3.2	3.4
100-199 BEDS.....	515	297	218	2,677	1,536	1,142	5.2	5.2	5.2
200-299 BEDS.....	146	85	61	643	394	249	4.4	4.6	4.1
300-499 BEDS.....	101	59	42	433	262	170	4.3	4.4	4.0
500 BEDS OR MORE.....	202	120	82	1,066	656	410	5.3	5.5	5.0
<b>WEST, ALL SIZES.....</b>	<b>420</b>	<b>227</b>	<b>193</b>	<b>1,876</b>	<b>1,082</b>	<b>794</b>	<b>4.5</b>	<b>4.8</b>	<b>4.1</b>
6-99 BEDS.....	75	37	37	176	93	83	2.4	2.5	2.2
100-199 BEDS.....	46	25	21	277	173	104	6.0	6.9	4.9
200-299 BEDS.....	151	78	73	631	325	306	4.2	4.2	4.2
300-499 BEDS.....	104	63	41	542	347	195	5.2	5.5	4.7
500 BEDS OR MORE.....	44	24	20	250	144	106	5.7	6.0	5.4

TABLE 4. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY, BY SEX, AGE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL: UNITED STATES, 1987--CON.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

AGE, REGION, AND BED SIZE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
15-44 YEARS									
	NUMBER OF PATIENTS DISCHARGED IN THOUSANDS			NUMBER OF DAYS OF CARE IN THOUSANDS			AVERAGE LENGTH OF STAY IN DAYS		
UNITED STATES, ALL SIZES.....	13,142	3,874	9,268	63,576	24,868	38,708	4.8	6.4	4.2
6-99 BEDS.....	1,926	593	1,333	7,205	2,637	4,569	3.7	4.4	3.4
100-199 BEDS.....	1,834	569	1,266	9,109	3,573	5,536	5.0	6.3	4.4
200-299 BEDS.....	3,096	836	2,260	13,774	5,141	8,633	4.4	6.2	3.8
300-499 BEDS.....	3,403	1,037	2,366	17,370	6,988	10,382	5.1	6.7	4.4
500 BEDS OR MORE.....	2,882	839	2,043	16,118	6,529	9,589	5.6	7.8	4.7
NORTHEAST, ALL SIZES.....	2,540	835	1,705	13,101	5,443	7,658	5.2	6.5	4.5
6-99 BEDS.....	240	109	131	1,233	630	603	5.1	5.8	4.6
100-199 BEDS.....	263	96	167	1,393	579	814	5.3	6.0	4.9
200-299 BEDS.....	510	176	334	2,353	992	1,361	4.6	5.6	4.1
300-499 BEDS.....	973	268	705	4,830	1,674	3,156	5.0	6.2	4.5
500 BEDS OR MORE.....	553	187	366	3,292	1,568	1,723	5.9	8.4	4.7
MIDWEST, ALL SIZES.....	3,272	1,003	2,269	17,228	6,881	10,347	5.3	6.9	4.6
6-99 BEDS.....	316	87	229	1,170	339	831	3.7	3.9	3.6
100-199 BEDS.....	402	113	289	1,967	730	1,236	4.9	6.5	4.3
200-299 BEDS.....	644	201	443	3,209	1,291	1,918	5.0	6.4	4.3
300-499 BEDS.....	978	341	636	5,454	2,451	3,003	5.6	7.2	4.7
500 BEDS OR MORE.....	933	260	673	5,428	2,069	3,359	5.8	8.0	5.0
SOUTH, ALL SIZES.....	4,485	1,289	3,197	21,572	8,156	13,416	4.8	6.3	4.2
6-99 BEDS.....	786	247	539	3,115	1,113	2,002	4.0	4.5	3.7
100-199 BEDS.....	883	275	608	4,369	1,721	2,648	4.9	6.2	4.4
200-299 BEDS.....	995	254	741	4,623	1,748	2,875	4.6	6.9	3.9
300-499 BEDS.....	768	219	549	3,707	1,381	2,326	4.8	6.3	4.2
500 BEDS OR MORE.....	1,053	293	761	5,758	2,193	3,565	5.5	7.5	4.7
WEST, ALL SIZES.....	2,845	747	2,097	11,675	4,388	7,287	4.1	5.9	3.5
6-99 BEDS.....	585	151	434	1,688	554	1,133	2.9	3.7	2.6
100-199 BEDS.....	286	84	202	1,381	543	838	4.8	6.4	4.1
200-299 BEDS.....	948	205	743	3,589	1,110	2,478	3.8	5.4	3.3
300-499 BEDS.....	684	209	475	3,378	1,481	1,897	4.9	7.1	4.0
500 BEDS OR MORE.....	342	99	243	1,640	699	941	4.8	7.1	3.9
45-64 YEARS									
UNITED STATES, ALL SIZES.....	7,099	3,528	3,571	48,360	23,784	24,577	6.8	6.7	6.9
6-99 BEDS.....	967	439	528	4,817	2,210	2,607	5.0	5.0	4.9
100-199 BEDS.....	1,009	497	512	6,608	3,158	3,451	6.6	6.4	6.7
200-299 BEDS.....	1,634	809	826	10,453	5,221	5,232	6.4	6.5	6.3
300-499 BEDS.....	1,824	934	890	13,398	6,564	6,834	7.3	7.0	7.7
500 BEDS OR MORE.....	1,665	850	816	13,084	6,631	6,453	7.9	7.8	7.9
NORTHEAST, ALL SIZES.....	1,441	716	725	11,064	5,238	5,826	7.7	7.3	8.0
6-99 BEDS.....	134	68	66	864	402	462	6.5	5.9	7.0
100-199 BEDS.....	159	72	86	1,090	474	616	6.9	6.5	7.1
200-299 BEDS.....	302	150	152	2,174	1,086	1,088	7.2	7.2	7.2
300-499 BEDS.....	555	282	273	4,331	2,022	2,309	7.8	7.2	8.5
500 BEDS OR MORE.....	291	144	148	2,605	1,254	1,351	9.0	8.7	9.2
MIDWEST, ALL SIZES.....	1,928	958	970	13,333	6,564	6,769	6.9	6.9	7.0
6-99 BEDS.....	174	74	100	847	365	482	4.9	4.9	4.8
100-199 BEDS.....	202	96	106	1,228	536	692	6.1	5.6	6.5
200-299 BEDS.....	367	177	189	2,341	1,109	1,232	6.4	6.3	6.5
300-499 BEDS.....	539	287	252	3,899	2,028	1,870	7.2	7.1	7.4
500 BEDS OR MORE.....	647	324	323	5,018	2,526	2,492	7.8	7.8	7.7
SOUTH, ALL SIZES.....	2,393	1,167	1,225	15,884	7,804	8,080	6.6	6.7	6.6
6-99 BEDS.....	412	180	232	2,091	942	1,149	5.1	5.2	5.0
100-199 BEDS.....	475	235	239	3,199	1,544	1,655	6.7	6.6	6.9
200-299 BEDS.....	501	239	262	3,178	1,581	1,597	6.3	6.6	6.1
300-499 BEDS.....	421	206	216	3,030	1,420	1,610	7.2	6.9	7.5
500 BEDS OR MORE.....	584	307	277	4,386	2,318	2,069	7.5	7.6	7.5
WEST, ALL SIZES.....	1,338	687	651	8,080	4,178	3,902	6.0	6.1	6.0
6-99 BEDS.....	247	117	130	1,015	502	514	4.1	4.3	3.9
100-199 BEDS.....	174	94	80	1,092	604	488	6.3	6.4	6.1
200-299 BEDS.....	465	242	223	2,760	1,445	1,315	5.9	6.0	5.9
300-499 BEDS.....	309	159	149	2,138	1,094	1,044	6.9	6.9	7.0
500 BEDS OR MORE.....	144	75	69	1,074	533	541	7.5	7.1	7.9

TABLE 4. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY, BY SEX, AGE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL: UNITED STATES, 1987--CON.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

AGE, REGION, AND BED SIZE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
<b>65 YEARS AND OVER</b>	<b>NUMBER OF PATIENTS DISCHARGED IN THOUSANDS</b>			<b>NUMBER OF DAYS OF CARE IN THOUSANDS</b>			<b>AVERAGE LENGTH OF STAY IN DAYS</b>		
UNITED STATES, ALL SIZES.....	10,459	4,629	5,830	90,397	38,336	52,060	8.6	8.3	8.9
6-99 BEDS.....	1,813	755	1,058	11,958	4,749	7,209	6.6	6.3	6.8
100-199 BEDS.....	1,559	669	890	12,834	5,369	7,465	8.2	8.0	8.4
200-299 BEDS.....	2,727	1,248	1,479	22,825	9,906	12,919	8.4	7.9	8.7
300-499 BEDS.....	2,576	1,145	1,432	24,766	10,418	14,347	9.6	9.1	10.0
500 BEDS OR MORE.....	1,783	811	972	18,015	7,894	10,120	10.1	9.7	10.4
NORTHEAST, ALL SIZES.....	2,272	996	1,276	24,076	9,837	14,240	10.6	9.9	11.2
6-99 BEDS.....	246	103	143	2,171	818	1,353	8.8	8.0	9.4
100-199 BEDS.....	312	128	184	2,885	1,167	1,718	9.2	9.1	9.4
200-299 BEDS.....	546	235	311	5,758	2,299	3,459	10.5	9.8	11.1
300-499 BEDS.....	863	385	478	9,376	3,819	5,557	10.9	9.9	11.6
500 BEDS OR MORE.....	306	146	160	3,886	1,733	2,153	12.7	11.9	13.5
MIDWEST, ALL SIZES.....	2,845	1,259	1,586	23,942	10,335	13,607	8.4	8.2	8.6
6-99 BEDS.....	381	165	216	2,445	967	1,477	6.4	5.9	6.8
100-199 BEDS.....	353	147	206	2,550	1,052	1,498	7.2	7.2	7.3
200-299 BEDS.....	645	281	364	5,335	2,234	3,101	8.3	8.0	8.5
300-499 BEDS.....	772	350	422	6,915	3,110	3,805	9.0	8.9	9.0
500 BEDS OR MORE.....	695	316	379	6,697	2,972	3,725	9.6	9.4	9.8
SOUTH, ALL SIZES.....	3,266	1,421	1,845	27,232	11,494	15,739	8.3	8.1	8.5
6-99 BEDS.....	795	323	472	5,212	2,096	3,116	6.6	6.5	6.6
100-199 BEDS.....	628	264	364	5,177	2,095	3,081	8.2	7.9	8.5
200-299 BEDS.....	675	313	362	5,627	2,541	3,087	8.3	8.1	8.5
300-499 BEDS.....	583	255	328	5,690	2,376	3,314	9.8	9.3	10.1
500 BEDS OR MORE.....	585	266	319	5,527	2,386	3,141	9.5	9.0	9.8
WEST, ALL SIZES.....	2,076	952	1,123	15,147	6,672	8,475	7.3	7.0	7.5
6-99 BEDS.....	392	165	227	2,131	868	1,263	5.4	5.3	5.6
100-199 BEDS.....	265	130	136	2,222	1,054	1,168	8.4	8.1	8.6
200-299 BEDS.....	862	419	443	6,104	2,832	3,272	7.1	6.8	7.4
300-499 BEDS.....	359	155	204	2,785	1,113	1,671	7.8	7.2	8.2
500 BEDS OR MORE.....	198	83	114	1,905	803	1,102	9.6	9.6	9.6



TABLE 5. RATE OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS AND OF DAYS OF CARE, BY SEX, AGE, AND GEOGRAPHIC REGION: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

AGE AND REGION	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
ALL AGES						
	RATE OF PATIENTS DISCHARGED PER 1,000 POPULATION			RATE OF DAYS OF CARE PER 1,000 POPULATION		
UNITED STATES.....	138.2	116.0	158.9	889.4	805.7	968.0
NORTHEAST.....	133.5	117.5	148.2	997.6	901.6	1,085.4
MIDWEST.....	146.8	124.9	167.5	976.6	890.5	1,057.9
SOUTH.....	136.1	113.5	157.0	845.0	766.1	918.4
WEST.....	135.9	108.1	162.9	748.6	674.8	820.2
UNDER 15 YEARS						
UNITED STATES.....	51.3	57.3	45.0	240.6	269.9	209.9
NORTHEAST.....	45.4	53.2	37.1	183.4	216.8	148.4
MIDWEST.....	52.3	57.8	46.5	271.7	288.1	254.5
SOUTH.....	62.3	70.0	54.2	294.7	335.9	251.6
WEST.....	37.3	39.4	35.0	166.5	187.6	144.4
15-44 YEARS						
UNITED STATES.....	115.1	68.7	160.3	556.9	441.1	669.7
NORTHEAST.....	108.6	73.0	142.8	560.1	475.4	641.5
MIDWEST.....	117.2	72.3	161.6	617.1	495.9	737.0
SOUTH.....	115.1	67.4	160.8	553.4	426.8	675.0
WEST.....	119.1	62.6	175.6	488.8	367.5	610.1
45-64 YEARS						
UNITED STATES.....	156.9	163.1	151.2	1,068.6	1,099.1	1,040.5
NORTHEAST.....	141.7	148.9	135.2	1,088.2	1,088.5	1,087.5
MIDWEST.....	174.1	179.6	169.1	1,204.2	1,230.1	1,180.5
SOUTH.....	155.3	160.0	151.0	1,030.9	1,069.9	995.7
WEST.....	155.3	163.6	147.5	938.3	995.4	884.0
65 YEARS AND OVER						
UNITED STATES.....	350.5	381.9	329.1	3,029.9	3,163.3	2,938.6
NORTHEAST.....	334.8	372.5	310.4	3,547.4	3,677.2	3,463.8
MIDWEST.....	378.5	415.8	352.9	3,185.4	3,414.2	3,027.1
SOUTH.....	321.4	343.2	306.3	2,679.5	2,775.6	2,613.5
WEST.....	386.6	417.5	363.7	2,821.1	2,924.8	2,744.5

TABLE 6. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, DAYS OF CARE, AND AVERAGE LENGTHS OF STAY BY, SEX, TYPE OF OWNERSHIP OF HOSPITAL, AND AGE OF PATIENT: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS]

TYPE OF OWNERSHIP AND AGE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE	BOTH SEXES	MALE	FEMALE
ALL TYPES									
	NUMBER OF PATIENTS DISCHARGED IN THOUSANDS			NUMBER OF DAYS OF CARE IN THOUSANDS			AVERAGE LENGTH OF STAY IN DAYS		
ALL AGES.....	33,387	13,568	19,818	214,942	94,230	120,713	6.4	6.9	6.1
UNDER 15 YEARS.....	2,688	1,537	1,150	12,609	7,242	5,367	4.7	4.7	4.7
15-44 YEARS.....	13,142	3,874	9,268	63,576	24,868	38,708	4.8	6.4	4.2
45-64 YEARS.....	7,099	3,528	3,571	48,360	23,784	24,577	6.8	6.7	6.9
65 YEARS AND OVER.....	10,459	4,629	5,830	90,397	38,336	52,060	8.6	8.3	8.9
VOLUNTARY NONPROFIT									
ALL AGES.....	22,801	9,287	13,514	151,577	65,979	85,598	6.6	7.1	6.3
UNDER 15 YEARS.....	1,840	1,064	776	8,562	4,981	3,581	4.7	4.7	4.6
15-44 YEARS.....	8,707	2,496	6,210	42,374	16,089	26,285	4.9	6.4	4.2
45-64 YEARS.....	4,965	2,491	2,473	34,480	16,917	17,564	6.9	6.8	7.1
65 YEARS AND OVER.....	7,289	3,235	4,054	66,161	27,992	38,169	9.1	8.7	9.4
GOVERNMENT									
ALL AGES.....	6,860	2,781	4,079	41,452	18,829	22,623	6.0	6.8	5.5
UNDER 15 YEARS.....	636	356	280	3,144	1,715	1,429	4.9	4.8	5.1
15-44 YEARS.....	3,024	906	2,118	14,765	6,197	8,568	4.9	6.8	4.0
45-64 YEARS.....	1,323	670	653	9,184	4,712	4,472	6.9	7.0	6.9
65 YEARS AND OVER.....	1,877	849	1,028	14,358	6,205	8,153	7.6	7.3	7.9
PROPRIETARY									
ALL AGES.....	3,725	1,500	2,225	21,913	9,421	12,492	5.9	6.3	5.6
UNDER 15 YEARS.....	211	117	94	903	545	358	4.3	4.7	3.8
15-44 YEARS.....	1,411	472	939	6,437	2,581	3,856	4.6	5.5	4.1
45-64 YEARS.....	812	367	445	4,696	2,155	2,541	5.8	5.9	5.7
65 YEARS AND OVER.....	1,292	544	748	9,877	4,140	5,738	7.6	7.6	7.7

TABLE 7. NUMBER, PERCENT DISTRIBUTION, AND RATE OF WOMEN WITH DELIVERIES DISCHARGED FROM SHORT-STAY HOSPITALS AND OF DAYS OF CARE, WITH AVERAGE LENGTHS OF STAY, BY AGE, RACE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS]

AGE, RACE, REGION, AND BED SIZE	DISCHARGED PATIENTS			DAYS OF CARE			
	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	NUMBER IN THOUSANDS	PERCENT DISTRIBUTION	RATE PER 1,000 POPULATION	AVERAGE LENGTH OF STAY IN DAYS
10-54 YEARS.....	3,911	100.0	50.3	11,985	100.0	154.0	3.1
AGE							
10-14 YEARS.....	11	0.3	1.3	29	0.2	3.7	2.8
15-44 YEARS.....	3,897	99.6	67.4	11,941	99.6	206.6	3.1
15-19 YEARS.....	480	12.3	53.1	1,419	11.8	157.1	3.0
20-24 YEARS.....	1,076	27.5	109.7	3,147	26.3	320.7	2.9
25-29 YEARS.....	1,263	32.3	115.6	3,870	32.3	354.3	3.1
30-34 YEARS.....	788	20.1	74.0	2,511	20.9	235.8	3.2
35-44 YEARS.....	290	7.4	16.7	994	8.3	57.2	3.4
45-54 YEARS.....	*	*	*	*	*	*	*
10-17 YEARS.....	188	4.8	14.0	543	4.5	40.3	2.9
18-54 YEARS.....	3,723	95.2	57.9	11,442	95.5	177.9	3.1
RACE							
WHITE.....	2,498	63.9	38.7	7,645	63.8	118.5	3.1
ALL OTHER.....	842	21.5	65.0	2,703	22.6	208.5	3.2
RACE NOT STATED.....	571	14.6	...	1,636	13.6	...	2.9
REGION							
NORTHEAST.....	694	17.8	43.2	2,457	20.5	152.9	3.5
MIDWEST.....	916	23.4	48.4	2,981	24.9	157.5	3.3
SOUTH.....	1,289	33.0	48.0	3,985	33.2	148.4	3.1
WEST.....	1,012	25.9	63.6	2,562	21.4	160.9	2.5
BED SIZE							
6-99 BEDS.....	474	12.1	...	1,173	9.8	...	2.5
100-199 BEDS.....	471	12.0	...	1,393	11.6	...	3.0
200-299 BEDS.....	974	24.9	...	2,757	23.0	...	2.8
300-499 BEDS.....	1,077	27.5	...	3,493	29.1	...	3.2
500 BEDS OR MORE.....	915	23.4	...	3,169	26.4	...	3.5

TABLE 8. NUMBER OF WOMEN WITH DELIVERIES DISCHARGED FROM SHORT-STAY HOSPITALS AND NUMBER OF DAYS OF CARE AND AVERAGE LENGTHS OF STAY FOR WOMEN WITH DELIVERIES, BY BED SIZE OF HOSPITAL AND GEOGRAPHIC REGION: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS]

REGION	ALL SIZES	6-99 BEDS	100-199 BEDS	200-299 BEDS	300-499 BEDS	500 BEDS OR MORE
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS						
UNITED STATES.....	3,911	474	471	974	1,077	915
NORTHEAST.....	694	39	57	125	328	146
MIDWEST.....	916	75	119	175	255	292
SOUTH.....	1,289	164	218	298	256	353
WEST.....	1,012	195	77	377	239	125
NUMBER OF DAYS OF CARE IN THOUSANDS						
UNITED STATES.....	11,985	1,173	1,393	2,757	3,493	3,169
NORTHEAST.....	2,457	124	175	442	1,177	537
MIDWEST.....	2,981	230	357	564	827	1,003
SOUTH.....	3,985	435	650	842	819	1,239
WEST.....	2,562	384	210	909	669	390
AVERAGE LENGTH OF STAY IN DAYS						
UNITED STATES.....	3.1	2.5	3.0	2.8	3.2	3.5
NORTHEAST.....	3.5	3.2	3.1	3.5	3.6	3.7
MIDWEST.....	3.3	3.1	3.0	3.2	3.2	3.4
SOUTH.....	3.1	2.6	3.0	2.8	3.2	3.5
WEST.....	2.5	2.0	2.7	2.4	2.8	3.1

TABLE 9. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY AGE AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE		ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS						
01	ALL CONDITIONS.....	33,387	2,688	13,142	7,099	10,459
02	INFECTIOUS AND PARASITIC DISEASES.....001-139	684	191	228	93	172
03	NEOPLASMS.....140-239	2,331	56	433	802	1,040
04	MALIGNANT NEOPLASMS.....140-208,230-234	1,879	38	229	658	953
05	MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197-5	198	*	*7	62	128
06	MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197,0,197-3	305	*	12	129	164
07	MALIGNANT NEOPLASM OF BREAST.....174-175,198-81	205	*	29	90	87
08	BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	452	18	204	143	87
09	ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,086	94	263	273	456
10	DIABETES MELLITUS.....250	474	27	131	150	166
11	DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	323	52	86	60	125
12	MENTAL DISORDERS.....290-319	1,781	65	1,093	359	263
13	PSYCHOSES.....290-299	814	12	448	179	175
14	ALCOHOL DEPENDENCE SYNDROME.....303	336	*	216	92	26
15	DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	949	190	260	197	303
16	DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	383	56	134	80	112
17	CATARACT.....366	63	*	*	11	47
18	DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	196	94	40	26	36
19	DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,572	32	450	1,743	3,347
20	HEART DISEASE.....391-392,0,393-398,402,404,410-416,420-429	3,736	19	242	1,236	2,240
21	ACUTE MYOCARDIAL INFARCTION.....410	760	*	46	279	435
22	ATHEROSCLEROTIC HEART DISEASE.....414-0	369	-	16	178	174
23	OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	1,040	*	62	415	562
24	CARDIAC DYSRHYTHMIAS.....427	521	*7	40	128	346
25	CONGESTIVE HEART FAILURE.....428-0	605	*5	14	103	483
26	CEREBROVASCULAR DISEASE.....430-438	895	*	34	191	665
27	DISEASES OF THE RESPIRATORY SYSTEM.....460-519	2,982	767	586	537	1,092
28	ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	416	190	61	60	105
29	CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	218	146	70	*	*
30	PNEUMONIA, ALL FORMS.....480-486	924	204	136	139	445
31	ASTHMA.....493	454	149	112	92	101
32	DISEASES OF THE DIGESTIVE SYSTEM.....520-579	3,663	298	1,143	953	1,270
33	ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	292	*	64	84	142
34	GASTRITIS AND DUODENITIS.....535	181	14	67	51	48
35	APPENDICITIS.....540-543	275	65	165	30	14
36	INGUINAL HERNIA.....550	301	38	73	94	96
37	NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	388	107	138	56	88
38	CHOLELITHIASIS.....574	522	*	184	162	175
39	DISEASES OF THE GENITOURINARY SYSTEM.....580-629	2,515	90	1,114	578	733
40	CALCULUS OF KIDNEY AND URETER.....592	314	*	148	113	52
41	HYPERPLASIA OF PROSTATE.....600	274	-	*	67	206
42	COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-676	904	*5	898	*	...
43	ABORTIONS AND ECTOPIC AND MQLAR PREGNANCIES.....630-639	301	*	297	*	...
44	DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	478	49	172	105	152
45	DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	1,955	53	734	613	554
46	ARTHROPATHIES AND RELATED DISORDERS.....710-719	484	12	129	128	215
47	INTERVERTEBRAL DISC DISORDERS.....722	486	*	252	180	53
48	CONGENITAL ANOMALIES.....740-759	240	136	63	28	13
49	CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	121	121	*	*	-
50	SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	450	78	162	145	65
51	INJURY AND POISONING.....800-999	3,027	360	1,377	515	775
52	FRACTURES, ALL SITES.....800-829	1,062	113	381	164	404
53	FRACTURE OF NECK OF FEMUR.....820	249	*	*9	21	217
54	SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	159	*	100	38	18
55	INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	238	58	127	23	30
56	LACERATIONS AND OPEN WOUNDS.....870-904	260	33	173	34	20
57	SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,327	52	4,079	97	98
58	FEMALES WITH DELIVERIES.....V27	3,911	11	3,897	*	...

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 9. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY AGE AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987--CON.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER	ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER	
RATE OF PATIENTS DISCHARGED PER 10,000 POPULATION					AVERAGE LENGTH OF STAY IN DAYS					
1,381.6	512.9	1,151.0	1,508.6	3,505.5	6.4	4.7	4.8	6.8	8.6	01
28.3	36.5	19.9	20.5	57.7	7.6	4.0	6.9	10.0	11.2	02
96.5	10.8	37.9	177.2	348.5	8.0	5.1	5.9	7.8	9.3	03
77.8	7.3	20.1	145.5	319.5	8.7	6.0	7.1	8.2	9.4	04
8.2	*	40.7	13.6	43.0	11.8	*	9.7	10.8	12.4	05
12.6	*	1.1	28.5	54.9	8.9	*	7.6	8.7	9.1	06
8.5	*	2.5	19.8	29.1	6.2	*	5.9	5.9	6.6	07
18.7	3.5	17.8	31.7	29.0	5.4	3.1	4.5	5.5	7.7	08
44.9	18.0	23.0	60.4	152.7	7.5	5.0	5.1	7.3	9.0	09
19.6	5.2	11.4	33.2	55.6	7.6	5.4	5.4	7.9	9.4	10
13.4	9.9	7.5	13.3	41.9	6.0	3.5	5.0	6.1	7.6	11
73.7	12.3	95.7	79.4	88.3	12.3	24.0	11.7	11.3	13.0	12
33.7	2.3	39.2	39.4	58.8	13.7	24.2	13.2	13.5	14.5	13
13.9	*	18.9	20.3	8.6	10.9	*	11.2	10.4	10.9	14
39.3	36.3	22.8	43.5	101.5	6.0	4.4	5.9	6.2	6.9	15
15.8	10.7	11.7	17.7	37.7	9.8	8.0	7.7	10.1	12.7	16
2.6	*	*	2.4	15.9	1.8	*	*	1.8	1.6	17
8.1	17.8	3.5	5.7	12.1	2.8	2.3	2.7	3.4	3.7	18
230.6	6.0	39.4	385.1	1,121.9	7.6	7.0	5.8	6.7	8.2	19
154.6	3.5	21.2	273.1	750.7	6.9	8.2	5.5	6.2	7.5	20
31.4	*	4.0	61.5	145.8	8.5	*	6.8	8.0	9.0	21
15.3	-	1.4	39.3	58.4	6.3	-	4.3	5.5	7.4	22
43.0	*	5.4	91.6	188.3	5.2	*	3.7	4.7	5.7	23
21.6	*1.3	3.5	28.4	116.0	5.7	*7.4	3.6	4.9	6.2	24
25.0	*0.9	1.3	22.7	161.8	8.4	*6.6	6.4	8.0	8.6	25
37.0	*	3.0	42.3	223.0	10.1	*	12.1	9.9	10.1	26
123.4	146.3	51.3	118.7	366.1	6.3	3.2	4.5	7.0	9.1	27
17.2	36.3	5.4	13.2	35.2	4.6	3.1	3.7	6.1	7.1	28
9.0	27.9	6.1	*	*	1.2	1.2	1.4	*	*	29
38.2	38.9	11.9	30.7	149.2	8.0	4.4	6.7	8.3	10.0	30
18.8	28.4	9.8	20.4	33.8	4.8	3.3	4.1	5.8	7.0	31
151.6	56.9	100.1	210.5	425.5	6.2	3.3	4.9	6.2	8.0	32
12.1	*	5.6	18.6	47.6	6.9	*	4.5	6.1	8.5	33
7.5	2.7	5.9	11.3	16.1	4.2	2.4	4.0	4.2	5.1	34
11.4	12.5	14.4	0.7	4.8	4.7	4.2	4.3	6.5	8.5	35
12.4	7.3	6.4	20.8	32.1	2.6	1.9	2.1	2.3	3.7	36
16.1	20.4	12.1	12.3	29.5	4.9	2.8	4.8	6.4	6.5	37
21.6	*	16.1	35.8	58.6	7.0	*	5.6	6.4	9.1	38
104.1	17.1	97.6	127.7	245.7	5.0	3.3	3.9	5.0	7.0	39
13.0	*	12.9	25.0	17.3	3.5	*	3.0	3.4	5.4	40
11.3	-	*	14.9	69.1	5.4	-	*	4.6	5.7	41
37.4	*0.9	78.7	*	...	2.7	*1.8	2.7	*	...	42
12.4	*	26.0	*	...	2.2	*	2.2	*	...	43
19.8	9.4	15.0	23.1	51.0	7.9	4.2	5.9	8.4	11.2	44
80.9	10.1	64.3	135.5	185.8	6.4	5.2	4.8	6.1	9.1	45
20.0	2.2	11.3	28.4	72.1	7.8	6.8	4.3	7.6	10.1	46
20.1	*	22.1	39.8	17.8	6.4	*	5.9	6.3	8.7	47
9.9	26.0	5.5	6.1	4.4	6.0	6.1	4.8	7.8	6.8	48
5.0	23.0	*	*	-	9.8	9.9	*	*	-	49
18.6	14.9	14.2	32.1	21.8	4.1	3.4	3.5	4.9	4.6	50
125.2	68.7	120.7	113.7	259.7	6.7	4.3	5.5	6.8	9.9	51
43.9	21.6	33.4	36.2	135.4	8.9	5.4	7.2	7.8	11.8	52
10.3	*	*0.8	4.5	72.7	13.9	*	*14.9	11.6	14.1	53
6.6	*	8.7	8.4	6.1	5.4	*	5.2	5.9	8.0	54
9.8	11.0	11.1	5.1	10.2	5.8	2.7	6.5	6.2	8.4	55
10.8	6.2	15.2	7.5	6.8	4.0	3.2	3.8	4.4	6.7	56
179.0	10.0	357.3	21.4	32.9	3.2	4.7	3.1	3.9	6.7	57
161.8	2.0	341.3	*	...	3.1	2.8	3.1	*	...	58

TABLE 10. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY SEX, RACE, AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	SEX					
	BOTH SEXES			BOTH SEXES		
	MALE	FEMALE	RATE OF PATIENTS DISCHARGED PER 10,000 POPULATION	MALE	FEMALE	
01 ALL CONDITIONS.....	33,387	13,568	19,818	1,381.6	1,160.1	1,589.3
02 INFECTIOUS AND PARASITIC DISEASES.....001-139	684	338	346	28.3	28.9	27.7
03 NEOPLASMS.....140-239	2,331	966	1,365	96.5	82.6	109.4
04 MALIGNANT NEOPLASMS.....140-208,230-234	1,679	868	1,011	77.8	74.2	81.0
05 MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197.5	198	99	99	8.2	8.5	7.9
06 MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	305	190	115	12.6	16.3	9.2
07 MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	205	*	204	8.5	*	16.3
08 BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	452	98	354	18.7	8.3	28.4
09 ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,086	415	671	44.9	35.5	53.8
10 DIABETES MELLITUS.....250	474	198	276	19.6	16.9	22.1
11 DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	323	145	179	13.4	12.4	14.3
12 MENTAL DISORDERS.....290-319	1,781	935	845	73.7	80.0	67.8
13 PSYCHOSES.....290-299	814	377	437	33.7	32.2	35.0
14 ALCOHOL DEPENDENCE SYNDROME.....303	336	248	87	13.5	21.2	7.0
15 DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	949	437	512	39.3	37.4	41.1
16 DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	383	174	208	15.8	14.9	16.7
17 CATARACT.....366	63	24	39	2.6	2.0	3.2
18 DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	196	96	100	8.1	8.2	8.0
19 DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,572	2,868	2,704	230.6	245.2	216.8
20 HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	3,736	2,016	1,720	154.6	172.4	138.0
21 ACUTE MYOCARDIAL INFARCTION.....410	760	478	282	31.4	40.9	22.6
22 ATHEROSCLEROTIC HEART DISEASE.....414.0	369	241	128	15.3	20.6	10.2
23 OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	1,040	549	491	43.0	46.9	39.4
24 CARDIAC DYSRHYTHMIAS.....427	521	257	265	21.6	21.9	21.2
25 CONGESTIVE HEART FAILURE.....428.0	605	269	336	25.0	23.0	26.9
26 CEREBROVASCULAR DISEASE.....430-438	895	392	502	37.0	33.5	40.3
27 DISEASES OF THE RESPIRATORY SYSTEM.....460-519	2,982	1,478	1,504	123.4	126.4	120.6
28 ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	416	218	198	17.2	18.7	15.9
29 CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	218	100	119	9.0	8.5	9.5
30 PNEUMONIA, ALL FORMS.....480-486	924	468	456	38.2	40.0	36.6
31 ASTHMA.....493	454	193	261	18.8	16.5	20.9
32 DISEASES OF THE DIGESTIVE SYSTEM.....520-579	3,663	1,714	1,949	151.6	146.5	156.3
33 ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	292	152	140	12.1	13.0	11.2
34 GASTRITIS AND DUODENITIS.....535	181	81	99	7.5	7.0	8.0
35 APPENDICITIS.....540-543	275	160	114	11.4	13.7	9.2
36 INGUINAL HERNIA.....550	301	266	35	12.4	22.7	2.8
37 NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	388	152	236	16.1	13.0	19.0
38 CHOLELITHIASIS.....574	522	151	371	21.6	12.9	29.8
39 DISEASES OF THE GENITOURINARY SYSTEM.....580-629	2,515	941	1,574	104.1	80.4	126.2
40 CALCULUS OF KIDNEY AND URETER.....592	314	212	102	13.0	18.1	8.2
41 HYPERPLASIA OF PROSTATE.....600	274	274	...	11.3	23.4	...
42 COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-676	904	...	904	37.4	...	72.5
43 ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	301	...	301	12.4	...	24.1
44 DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	478	229	249	19.8	19.6	20.0
45 DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	1,955	886	1,069	80.9	75.8	85.7
46 ARTHROPATHIES AND RELATED DISORDERS.....710-719	484	194	290	20.0	16.6	23.2
47 INTERVERTEBRAL DISC DISORDERS.....722	486	280	206	20.1	24.0	16.5
48 CONGENITAL ANOMALIES.....740-759	240	120	119	9.9	10.3	9.6
49 CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	121	70	51	5.0	6.0	4.1
50 SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	450	208	242	18.6	17.8	19.4
51 INJURY AND POISONING.....800-999	3,027	1,660	1,367	125.2	141.9	109.6
52 FRACTURES, ALL SITES.....800-829	1,062	519	543	43.9	44.3	43.6
53 FRACTURE OF NECK OF FEMUR.....820	249	71	177	10.3	6.1	14.2
54 SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	159	76	83	6.6	6.5	6.6
55 INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	238	154	84	9.8	13.1	6.8
56 LACERATIONS AND OPEN WOUNDS.....870-904	260	194	66	10.8	16.6	5.3
57 SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,327	157	4,169	179.0	13.5	334.4
58 FEMALES WITH DELIVERIES.....V27	3,911	...	3,911	161.8	...	313.0

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 10. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY SEX, RACE, AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987--CGN.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

SEX--CON.			RACE												
BOTH SEXES	MALE	FEMALE	ALL RACES	WHITE	ALL OTHER	NOT STATED	ALL RACES	WHITE	ALL OTHER	NOT STATED	ALL RACES	WHITE	ALL OTHER	NOT STATED	
AVERAGE LENGTH OF STAY IN DAYS			NUMBER OF PATIENTS DISCHARGED IN THOUSANDS				RATE OF PATIENTS DISCHARGED PER 10,000 POPULATION				AVERAGE LENGTH OF STAY IN DAYS				
6.4	6.9	6.1	33,387	24,376	5,174	3,836	1,381.6	1,192.1	1,391.4	...	6.4	6.5	6.6	5.7	01
7.6	8.3	7.0	684	492	123	69	28.3	24.1	33.0	...	7.6	7.4	8.8	6.7	02
8.0	8.7	7.5	2,331	1,789	310	232	96.5	87.5	83.3	...	8.0	8.0	8.7	7.4	03
8.7	9.0	8.3	1,879	1,476	214	189	77.8	72.2	57.7	...	8.7	8.5	10.1	7.9	04
11.8	11.6	11.8	198	160	20	18	8.2	7.8	5.4	...	11.8	11.5	15.9	10.0	05
8.9	8.7	9.2	305	240	35	31	12.6	11.7	9.3	...	8.9	8.7	10.3	8.3	06
6.2	*	6.1	205	164	18	23	8.5	8.0	4.8	...	6.2	6.1	8.2	5.0	07
5.4	5.8	5.3	452	314	95	43	18.7	15.3	25.6	...	5.4	5.3	5.6	5.2	08
7.3	7.3	7.3	1,086	779	198	109	44.9	38.1	53.2	...	7.3	7.2	8.3	6.3	09
7.6	7.7	7.6	474	317	105	53	19.6	15.5	28.1	...	7.6	7.4	8.6	6.6	10
6.0	6.1	5.9	323	203	89	32	13.4	9.9	23.8	...	6.0	6.1	5.9	5.5	11
12.3	11.9	12.8	1,781	1,257	328	195	73.7	61.5	88.3	...	12.3	12.8	11.6	10.5	12
13.7	13.0	14.2	814	564	147	103	33.7	27.6	39.4	...	13.7	14.2	13.1	11.6	13
10.9	10.6	11.7	336	242	63	30	13.9	11.8	17.0	...	10.9	11.5	8.6	11.2	14
6.0	6.3	5.7	949	706	128	116	39.3	34.5	34.3	...	6.0	5.8	7.7	5.2	15
9.8	10.7	9.1	383	286	56	40	15.8	14.0	15.0	...	9.8	9.4	12.8	8.9	16
1.8	2.1	1.6	63	51	*6	*7	2.6	2.5	*1.5	...	1.8	1.7	*2.3	*1.9	17
2.8	2.6	3.0	196	151	24	20	8.1	7.4	6.4	...	2.8	2.8	3.0	2.3	18
7.6	7.2	7.9	5,572	4,373	640	559	230.6	213.9	172.0	...	7.6	7.5	8.6	7.0	19
6.9	6.7	7.2	3,736	2,998	381	357	154.6	146.6	102.5	...	6.9	6.9	7.3	6.5	20
8.5	8.0	9.4	760	630	55	75	31.4	30.8	14.8	...	8.5	8.5	8.9	8.1	21
6.3	6.1	6.8	369	303	38	27	15.3	14.8	10.3	...	6.3	6.3	6.0	7.3	22
5.2	4.9	5.5	1,040	856	92	92	43.0	41.9	24.7	...	5.2	5.2	5.2	4.9	23
5.7	5.6	5.8	521	406	54	61	21.6	19.9	14.5	...	5.7	5.7	6.7	5.0	24
8.4	8.2	8.6	605	469	73	62	25.0	23.0	19.7	...	8.4	8.6	8.0	7.6	25
10.1	9.6	10.4	895	684	108	103	37.0	33.5	29.0	...	10.1	9.7	13.9	8.4	26
6.3	6.4	6.2	2,982	2,225	448	309	123.4	108.8	120.5	...	6.3	6.5	6.1	5.5	27
4.6	4.4	4.9	416	316	57	44	17.2	15.4	15.2	...	4.6	4.7	4.4	4.3	28
1.2	1.2	1.3	218	164	21	33	9.0	8.0	5.8	...	1.2	1.2	1.8	1.1	29
8.0	7.9	8.1	924	692	136	95	38.2	33.9	36.6	...	8.0	8.1	7.6	7.6	30
4.8	4.4	5.1	454	292	124	38	18.8	14.3	33.4	...	4.8	5.2	4.0	4.6	31
6.2	5.7	6.6	3,663	2,781	479	403	151.6	136.0	128.8	...	6.2	6.2	6.6	5.7	32
6.9	6.8	7.0	292	225	35	32	12.1	11.0	9.4	...	6.9	7.0	7.1	5.9	33
4.2	4.1	4.3	181	136	28	17	7.5	6.7	7.4	...	4.2	4.4	3.9	3.4	34
4.7	4.6	4.9	275	199	33	43	11.4	9.7	8.9	...	4.7	4.7	5.0	4.5	35
2.6	2.5	3.2	301	234	33	33	12.4	11.4	9.0	...	2.6	2.6	3.0	2.5	36
4.9	4.6	5.0	388	290	54	44	16.1	14.2	14.6	...	4.9	5.0	4.4	4.7	37
7.0	7.6	6.8	522	410	53	60	21.6	20.0	14.2	...	7.0	7.1	7.2	6.5	38
5.0	5.2	5.0	2,515	1,885	349	281	104.1	92.2	94.0	...	5.0	5.0	5.6	4.6	39
3.5	3.2	4.2	314	250	24	39	13.0	12.2	6.5	...	3.5	3.6	3.7	2.9	40
5.4	5.4	...	274	216	23	35	11.3	10.6	6.2	...	5.4	5.3	6.6	5.1	41
2.7	...	2.7	904	540	246	118	37.4	26.4	66.2	...	2.7	2.5	3.1	2.5	42
2.2	...	2.2	301	180	91	30	12.4	8.8	24.4	...	2.2	2.0	2.4	2.4	43
7.9	7.2	8.6	478	340	93	45	19.8	16.6	25.0	...	7.9	8.0	8.4	6.9	44
6.4	5.9	6.9	1,955	1,470	221	263	80.9	71.9	59.5	...	6.4	6.5	6.3	6.0	45
7.8	6.8	8.5	484	358	49	77	20.0	17.5	13.3	...	7.8	8.0	7.3	7.3	46
6.4	5.8	7.0	486	373	45	68	20.1	18.3	12.2	...	6.4	6.4	7.1	5.5	47
6.0	5.7	6.2	240	176	42	22	9.9	8.6	11.3	...	6.0	5.9	7.2	4.7	48
9.8	9.6	10.1	121	81	25	15	5.0	3.9	6.8	...	9.8	10.6	9.6	5.9	49
4.1	3.7	4.4	450	291	61	98	18.6	14.2	16.3	...	4.1	3.7	3.5	5.7	50
6.7	6.3	7.1	3,027	2,195	481	351	125.2	107.4	129.3	...	6.7	6.7	6.9	6.3	51
8.9	8.3	9.4	1,062	790	133	139	43.9	38.6	35.8	...	8.9	8.9	9.3	8.2	52
13.9	14.3	13.8	249	199	17	33	10.3	9.7	4.6	...	13.9	13.8	16.7	13.2	53
5.4	5.1	5.7	159	117	25	17	6.6	5.7	6.7	...	5.4	5.4	5.7	5.0	54
5.8	6.3	4.9	238	176	40	22	9.8	8.6	10.9	...	5.8	6.1	4.9	5.0	55
4.0	4.0	4.1	260	160	71	29	10.8	7.8	19.0	...	4.0	4.0	4.0	4.0	56
3.2	5.8	3.1	4,327	2,793	914	619	179.0	136.6	245.8	...	3.2	3.3	3.3	3.0	57
3.1	...	3.1	3,911	2,498	842	571	161.8	122.2	226.5	...	3.1	3.1	3.2	2.9	58

TABLE 11. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY GEOGRAPHIC REGION AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	UNITED STATES	NORTH-EAST	MIDWEST	SOUTH	WEST
01 ALL CONDITIONS.....	33,387	6,699	8,718	11,292	6,078
02 INFECTIOUS AND PARASITIC DISEASES.....001-139	684	137	171	249	126
03 NEOPLASMS.....140-239	2,331	493	633	720	485
04 MALIGNANT NEOPLASMS.....140-208,230-234	1,879	402	531	561	386
05 MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197.5	198	54	45	60	39
06 MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	305	68	86	95	57
07 MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	205	40	60	63	42
08 BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	452	92	102	159	99
09 ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,086	216	297	382	191
10 DIABETES MELLITUS.....250	474	99	126	167	82
11 DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	323	71	77	117	58
12 MENTAL DISORDERS.....290-319	1,781	438	570	496	277
13 PSYCHOSES.....290-299	814	225	222	215	148
14 ALCOHOL DEPENDENCE SYNDROME.....303	336	93	134	69	39
15 DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	949	200	288	296	165
16 DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	383	71	114	125	72
17 CATARACT.....366	63	32	12	*7	12
18 DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	196	45	59	64	27
19 DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,572	1,219	1,472	1,833	1,048
20 HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	3,736	829	993	1,211	704
21 ACUTE MYOCARDIAL INFARCTION.....410	760	168	194	238	159
22 ATHEROSCLEROTIC HEART DISEASE.....414.0	369	70	127	106	66
23 OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	1,040	246	267	346	181
24 CARDIAC DYSRHYTHMIAS.....427	521	107	132	176	107
25 CONGESTIVE HEART FAILURE.....428.0	605	148	157	189	111
26 CEREBROVASCULAR DISEASE.....430-438	895	191	221	311	171
27 DISEASES OF THE RESPIRATORY SYSTEM.....460-519	2,982	585	786	1,147	464
28 ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	416	67	105	194	50
29 CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	218	49	63	84	22
30 PNEUMONIA, ALL FORMS.....480-486	924	171	258	349	146
31 ASTHMA.....493	454	109	110	159	76
32 DISEASES OF THE DIGESTIVE SYSTEM.....520-579	3,663	744	929	1,297	693
33 ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	292	55	74	105	57
34 GASTRITIS AND DUODENITIS.....535	181	38	43	76	23
35 APPENDICITIS.....540-543	275	48	64	87	76
36 INGUINAL HERNIA.....550	301	75	86	103	36
37 NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	388	66	111	151	60
38 CHOLELITHIASIS.....574	522	109	133	180	100
39 DISEASES OF THE GENITOURINARY SYSTEM.....580-629	2,515	475	615	927	498
40 CALCULUS OF KIDNEY AND URETER.....592	314	59	88	118	48
41 HYPERPLASIA OF PROSTATE.....600	274	51	73	84	66
42 COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-676	904	194	229	285	197
43 ABORTIONS AND ECTOPIC AND MULAK PREGNANCIES.....630-639	301	68	60	95	58
44 DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	478	115	118	162	84
45 DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	1,955	311	526	702	416
46 ARTHROPATHIES AND RELATED DISORDERS.....710-719	484	77	151	127	130
47 INTERVERTEBRAL DISC DISORDERS.....722	486	65	117	204	100
48 CONGENITAL ANOMALIES.....740-759	240	41	56	97	45
49 CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	121	14	30	44	33
50 SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	450	71	124	142	113
51 INJURY AND POISONING.....800-999	3,027	597	764	992	674
52 FRACTURES, ALL SITES.....800-829	1,062	216	259	340	246
53 FRACTURE OF NECK OF FEMUR.....820	249	54	67	79	49
54 SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	159	30	34	75	19
55 INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	238	59	64	75	40
56 LACERATIONS AND OPEN WOUNDS.....870-904	260	44	64	92	60
57 SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,327	779	1,035	1,402	1,111
58 FEMALES WITH DELIVERIES.....V27	3,911	694	916	1,289	1,012

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 11. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, RATE OF DISCHARGES, AND AVERAGE LENGTHS OF STAY, BY GEOGRAPHIC REGION AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987 --CON.

DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)1

UNITED STATES	NORTH-EAST	MIDWEST	SOUTH	WEST	UNITED STATES	NORTH-EAST	MIDWEST	SOUTH	WEST	
RATE OF PATIENTS DISCHARGED PER 10,000 POPULATION					AVERAGE LENGTH OF STAY IN DAYS					
1,381.6	1,335.5	1,467.9	1,360.8	1,359.3	6.4	7.5	6.7	6.2	5.5	01
28.3	27.4	28.8	30.0	25.7	7.6	9.7	7.5	6.3	8.0	02
96.5	98.4	106.5	86.8	98.6	8.0	9.8	8.0	7.6	6.8	03
77.8	80.1	89.3	67.6	78.5	8.7	10.7	8.5	8.2	7.4	04
8.2	10.7	7.5	7.2	8.0	11.8	12.3	11.3	12.2	10.8	05
12.6	13.5	14.5	11.5	11.6	8.9	11.2	8.1	9.2	6.6	06
8.5	8.1	10.0	7.6	8.6	6.2	8.3	5.7	6.4	4.4	07
18.7	18.3	17.2	19.2	20.1	5.4	6.0	5.9	5.2	4.6	08
44.9	43.0	50.1	46.0	38.9	7.3	9.2	7.1	7.0	5.9	09
19.6	19.7	21.2	20.2	16.6	7.6	9.3	7.9	7.2	5.9	10
13.4	14.2	12.9	14.1	11.9	6.0	7.8	6.0	5.2	5.2	11
73.7	87.3	96.0	59.8	56.3	12.3	11.4	13.0	13.0	11.2	12
33.7	45.6	37.3	25.9	30.2	13.7	14.0	14.6	13.3	12.4	13
13.9	18.6	22.6	8.3	8.0	10.9	6.5	11.8	14.4	12.2	14
39.3	39.9	48.5	35.7	33.6	6.0	5.7	6.1	6.2	5.7	15
15.8	14.1	19.3	15.1	14.8	9.8	10.5	10.1	9.5	9.3	16
2.6	6.4	2.1	40.8	2.4	1.8	1.6	1.9	33.4	1.3	17
8.1	9.0	9.9	7.7	5.5	2.8	2.5	3.3	2.7	2.3	18
230.6	243.0	247.8	221.0	213.4	7.6	9.0	7.6	7.3	6.3	19
154.6	165.3	167.2	145.9	143.3	6.9	8.2	7.1	6.6	5.7	20
31.4	33.6	32.7	28.7	32.3	8.5	10.3	9.2	7.9	6.7	21
15.3	13.9	21.4	12.8	13.4	6.3	6.8	6.5	6.4	5.4	22
43.0	49.1	44.9	41.6	36.9	5.2	5.7	5.5	5.1	4.1	23
21.6	21.3	22.2	21.2	21.8	5.7	6.9	5.5	5.6	4.9	24
25.0	29.5	26.4	22.7	22.6	8.4	10.4	8.1	8.1	6.7	25
37.0	38.1	37.2	37.5	34.9	10.1	12.6	9.9	9.5	8.5	26
123.4	116.5	132.3	138.3	94.5	6.3	7.6	6.1	5.9	5.9	27
17.2	13.3	17.8	23.3	10.2	4.6	5.3	4.8	4.5	4.1	28
9.0	9.7	10.6	10.1	4.5	1.2	1.1	1.2	1.4	1.1	29
38.2	34.0	43.5	42.1	29.7	8.0	10.0	7.9	7.1	7.9	30
18.8	21.7	18.5	19.1	15.6	4.8	5.4	4.8	4.6	4.2	31
151.6	148.2	156.4	156.3	141.1	6.2	7.1	6.2	5.9	5.8	32
12.1	11.1	12.5	12.6	11.6	6.9	8.5	6.9	6.6	6.0	33
7.5	7.6	7.3	9.2	4.7	4.2	4.4	4.2	4.3	3.7	34
11.4	9.6	10.8	10.4	15.4	4.7	5.8	5.0	4.4	4.1	35
12.4	14.9	14.5	12.4	7.4	2.6	2.5	2.7	2.8	2.2	36
16.1	13.2	18.7	18.2	12.2	4.9	5.8	5.0	4.0	5.6	37
21.6	21.8	22.5	21.7	20.3	7.0	7.7	7.2	7.0	6.1	38
104.1	94.7	103.5	111.7	101.4	5.0	5.8	5.3	4.9	4.3	39
13.0	11.9	14.9	14.2	9.8	3.5	3.9	3.8	3.4	2.7	40
11.3	10.2	12.2	10.1	13.5	5.4	6.7	5.4	5.8	3.8	41
37.4	38.6	38.5	34.3	40.1	2.7	2.7	2.6	2.8	2.5	42
12.4	17.5	10.1	11.4	11.8	2.2	2.1	2.2	2.2	2.3	43
19.8	22.9	19.8	19.5	17.0	7.9	8.7	7.4	7.7	8.2	44
80.9	62.0	88.5	84.6	84.7	6.4	7.4	6.5	6.3	5.9	45
20.0	15.3	25.4	15.3	26.5	7.8	8.8	8.7	7.3	6.6	46
20.1	12.9	19.8	24.6	20.4	6.4	6.7	5.8	6.9	5.8	47
9.9	8.1	9.5	11.7	9.2	6.0	4.7	6.6	6.4	5.5	48
5.0	2.8	5.1	5.3	6.7	9.8	9.6	15.2	8.8	6.5	49
18.6	14.1	20.9	17.2	23.0	4.1	4.3	4.1	3.7	4.4	50
125.2	119.1	128.6	119.5	137.1	6.7	7.4	6.7	6.6	6.1	51
43.9	43.1	43.7	41.0	50.1	8.9	10.6	8.6	8.8	7.6	52
10.3	10.7	11.2	9.5	10.0	13.9	18.9	11.8	13.9	11.5	53
6.6	6.1	5.8	9.1	3.8	5.4	6.4	5.5	5.0	5.3	54
9.8	11.7	10.7	9.1	8.2	5.8	5.5	6.6	5.4	5.4	55
10.8	8.9	10.7	11.0	12.3	4.0	4.0	4.0	4.1	3.9	56
179.0	155.4	174.2	149.0	226.1	3.2	3.7	3.4	3.4	2.5	57
161.8	138.4	154.2	155.3	206.0	3.1	3.5	3.3	3.1	2.5	58



TABLE 12. NUMBER OF PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY BED SIZE OF HOSPITAL AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	ALL SIZES	6-99 BEDS	100-199 BEDS	200-299 BEDS	300-499 BEDS	500 BEDS OR MORE
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS						
ALL CONDITIONS.....	33,387	5,079	5,153	7,997	8,308	6,849
INFECTIOUS AND PARASITIC DISEASES.....001-139	684	101	136	153	154	140
NEOPLASMS.....140-239	2,331	199	292	584	635	661
MALIGNANT NEOPLASMS.....140-208,230-234	1,679	150	203	471	519	537
MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197.5	198	22	25	52	52	47
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	305	21	35	75	91	84
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	205	22	25	49	55	54
BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	452	49	49	113	116	125
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,086	201	177	247	249	212
DIABETES MELLITUS.....250	474	87	80	101	111	95
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	323	54	53	69	76	73
MENTAL DISORDERS.....290-319	1,781	248	342	376	481	334
PSYCHOSES.....290-299	814	109	155	154	228	168
ALCOHOL DEPENDENCE SYNDROME.....303	336	57	42	94	88	55
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	949	120	141	210	242	237
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	383	47	60	75	101	100
CATARACT.....366	63	36	20	19	14	14
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	196	24	42	52	44	33
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,572	847	741	1,385	1,491	1,107
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	3,736	584	486	912	1,009	745
ACUTE MYOCARDIAL INFARCTION.....410	760	120	96	185	203	156
ATHEROSCLEROTIC HEART DISEASE.....414.0	369	17	15	83	124	130
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	1,040	176	141	249	282	193
CARDIAC DYSRHYTHMIAS.....427	521	97	88	132	121	83
CONGESTIVE HEART FAILURE.....428.0	605	122	91	154	154	84
CEREBROVASCULAR DISEASE.....430-438	895	142	129	237	231	155
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	2,982	606	642	647	634	453
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	416	103	101	85	79	49
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	218	25	64	57	39	34
PNEUMONIA, ALL FORMS.....480-486	924	220	189	197	199	119
ASTHMA.....493	454	71	93	103	99	88
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	3,663	708	626	883	819	628
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	292	55	54	71	67	45
GASTRITIS AND DUODENITIS.....535	181	56	33	40	34	19
APPENDICITIS.....540-543	275	64	43	67	66	35
INGUINAL HERNIA.....550	301	44	54	75	68	60
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	388	87	79	88	76	58
CHOLELITHIASIS.....574	522	92	92	141	112	84
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	2,515	424	408	637	569	476
CALCULUS OF KIDNEY AND URETER.....592	314	48	55	69	68	73
HYPERPLASIA OF PROSTATE.....600	274	37	39	83	68	48
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-670	904	97	105	220	244	239
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	301	31	33	80	84	72
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	478	82	93	102	113	89
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	1,955	300	286	500	464	404
ARTHRITIS AND RELATED DISORDERS.....710-719	484	54	55	141	117	116
INTERVERTEBRAL DISC DISORDERS.....722	486	62	90	130	115	90
CONGENITAL ANOMALIES.....740-759	240	19	57	41	48	74
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	121	10	28	27	27	29
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	450	66	73	121	100	89
INJURY AND POISONING.....800-999	3,027	474	485	697	786	585
FRACTURES, ALL SITES.....800-829	1,062	153	173	267	279	189
FRACTURE OF NECK OF FEMUR.....820	249	36	42	68	65	38
SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	159	44	47	21	29	17
INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	238	39	37	50	65	46
LACERATIONS AND OPEN WOUNDS.....870-904	260	37	37	53	70	64
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,327	522	510	1,099	1,177	1,020
FEMALES WITH DELIVERIES.....V27	3,911	474	471	974	1,077	915

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 13. AVERAGE LENGTH OF STAY FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY BED SIZE OF HOSPITAL AND CATEGORY OF FIRST-LISTED DIAGNOSIS: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	AVERAGE LENGTH OF STAY IN DAYS					
	ALL SIZES	6-99 BEDS	100-199 BEDS	200-299 BEDS	300-499 BEDS	500 BEDS OR MORE
ALL CONDITIONS.....	6.4	4.9	6.3	6.2	7.0	7.3
INFECTIOUS AND PARASITIC DISEASES.....001-139	7.6	5.5	6.2	6.9	8.7	10.0
NEOPLASMS.....140-239	8.0	6.5	7.3	7.8	8.6	8.4
MALIGNANT NEOPLASMS.....140-208,230-234	8.7	7.2	7.7	8.5	9.2	9.0
MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197.5	11.8	11.0	11.4	12.0	12.2	11.6
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	8.9	7.9	8.9	8.2	9.1	9.4
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	6.2	5.2	6.1	5.4	6.1	7.5
BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	5.4	4.3	5.3	4.9	5.9	5.9
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	7.3	5.6	7.0	7.3	8.2	8.0
DIABETES MELLITUS.....250	7.6	6.4	7.1	7.1	8.0	9.2
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	6.0	4.2	5.6	6.4	6.7	6.3
MENTAL DISORDERS.....290-319	12.3	8.6	13.6	11.2	12.1	15.3
PSYCHOSES.....290-299	13.7	9.4	15.0	10.7	14.3	17.2
ALCOHOL DEPENDENCE SYNDROME.....303	10.9	8.4	8.4	12.6	10.8	12.7
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	6.0	4.3	5.6	5.0	6.9	7.0
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	9.8	6.2	8.6	8.6	11.5	11.6
CATARACT.....366	1.8	1.7	1.5	1.6	1.6	1.9
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	2.8	3.5	2.8	2.1	3.0	3.2
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	7.6	5.5	7.3	7.0	8.3	9.0
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	6.9	5.2	6.7	6.4	7.6	8.2
ACUTE MYOCARDIAL INFARCTION.....410	8.5	6.0	7.9	7.6	9.8	10.2
ATHEROSCLEROTIC HEART DISEASE.....414.0	6.3	4.4	5.2	5.8	6.8	6.6
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	5.2	3.7	5.0	4.6	5.6	6.7
CARDIAC DYSRHYTHMIAS.....427	5.7	4.5	5.6	5.2	6.1	7.4
CONGESTIVE HEART FAILURE.....428.0	8.4	6.8	8.2	8.1	9.3	9.9
CEREBROVASCULAR DISEASE.....430-438	10.1	6.5	10.0	9.4	11.3	12.9
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	6.3	5.4	5.8	6.5	7.1	6.7
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	4.6	4.4	4.3	4.8	4.9	5.2
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	1.2	1.2	1.4	1.1	1.1	1.4
PNEUMONIA, ALL FORMS.....480-486	8.0	6.8	7.4	8.6	8.8	9.1
ASTHMA.....493	4.8	4.6	4.6	5.1	5.1	4.5
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	6.2	5.0	5.9	6.3	6.9	6.8
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	6.9	5.2	6.8	7.5	7.2	7.7
GASTRITIS AND DUODENITIS.....535	4.2	3.8	4.6	4.4	4.3	4.3
APPENDICITIS.....540-543	4.7	4.0	4.6	4.4	5.4	5.2
INGUINAL HERNIA.....550	2.6	2.6	2.6	2.6	2.6	2.7
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	4.9	3.7	3.8	5.4	5.8	5.9
CHOLELITHIASIS.....574	7.0	6.4	6.4	7.2	7.8	6.9
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	5.0	4.4	5.0	4.8	5.4	5.6
CALCULUS OF KIDNEY AND URETER.....592	3.5	2.8	3.6	3.3	3.9	3.7
HYPERPLASIA OF PROSTATE.....600	5.4	5.2	5.7	4.9	5.7	5.7
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-676	2.7	2.2	2.4	2.4	2.6	3.2
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	2.2	2.2	2.1	2.0	2.2	2.4
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	7.9	6.0	7.2	8.4	8.8	8.9
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	6.4	4.9	6.1	6.3	7.0	7.3
ARTHROPATHIES AND RELATED DISORDERS.....710-719	7.8	5.5	7.5	7.2	8.9	8.7
INTERVERTEBRAL DISC DISORDERS.....722	6.4	7.0	5.9	6.4	6.3	6.4
CONGENITAL ANOMALIES.....740-759	6.0	3.7	7.1	4.2	5.4	7.0
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	9.8	2.3	10.3	5.7	11.7	14.2
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	4.1	2.9	4.4	4.5	3.5	4.4
INJURY AND POISONING.....800-999	6.7	4.6	5.8	6.5	7.3	8.4
FRACTURES, ALL SITES.....800-829	8.9	6.1	7.7	8.7	10.2	10.4
FRACTURE OF NECK OF FEMUR.....820	13.9	10.0	13.0	14.2	15.8	14.9
SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	5.4	5.5	5.0	6.5	5.1	5.7
INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	5.8	3.1	4.9	5.6	5.3	9.7
LACERATIONS AND OPEN WOUNDS.....870-904	4.0	3.2	3.1	3.5	4.1	5.4
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	3.2	2.5	3.0	3.2	3.4	3.6
FEMALES WITH DELIVERIES.....V27	3.1	2.5	3.0	2.8	3.2	3.5

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 14. NUMBER OF ALL-LISTED DIAGNOSES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, SEX, RACE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL, BY DIAGNOSTIC CATEGORY: UNITED STATES, 1987

DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)

DIAGNOSTIC CATEGORY AND ICD-9-CM CODE	AGE				
	ALL DIAGNOSES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
	NUMBER OF ALL-LISTED DIAGNOSIS IN THOUSANDS				
01 ALL CONDITIONS.....	103,431	5,461	32,275	22,465	43,230
02 INFECTIOUS AND PARASITIC DISEASES.....001-139	2,661	393	770	451	1,046
03 NEOPLASMS.....140-239	4,738	80	753	1,586	2,320
04 MALIGNANT NEOPLASMS.....140-208,230-234	3,768	55	369	1,271	2,072
05 MALIGNANT NEOPLASM OF LARGE INTESTINE AND RECTUM.....153-154,197.5	265	*	11	80	174
06 MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	551	*	24	220	306
07 MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	271	*	36	115	120
08 BENIGN NEOPLASMS AND NEOPLASMS OF UNCERTAIN BEHAVIOR AND UNSPECIFIED NATURE.....210-229,235-239	970	25	384	315	247
09 ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	7,345	312	1,157	2,039	3,837
10 DIABETES MELLITUS.....250	2,902	33	409	914	1,547
11 DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	2,347	143	571	480	1,153
12 MENTAL DISORDERS.....290-319	5,141	138	2,559	1,099	1,344
13 PSYCHOSES.....290-299	1,562	17	627	315	604
14 ALCOHOL DEPENDENCE SYNDROME.....303	842	*	470	265	103
15 DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	3,459	490	711	700	1,558
16 DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	1,640	112	354	329	845
17 CATARACT.....366	125	*	10	19	94
18 DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	577	299	95	63	120
19 DISEASES OF THE CIRCULATORY SYSTEM.....390-459	20,616	108	1,279	5,403	13,827
20 HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	13,047	69	622	3,334	9,021
21 ACUTE MYOCARDIAL INFARCTION.....410	872	*	50	308	514
22 ATHEROSCLEROTIC HEART DISEASE.....414.0	1,951	*	48	546	1,351
23 OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	3,139	*6	134	1,066	1,934
24 CARDIAC DYSRHYTHMIAS.....427	2,656	19	132	522	1,982
25 CONGESTIVE HEART FAILURE.....428.0	1,714	14	40	270	1,390
26 CEREBROVASCULAR DISEASE.....430-438	1,912	*8	61	360	1,484
27 DISEASES OF THE RESPIRATORY SYSTEM.....460-519	7,578	1,176	1,235	1,591	3,576
28 ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	805	296	151	130	227
29 CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	287	196	88	*	*
30 PNEUMONIA, ALL FORMS.....480-486	1,464	278	199	237	751
31 ASTHMA.....493	785	198	203	164	220
32 DISEASES OF THE DIGESTIVE SYSTEM.....520-579	8,178	447	2,114	2,131	3,486
33 ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	565	*	108	162	292
34 GASTRITIS AND DUODENITIS.....535	582	24	169	172	217
35 APPENDICITIS.....540-543	321	69	193	36	22
36 INGUINAL HERNIA.....550	377	45	80	109	143
37 NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	668	157	215	103	193
38 CHOLELITHIASIS.....574	837	*	237	236	361
39 DISEASES OF THE GENITOURINARY SYSTEM.....580-629	7,335	171	2,703	1,609	2,852
40 CALCULUS OF KIDNEY AND URETER.....592	406	*	173	143	88
41 HYPERTROPHIA OF PROSTATE.....600	493	-	*	111	380
42 COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM 1/.....630-676	7,174	23	7,143	*6	...
43 ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	338	*	334	*	...
44 DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	1,270	97	362	294	517
45 DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	4,744	86	1,247	1,324	2,086
46 ARTHROPATHIES AND RELATED DISORDERS.....710-719	1,695	20	276	398	1,000
47 INTERVERTEBRAL DISC DISORDERS.....722	630	*	293	231	104
48 CONGENITAL ANOMALIES.....740-759	628	276	172	97	82
49 CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	319	306	*	11	*
50 SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	5,343	475	1,312	1,381	2,176
51 INJURY AND POISONING.....800-999	6,354	583	2,914	1,157	1,700
52 FRACTURES, ALL SITES.....800-829	1,647	148	683	252	564
53 FRACTURE OF NECK OF FEMUR.....820	275	*	12	23	237
54 SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	266	*7	164	66	30
55 INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	328	67	177	37	48
56 LACERATIONS AND OPEN WOUNDS.....870-904	708	73	469	92	74
57 SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	8,203	157	5,271	1,107	1,668
58 FEMALES WITH DELIVERIES.....V27	3,911	11	3,897	*	...

1/ FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 14. NUMBER OF ALL-LISTED DIAGNOSES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, SEX, RACE, GEOGRAPHIC REGION, AND BED SIZE OF HOSPITAL, BY DIAGNOSTIC CATEGORY: UNITED STATES, 1987--CON.

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

SEX		RACE			REGION					BED SIZE				
MALE	FEMALE	WHITE	ALL OTHER	NOT STATED	NORTH-EAST	MIDWEST	SOUTH	WEST	6-99 BEDS	100-199 BEDS	200-299 BEDS	300-499 BEDS	500 OR MORE	
NUMBER OF ALL-LISTED DIAGNOSES IN THOUSANDS--CON.														
42,306	61,125	77,542	15,369	10,521	21,722	26,942	34,359	20,409	16,183	15,182	25,309	26,063	20,694	01
1,144	1,516	1,942	460	259	542	670	934	516	429	410	645	633	544	02
2,074	2,664	3,710	578	451	1,031	1,298	1,416	993	483	532	1,253	1,271	1,200	03
1,838	1,930	3,013	402	353	830	1,065	1,081	792	358	410	1,003	1,025	972	04
129	136	212	29	24	72	62	80	51	32	35	74	65	60	05
344	207	446	58	47	130	155	168	98	51	64	143	156	138	06
*	269	219	23	29	52	83	81	55	30	31	68	73	69	07
236	734	697	175	98	201	233	335	201	125	122	250	246	228	08
2,849	4,496	5,560	1,149	636	1,577	2,037	2,452	1,279	1,291	1,139	1,770	1,786	1,359	09
1,199	1,702	2,113	515	274	678	779	949	495	457	429	687	759	569	10
949	1,398	1,638	508	202	550	596	747	455	346	310	559	607	525	11
2,619	2,521	3,764	878	499	1,244	1,480	1,467	949	794	875	1,168	1,325	978	12
715	847	1,136	258	168	404	429	431	298	217	276	339	416	313	13
631	211	591	185	66	245	265	189	143	144	109	210	225	153	14
1,637	1,822	2,625	466	368	738	997	1,068	656	464	511	817	910	757	15
779	861	1,274	217	150	342	461	517	320	226	244	393	434	344	16
50	75	96	18	12	50	29	25	21	16	13	33	38	26	17
299	278	437	76	65	122	166	198	91	75	121	142	135	105	18
10,167	10,449	16,395	2,376	1,845	4,862	5,285	6,741	3,729	3,164	2,810	5,223	5,454	3,966	19
6,718	6,328	10,595	1,313	1,139	3,148	3,329	4,186	2,384	2,037	1,779	3,326	3,468	2,437	20
538	334	724	64	84	197	223	273	179	143	111	208	229	180	21
1,075	876	1,642	165	144	518	543	586	304	187	201	507	626	431	22
1,727	1,412	2,605	271	263	790	774	1,003	572	516	421	755	838	609	23
1,366	1,289	2,156	255	245	595	675	834	551	454	400	699	647	455	24
759	955	1,350	194	170	434	443	531	305	346	257	415	441	254	25
878	1,034	1,495	225	192	418	483	659	353	302	283	501	502	325	26
3,877	3,701	5,841	992	744	1,582	1,976	2,762	1,258	1,514	1,413	1,740	1,695	1,215	27
391	414	611	117	77	150	202	345	108	199	183	165	160	98	28
138	149	215	29	42	62	81	114	30	33	88	74	50	42	29
753	711	1,105	212	147	279	401	528	256	337	278	327	318	204	30
314	471	527	188	70	189	197	263	135	124	145	186	174	155	31
3,707	4,472	6,284	1,091	803	1,735	2,067	2,906	1,470	1,549	1,338	1,987	1,880	1,424	32
287	279	439	72	55	122	142	201	101	101	105	135	130	95	33
279	302	440	90	52	122	135	247	79	154	105	139	115	70	34
175	145	234	38	48	55	76	102	87	70	53	82	74	41	35
333	44	295	41	42	94	106	127	50	56	65	96	87	73	36
260	408	512	90	66	129	180	253	106	148	124	148	138	110	37
271	567	661	87	89	179	212	291	155	145	145	223	192	131	38
2,574	4,761	5,497	1,106	732	1,418	1,796	2,695	1,426	1,219	1,140	1,886	1,712	1,378	39
266	140	329	32	45	80	110	155	61	61	68	93	88	95	40
493	...	394	46	53	101	130	154	108	75	76	139	118	85	41
...	7,174	4,552	1,649	972	1,277	1,720	2,312	1,865	856	784	1,754	1,970	1,810	42
...	338	207	99	32	95	65	111	67	37	38	91	92	79	43
587	683	933	224	113	314	320	420	215	210	216	284	313	248	44
1,869	2,874	3,700	537	507	872	1,262	1,680	930	887	692	1,183	1,123	859	45
599	1,097	1,322	191	182	326	467	550	352	306	229	433	422	306	46
350	279	492	61	77	84	148	273	124	92	116	164	144	113	47
302	326	465	105	58	107	166	233	122	60	125	121	142	180	48
189	130	210	73	35	37	89	116	77	18	66	60	67	108	49
2,516	2,827	4,009	771	563	998	1,419	1,851	1,074	902	850	1,332	1,266	993	50
3,499	2,855	4,685	958	711	1,253	1,628	2,050	1,421	975	932	1,502	1,697	1,248	51
844	802	1,244	206	196	325	416	531	374	234	256	402	446	309	52
80	194	220	20	34	58	73	90	54	39	45	74	73	44	53
129	137	190	48	29	56	58	119	33	75	71	46	49	25	54
209	120	247	51	30	79	92	101	57	54	51	70	91	63	55
497	211	468	167	73	137	171	244	156	99	98	154	196	162	56
1,746	6,457	5,731	1,449	1,023	1,585	2,134	2,509	1,975	1,022	1,039	2,029	2,213	1,900	57
...	3,911	2,498	842	571	694	916	1,289	1,012	474	471	974	1,077	915	58

TABLE 15. NUMBER OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER	NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS				
						ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
ALL PROCEDURES.....	39,118	1,866	15,632	9,252	12,369					
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	914	182	306	220	206					
SPINAL TAP.....03.31	351	143	90	48	70					
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	109	*	44	37	24					
OPERATIONS ON THE EYE.....08-16	497	39	96	116	246					
EXTRACTION OF LENS.....13.1-13.6	83	*6	*7	14	57					
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	69	*	*	13	54					
OPERATIONS ON THE EAR.....18-20	176	93	42	22	20					
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	937	239	432	161	105					
RHINOPLASTY AND REPAIR OF NOSE.....21.8	125	*6	89	23	*7					
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	244	159	80	*	*					
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	1,018	47	197	315	458					
BRONCHOSCOPY.....33.21-33.23	196	14	29	59	93					
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	3,116	99	331	1,274	1,412					
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	184	-	17	104	64					
DIRECT HEART REVASCULARIZATION.....36.1	332	*	*9	170	152					
CARDIAC CATHETERIZATION.....37.21-37.23	866	19	79	440	328					
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	234	*	*8	49	174					
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	398	20	80	113	184					
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,842	229	1,815	1,511	2,287					
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	153	*8	26	43	76					
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	308	*6	45	84	172					
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	415	*	67	102	245					
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	303	66	186	33	17					
HEMORRHOIDECTOMY.....49.43-49.46	97	-	48	32	17					
CHOLECYSTECTOMY.....51.2	536	*	199	163	172					
REPAIR OF INGUINAL HERNIA.....53.0-53.1	329	42	77	99	111					
DIVISION OF PERITONEAL ADHESIONS.....54.5	339	*	194	70	74					
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,721	54	380	476	811					
ENDOSCOPES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	637	13	91	170	363					
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	747	70	75	160	442					
PROSTATECTOMY.....60.2-60.6	410	***	*	90	318					
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	2,884	*7	2,108	538	231					
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	490	*	276	163	50					
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	415	-	413	*	***					
HYSTERECTOMY.....68.3-68.7	655	*	406	188	60					
DILATION AND CURETTAGE OF UTERUS.....69.0	379	*	314	48	16					
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	149	-	43	59	46					
OBSTETRICAL PROCEDURES.....72-75	5,358	18	5,337	*	-					
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	1,833	*7	1,826	*	-					
CESAREAN SECTION.....74.0-74.2,74.4,74.99	953	*	951	*	-					
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	660	*5	656	-	-					
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,466	209	1,477	839	941					
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	481	30	200	86	165					
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	205	54	72	26	53					
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	352	*5	176	133	38					
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	210	*	79	40	88					
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5,81.6	212	*	11	40	161					
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83.1,83.3-83.9	322	25	155	91	51					
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,600	95	642	434	430					
MASTECTOMY.....85.4	141	*	18	60	62					
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86.2-86.4	568	38	235	126	169					
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	149	16	57	35	42					
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	10,335	460	2,271	3,032	4,572					
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	1,646	86	366	396	798					
PYELOGRAM.....87.73-87.75	334	10	125	93	105					
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	1,448	17	155	683	593					
DIAGNOSTIC ULTRASOUND.....88.7	1,596	69	490	360	677					
CIRCULATORY MONITORING.....89.6	821	53	109	184	475					
RADIOISOTOPE SCAN.....92.0-92.1	759	18	136	219	386					

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 16. RATE OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	ALL AGES	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
RATE OF ALL-LISTED PROCEDURES PER 100,000 POPULATION					
ALL PROCEDURES.....	16,187.3	3,560.3	13,691.7	20,443.5	41,456.9
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	378.1	348.2	268.0	485.5	689.2
SPINAL TAP.....03.31	145.1	272.1	78.9	106.5	234.1
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	45.0	*	38.5	82.8	79.8
OPERATIONS ON THE EYE.....08-16	205.7	75.1	84.0	255.8	825.1
EXTRACTION OF LENS.....13.1-13.6	34.4	*10.6	*5.8	31.1	190.4
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	28.4	*	*	29.2	180.3
OPERATIONS ON THE EAR.....18-20	73.0	176.7	36.5	49.2	66.8
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	387.5	455.6	378.4	356.0	350.7
RHINOPLASTY AND REPAIR OF NOSE.....21.8	51.5	*10.6	77.8	50.5	*24.5
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	101.0	303.1	70.4	*	*
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	421.3	90.0	172.7	696.6	1,536.5
BRONCHOSCOPY.....33.21-33.23	81.1	27.4	25.5	130.9	312.9
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	1,289.5	189.4	289.6	2,815.7	4,732.8
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	76.3	-	14.9	228.9	214.1
DIRECT HEART REVASCLARIZATION.....36.1	137.3	*	*7.6	376.7	511.0
CARDIAC CATHETERIZATION.....37.21-37.23	358.2	35.6	69.5	972.2	1,098.4
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	96.7	*	*6.7	107.6	584.0
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	164.8	39.0	70.4	250.2	617.5
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	2,417.6	437.5	1,589.6	3,338.5	7,611.6
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	63.3	*14.7	22.6	95.5	255.2
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	127.3	*10.7	39.6	186.5	577.5
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	171.9	*	58.4	224.6	821.1
APPENDICETOMY, EXCLUDING INCIDENTAL.....47.0	125.3	126.5	163.3	73.9	55.8
HEMORRHOIDECTOMY.....49.43-49.46	40.0	-	42.0	71.3	55.6
CHOLECYSTECTOMY.....51.2	221.9	*	174.1	360.7	577.1
REPAIR OF INGUINAL HERNIA.....53.0-53.1	136.2	79.6	67.2	219.5	372.8
DIVISION OF PERITONEAL ADHESIONS.....54.5	140.3	*	169.7	153.7	247.0
OPERATIONS ON THE URINARY SYSTEM.....55-59	712.0	103.5	332.5	1,051.6	2,717.3
ENDOSCOPES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	263.6	24.5	79.6	376.3	1,216.5
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	309.2	133.3	65.7	353.8	1,481.9
PROSTATECTOMY.....60.2-60.6	169.7	...	*	199.1	1,067.0
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	1,193.2	*13.3	1,846.2	1,188.4	774.1
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	202.8	*	242.0	360.8	167.9
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	171.8	-	361.9	*	...
HYSTERECTOMY.....68.3-68.7	270.9	*	355.9	415.9	200.4
DILATION AND CURETTAGE OF UTERUS.....69.0	157.0	*	275.0	106.7	55.2
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	61.5	-	38.0	131.2	153.9
OBSTETRICAL PROCEDURES.....72-75	2,217.3	34.5	4,674.5	*	...
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM					
EXTRACTION.....72.1,72.21,72.31,72.71,73.6	758.7	*12.8	1,599.6	*	...
CESAREAN SECTION.....74.0-74.2,74.4,74.99	394.2	*	832.6	*	...
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	273.1	*8.7	574.2	-	...
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	1,434.2	398.0	1,293.8	1,854.4	3,153.8
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	198.9	56.6	174.8	190.8	553.0
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	84.8	102.8	63.3	56.7	177.9
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	145.7	*10.2	154.3	292.9	127.5
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	86.9	*	68.9	88.5	296.6
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5,81.6	87.8	*	9.4	88.2	538.7
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83.1,83.3-83.9	133.2	48.0	135.8	200.4	170.5
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	662.2	181.8	562.1	958.3	1,439.7
MASTECTOMY.....85.4	58.4	*	16.1	133.4	208.4
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN					
OR SUBCUTANEOUS TISSUE.....86.2-86.4	235.1	72.4	206.2	277.4	567.3
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	61.8	30.2	50.0	76.6	139.8
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	4,276.7	877.8	1,989.1	6,699.2	15,325.3
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	681.3	164.7	320.7	875.8	2,673.3
PYELOGRAM.....87.73-87.75	138.1	19.6	109.6	206.5	351.4
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	599.2	32.4	136.0	1,508.4	1,987.8
DIAGNOSTIC ULTRASOUND.....88.7	660.5	132.5	428.8	795.3	2,269.9
CIRCULATORY MONITORING.....89.6	339.8	100.6	95.6	406.6	1,592.8
RADIOISOTOPE SCAN.....92.0-92.1	314.0	33.7	119.0	483.9	1,294.4

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 17. NUMBER OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY SEX AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	BOTH SEXES	MALE	FEMALE
NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS			
ALL PROCEDURES.....	39,118	15,716	23,402
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	914	474	439
SPINAL TAP.....03.31	351	181	169
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	109	30	79
OPERATIONS ON THE EYE.....08-16	497	225	272
EXTRACTION OF LENS.....13.1-13.6	83	31	52
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	69	25	44
OPERATIONS ON THE EAR.....18-20	176	106	71
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	937	485	452
RHINOPLASTY AND REPAIR OF NOSE.....21.8	125	60	65
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	244	115	129
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	1,018	600	418
BRONCHOSCOPY.....33.21-33.23	196	121	75
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	3,116	1,838	1,279
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	184	123	62
DIRECT HEART REVASCULARIZATION.....36.1	332	244	88
CARDIAC CATHETERIZATION.....37.21-37.23	866	533	333
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	234	132	101
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	398	202	196
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,842	2,517	3,326
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	153	74	79
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	308	139	168
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	415	185	230
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	303	164	139
HEMORRHOIDECTOMY.....49.43-49.46	97	52	45
CHOLECYSTECTOMY.....51.2	536	148	388
REPAIR OF INGUINAL HERNIA.....53.0-53.1	329	290	39
DIVISION OF PERITONEAL ADHESIONS.....54.5	339	53	286
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,721	1,089	631
ENDOSCOPIES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	637	473	164
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	747	747	...
PRUSTATECTOMY.....60.2-60.6	410	410	...
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	2,884	...	2,884
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	490	...	490
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	415	...	415
HYSTERECTOMY.....68.3-68.7	655	...	655
DILATION AND CURETTAGE OF UTERUS.....69.0	379	...	379
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	149	...	149
OBSTETRICAL PROCEDURES.....72-75	5,358	...	5,358
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	1,833	...	1,833
CESAREAN SECTION.....74.0-74.2,74.4,74.99	953	...	953
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	660	...	660
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,466	1,718	1,748
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	481	257	223
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	205	110	95
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	352	202	150
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	210	106	104
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5,81.6	212	66	146
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83,1,83.3-83.9	322	182	140
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,600	667	933
MASTECTOMY.....85.4	141	*	140
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86.2-86.4	568	302	266
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	149	88	61
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	10,335	5,018	5,317
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	1,646	814	833
PYELOGRAM.....87.73-87.75	334	190	144
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	1,448	868	580
DIAGNOSTIC ULTRASOUND.....88.7	1,596	616	981
CIRCULATORY MONITORING.....89.6	821	430	391
RADIOISOTOPE SCAN.....92.0-92.1	759	350	409

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 18. RATE OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY SEX AND PROCEDURE CATEGORY: UNITED STATES, 1987

DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)

PROCEDURE CATEGORY AND ICD-9-CM CODE	BOTH SEXES	MALE	FEMALE
RATE OF ALL-LISTED PROCEDURES PER 100,000 POPULATION			
ALL PROCEDURES.....	16,187.3	13,437.2	18,766.7
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	378.1	405.6	352.4
SPINAL TAP.....03.31	145.1	155.2	135.7
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	45.0	25.3	63.6
OPERATIONS ON THE EYE.....08-16	205.7	192.7	217.9
EXTRACTION OF LENS.....13.1-13.6	34.4	26.7	41.5
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	28.4	21.1	35.3
OPERATIONS ON THE EAR.....18-20	73.0	90.5	56.7
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	387.5	414.5	362.2
RHINOPLASTY AND REPAIR OF NOSE.....21.8	51.5	51.1	51.9
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	101.0	98.5	103.3
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	421.3	512.6	335.6
BRONCHOSCOPY.....33.21-33.23	81.1	103.8	59.8
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	1,289.5	1,571.2	1,025.3
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	76.3	104.9	49.5
DIRECT HEART REVASCULARIZATION.....36.1	137.3	208.6	70.4
CARDIAC CATHETERIZATION.....37.21-37.23	358.2	455.4	267.0
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	96.7	113.2	81.2
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	164.8	173.0	157.1
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	2,417.6	2,151.6	2,667.0
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	63.3	63.4	63.2
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	127.3	118.9	135.1
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	171.9	158.5	184.4
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	125.3	140.3	111.2
HEMORRHOIDECTOMY.....49.43-49.46	40.0	44.6	35.8
CHOLECYSTECTOMY.....51.2	221.9	126.6	311.4
REPAIR OF INGUINAL HERNIA.....53.0-53.1	136.2	247.7	31.6
DIVISION OF PERITONEAL ADHESIONS.....54.5	140.3	45.4	229.3
OPERATIONS ON THE URINARY SYSTEM.....55-59	712.0	931.5	506.1
ENDOSCOPES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	263.6	404.3	131.6
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	309.2	638.8	...
PROSTATECTOMY.....60.2-60.6	169.7	350.7	...
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	1,193.2	...	2,312.4
DOPHORECTOMY AND SALPINGO-DOPHORECTOMY.....65.3-65.6	202.8	...	393.1
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	171.8	...	333.0
HYSTERECTOMY.....68.3-68.7	270.9	...	524.9
DILATION AND CURETTAGE OF UTERUS.....69.0	157.0	...	304.2
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	61.5	...	119.3
OBSTETRICAL PROCEDURES.....72-75	2,217.3	...	4,297.0
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	758.7	...	1,470.2
CESAREAN SECTION.....74.0-74.2,74.4,74.99	394.2	...	763.9
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	273.1	...	529.3
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	1,434.2	1,469.0	1,401.5
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	198.9	219.9	179.1
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	84.8	93.9	76.3
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	145.7	172.6	120.5
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	86.9	90.5	83.6
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5,81.6	87.8	56.3	117.3
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83.1,83.3-83.9	133.2	155.5	112.2
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	662.2	570.3	748.3
MASTECTOMY.....85.4	58.4	*	112.0
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86.2-86.4	235.1	258.5	213.2
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	61.8	75.4	49.0
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	4,276.7	4,290.6	4,263.7
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	681.3	695.7	667.7
PYELOGRAM.....87.73-87.75	138.1	162.2	115.5
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	599.2	742.2	465.0
DIAGNOSTIC ULTRASOUND.....88.7	660.5	526.3	786.3
CIRCULATORY MONITORING.....89.6	339.8	367.4	313.8
RADIOISOTOPE SCAN.....92.0-92.1	314.0	299.0	328.0

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.



TABLE 19. NUMBER OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY RACE AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	ALL RACES	WHITE	ALL OTHER	NOT STATED
	NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS			
ALL PROCEDURES.....	39,118	29,131	5,988	3,999
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	914	662	159	92
SPINAL TAP.....03-31	351	235	86	29
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	109	83	14	12
OPERATIONS ON THE EYE.....08-16	497	352	65	80
EXTRACTION OF LENS.....13.1-13.6	83	67	48	49
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	49	56	45	48
OPERATIONS ON THE EAR.....18-20	176	137	19	21
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	937	708	108	121
RHINOPLASTY AND REPAIR OF NOSE.....21.8	125	99	10	15
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	244	182	25	37
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	1,018	785	150	83
BRONCHOSCOPY.....33.21-33.23	196	151	28	17
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	3,116	2,489	392	236
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	184	155	16	14
DIRECT HEART REVASCULARIZATION.....36.1	332	293	20	19
CARDIAC CATHETERIZATION.....37.21-37.23	866	715	97	54
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	234	189	20	25
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	398	311	52	35
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,842	4,448	807	587
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	153	116	27	10
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	308	241	35	31
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	415	317	60	38
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	303	219	36	47
HEMORRHOIDECTOMY.....49.43-49.46	97	68	15	14
CHOLECYSTECTOMY.....51.2	536	416	54	66
REPAIR OF INGUINAL HERNIA.....53.0-53.1	329	256	36	37
DIVISION OF PERITONEAL ADHESIONS.....54.5	339	249	57	34
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,721	1,361	207	153
ENDOSCOPIES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	637	513	68	56
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	747	570	94	83
PROSTATECTOMY.....60.2-60.6	410	324	37	49
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	2,884	2,011	543	329
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	490	366	70	54
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	415	258	103	54
HYSTERECTOMY.....68.3-68.7	655	471	102	81
DILATION AND CURETTAGE OF UTERUS.....69.0	379	246	95	38
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	149	121	48	20
OBSTETRICAL PROCEDURES.....72-75	5,358	3,456	1,124	779
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	1,833	1,260	310	263
CESAREAN SECTION.....74.0-74.2,74.4,74.99	953	629	198	125
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	660	403	153	104
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,466	2,556	444	465
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	481	358	59	64
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	205	152	24	28
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	352	272	29	51
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	210	155	16	39
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5-81.6	212	169	14	30
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83.1,83.3-83.9	322	230	48	44
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,600	1,190	254	157
MASTECTOMY.....85.4	141	114	10	18
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86.2-86.4	568	420	97	51
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	149	106	32	11
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	10,335	8,013	1,555	766
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	1,646	1,271	257	118
PYELOGRAM.....87.73-87.75	334	270	39	25
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	1,448	1,169	158	121
DIAGNOSTIC ULTRASOUND.....88.7	1,596	1,162	324	111
CIRCULATORY MONITORING.....89.6	821	629	137	55
RADIOISOTOPE SCAN.....92.0-92.1	759	593	120	46

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 20. NUMBER OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY GEOGRAPHIC REGION AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	UNITED STATES	NORTH-EAST	MIDWEST	SOUTH	WEST
	NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS				
ALL PROCEDURES.....	39,118	8,468	9,924	12,221	8,505
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	914	164	223	340	186
SPINAL TAP.....03-31	351	71	88	124	69
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	109	21	33	30	26
OPERATIONS ON THE EYE.....08-16	497	116	176	119	85
EXTRACTION OF LENS.....13-1-13-6	83	35	19	15	14
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKUS).....13-7	69	32	17	47	13
OPERATIONS ON THE EAR.....18-20	176	45	53	53	26
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	937	192	296	310	138
RHINOPLASTY AND REPAIR OF NOSE.....21-8	125	20	55	35	15
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28-2-28-3	244	51	71	93	28
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	1,018	249	258	315	196
BRONCHOSCOPY.....33-21-33-23	196	42	47	68	38
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	3,116	560	967	1,011	579
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36-0	184	24	67	69	25
DIRECT HEART REVASCLARIZATION.....36-1	332	50	119	106	57
CARDIAC CATHETERIZATION.....37-21-37-23	866	156	258	324	128
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37-7-37-8	234	43	61	82	47
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	398	86	116	118	79
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,842	1,242	1,449	2,021	1,130
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42-23-44-13	153	38	31	57	26
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43-5-43-8,45-6-45-8	308	66	86	94	62
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45-24	415	108	97	142	68
APPENDECTOMY, EXCLUDING INCIDENTAL.....47-0	303	50	73	98	82
HEMORRHOIDECTOMY.....49-43-49-46	97	22	22	35	17
CHOLECYSTECTOMY.....51-2	536	105	137	179	116
REPAIR OF INGUINAL HERNIA.....53-0-53-1	329	82	93	112	42
DIVISION OF PERITONEAL ADHESIONS.....54-5	339	63	67	142	67
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,721	376	459	566	318
ENDOSCOPIES THROUGH NATURAL ORIFICE.....55-21-55-22,56-31,57-32,58-22	637	152	173	219	93
OPERATIONS ON THE MALE GENITAL ORGANS.....60-84	747	157	194	237	159
PROSTATECTOMY.....60-2-60-6	410	75	108	126	100
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	2,884	536	607	1,108	632
DOPHORECTOMY AND SALPINGO-DOPHORECTOMY.....65-3-65-6	490	73	115	187	116
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66-2-66-3	415	64	82	181	89
HYSTERECTOMY.....68-3-68-7	655	88	158	251	157
DILATION AND CURETTAGE OF UTERUS.....69-0	379	118	69	129	63
REPAIR OF CYSTOCELE AND RECTOCELE.....70-5	149	23	31	59	36
OBSTETRICAL PROCEDURES.....72-75	5,358	935	1,359	1,635	1,429
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72-1,72-21,72-31,72-71,73-6	1,833	333	456	624	421
CESAREAN SECTION.....74-6-74-2,74-4,74-99	953	183	213	329	228
REPAIR OF CURRENT OBSTETRIC LACERATION.....75-5-75-6	660	117	156	193	194
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,466	612	867	1,131	856
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76-79,79-2-79-3,79-5-79-6	481	89	109	156	126
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76-70,76-78,79-0-79-1,79-4	205	50	45	68	42
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80-5,81-0	352	40	84	148	80
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81-41-81-47	210	27	66	50	67
ARTHROPLASTY AND REPLACEMENT OF HIP.....81-5,81-6	212	35	70	55	53
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83-1,83-3-83-9	322	62	80	107	73
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,600	353	422	514	312
MASTECTOMY.....85-4	141	26	42	46	28
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86-2-86-4	568	128	145	193	102
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86-6-86-7	149	29	40	51	31
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	10,335	2,823	2,446	2,712	2,354
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87-03,87-41,87-71,88-01,88-38	1,646	504	370	439	333
PYELOGRAM.....87-73-87-75	334	98	88	95	53
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88-4-88-5	1,448	284	451	452	260
DIAGNOSTIC ULTRASOUND.....88-7	1,596	512	371	332	382
CIRCULATORY MONITORING.....89-6	821	271	122	162	266
RADIOISOTOPE SCAN.....92-0-92-1	759	270	173	174	142

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 21. RATE OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY GEOGRAPHIC REGION AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION ICD-9-CM]

PROCEDURE CATEGORY AND ICD-9-CM CODE	UNITED STATES	NORTH-EAST	MIDWEST	SOUTH	WEST
RATE OF ALL-LISTED PROCEDURES PER 100,000 POPULATION					
ALL PROCEDURES.....	16,187.3	16,881.9	16,708.9	14,727.8	17,312.9
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	378.1	327.3	375.7	410.1	379.1
SPINAL TAP.....03.31	145.1	141.4	147.4	148.9	139.8
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	45.0	41.9	55.2	35.6	51.9
OPERATIONS ON THE EYE.....08-16	205.7	232.0	296.3	143.8	173.9
EXTRACTION OF LENS.....13.1-13.6	34.4	69.6	31.2	18.3	29.5
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKUS).....13.7	28.4	63.2	28.7	48.2	26.6
OPERATIONS ON THE EAR.....18-20	73.0	89.4	89.7	63.7	51.9
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	387.5	383.6	497.8	373.7	281.6
RHINOPLASTY AND REPAIR OF NOSE.....21.8	51.5	39.0	92.8	41.8	38.8
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	101.0	102.5	119.1	112.6	58.0
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	421.3	495.7	434.4	380.2	398.8
BRONCHOSCOPY.....33.21-33.23	81.1	84.5	78.9	82.4	78.2
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	1,289.5	1,116.3	1,627.6	1,217.8	1,178.5
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36.0	76.3	47.1	112.3	82.8	51.8
DIRECT HEART REVASCULARIZATION.....36.1	137.3	99.1	199.9	128.3	115.9
CARDIAC CATHETERIZATION.....37.21-37.23	358.2	310.8	433.6	390.7	260.7
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37.7-37.8	96.7	85.4	102.6	99.4	96.5
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	164.8	170.7	194.8	141.6	161.6
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	2,417.6	2,475.4	2,440.2	2,436.2	2,299.9
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	63.3	76.7	52.8	69.2	52.2
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	127.3	131.8	145.4	112.8	125.2
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45.24	171.9	214.4	163.7	171.4	139.2
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	125.3	99.2	122.3	118.2	167.6
HEMORRHOIDECTOMY.....49.43-49.46	40.0	44.2	37.3	42.5	35.0
CHOLECYSTECTOMY.....51.2	221.9	209.5	230.1	215.2	236.1
REPAIR OF INGUINAL HERNIA.....53.0-53.1	136.2	163.8	156.2	135.0	85.7
DIVISION OF PERITONEAL ADHESIONS.....54.5	140.3	125.5	112.7	171.5	136.1
OPERATIONS ON THE URINARY SYSTEM.....55-59	712.0	750.2	773.5	682.6	648.2
ENDOSCOPIES THROUGH NATURAL ORIFICE.....55.21-55.22,56.31,57.32,58.22	263.6	303.0	291.3	263.6	189.9
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	309.2	314.0	326.1	285.7	323.4
PROSTATECTOMY.....60.2-60.6	169.7	150.4	182.5	152.0	204.0
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	1,193.2	1,069.5	1,022.1	1,335.9	1,285.5
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	202.8	145.1	192.9	225.2	236.0
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	171.8	126.7	138.7	217.8	180.4
HYSTERECTOMY.....68.3-68.7	270.9	176.0	265.9	302.8	319.8
DILATION AND CURETTAGE OF UTERUS.....69.0	157.0	235.1	115.7	155.8	129.2
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	61.5	45.0	52.8	70.8	73.3
OBSTETRICAL PROCEDURES.....72-75	2,217.3	1,863.8	2,288.3	1,970.9	2,908.8
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	758.7	663.3	767.6	751.5	857.3
CESAREAN SECTION.....74.0-74.2,74.4,74.99	394.2	365.0	357.9	396.3	464.3
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	273.1	233.5	263.2	232.5	394.2
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	1,434.2	1,220.0	1,459.5	1,362.6	1,743.2
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76.79,79.2-79.3,79.5-79.6	198.9	176.6	184.3	188.1	257.3
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76.70,76.78,79.0-79.1,79.4	84.8	99.5	75.2	81.8	86.3
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	145.7	79.6	141.3	178.5	163.3
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	86.9	53.3	111.5	60.2	136.7
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5,81.6	87.8	69.2	117.5	66.1	107.5
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83.1,83.3-83.9	133.2	124.1	134.7	128.9	147.7
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	662.2	704.3	709.9	619.1	634.3
MASTECTOMY.....85.4	58.4	51.7	70.1	55.4	56.4
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86.2-86.4	235.1	255.9	243.6	233.0	207.0
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	61.8	56.9	66.6	61.0	62.3
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	4,276.7	5,627.9	4,117.8	3,268.5	4,792.0
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87.03,87.41,87.71,88.01,88.38	681.3	1,004.0	622.9	529.5	678.8
PYELOGRAM.....87.73-87.75	138.1	194.9	148.2	114.8	107.1
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	599.2	567.1	759.7	545.1	529.2
DIAGNOSTIC ULTRASOUND.....88.7	660.5	1,019.8	623.9	399.9	777.8
CIRCULATORY MONITORING.....89.6	339.8	541.1	204.7	195.3	541.6
RADIOISOTOPE SCAN.....92.0-92.1	314.0	537.5	291.7	209.4	289.2

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

TABLE 22. NUMBER OF ALL-LISTED PROCEDURES FOR PATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY BED SIZE OF HOSPITAL AND PROCEDURE CATEGORY: UNITED STATES, 1987

[DISCHARGES FROM NON-FEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. GROUPINGS OF PROCEDURES BY ANATOMICAL SYSTEMS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION (ICD-9-CM)]

PROCEDURE CATEGORY AND ICD-9-CM CODE	ALL SIZES	6-99 BEDS	100-199 BEDS	200-299 BEDS	300-499 BEDS	500 BEDS OR MORE
NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS						
ALL PROCEDURES.....	39,118	3,755	4,844	10,147	10,744	9,629
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	914	62	126	199	261	265
SPINAL TAP.....03-31	351	20	65	63	94	109
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	109	46	11	27	30	35
OPERATIONS ON THE EYE.....08-16	497	73	40	105	128	152
EXTRACTION OF LENS.....13-1-13-6	83	46	49	22	26	20
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13-7	69	48	4	20	22	14
OPERATIONS ON THE EAR.....18-20	176	47	32	54	47	36
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	937	121	190	211	200	215
RHINOPLASTY AND REPAIR OF NOSE.....21-8	125	29	18	22	25	30
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28-2-28-3	244	28	72	63	43	38
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	1,018	52	136	242	308	280
BRONCHOSCOPY.....33-21-33-23	196	47	30	50	55	54
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	3,116	61	173	711	1,064	1,107
REMOVAL OF CORONARY ARTERY OBSTRUCTION.....36-0	184	-	4	32	75	73
DIRECT HEART REVASCULARIZATION.....36-1	332	-	4	69	107	154
CARDIAC CATHETERIZATION.....37-21-37-23	866	4	27	182	319	337
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, AND REPAIR.....37-7-37-8	234	16	27	65	72	54
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	398	20	47	93	113	126
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,842	794	883	1,492	1,440	1,234
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42-23,44-13	153	25	21	35	44	29
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43-5-43-8,45-6-45-8	308	38	41	76	86	68
ENDOSCOPY OF LARGE INTESTINE (NATURAL ORIFICE).....45-24	415	44	69	99	114	89
APPENDECTOMY, EXCLUDING INCIDENTAL.....47-0	303	68	46	79	70	40
HEMORRHOIDECTOMY.....49-43-49-46	97	17	12	25	26	17
CHOLECYSTECTOMY.....51-2	536	90	93	142	122	90
REPAIR OF INGUINAL HERNIA.....53-0-53-1	329	47	58	82	76	66
DIVISION OF PERITONEAL ADHESIONS.....54-5	339	52	56	82	84	66
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,721	186	248	435	460	391
ENDOSCOPIC THROUGH NATURAL ORIFICE.....55-21-55-22,56-31,57-32,58-22	637	74	89	169	166	139
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	747	91	110	213	183	151
PROSTATECTOMY.....60-2-60-6	410	51	56	125	103	75
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	2,884	416	401	794	696	577
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65-3-65-6	490	81	79	125	116	89
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66-2-66-3	415	72	62	110	90	80
HYSTERECTOMY.....68-3-68-7	655	95	100	179	155	125
DILATION AND CURETTAGE OF UTERUS.....69-0	379	51	45	111	98	74
REPAIR OF CYSTOCELE AND RECTOCELE.....70-5	149	22	28	32	39	26
OBSTETRICAL PROCEDURES.....72-75	5,358	538	526	1,338	1,576	1,381
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72-1,72-21,72-31,72-71,73-6	1,833	217	224	464	512	417
CESAREAN SECTION.....74-0-74-2,74-4,74-99	953	101	112	232	273	235
REPAIR OF CURRENT OBSTETRIC LACERATION.....75-5-75-6	660	69	62	177	190	162
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,466	519	472	864	874	736
OPEN REDUCTION OF FRACTURE, EXCEPT JAW.....76-79,79-2-79-3,79-5-79-6	481	65	70	119	129	97
OTHER REDUCTION OF FRACTURE, EXCEPT JAW.....76-70,76-78,79-0-79-1,79-4	205	31	40	43	54	37
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80-5,81-0	352	30	56	89	97	80
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81-41-81-47	210	22	30	61	53	45
ARTHROPLASTY AND REPLACEMENT OF HIP.....81-5,81-6	212	22	26	55	57	52
OPERATIONS ON MUSCLES, TENDONS, FASCIA, AND BURSA.....82-83-1,83-3-83-9	322	54	39	80	72	76
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,600	203	201	383	412	401
MASTECTOMY.....85-4	141	16	19	34	37	35
EXCISION OR DESTRUCTION OF LESION OR TISSUE OF SKIN OR SUBCUTANEOUS TISSUE.....86-2-86-4	568	77	83	142	139	127
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86-6-86-7	149	10	18	29	45	47
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	10,335	604	1,248	2,986	2,955	2,542
COMPUTERIZED AXIAL TOMOGRAPHY (CAT SCAN).....87-03,87-41,87-71,88-01,88-38	1,646	90	207	490	466	394
PYELOGRAM.....87-73-87-75	334	43	40	91	94	66
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88-4-88-5	1,448	48	47	304	582	507
DIAGNOSTIC ULTRASOUND.....88-7	1,596	86	202	477	435	397
CIRCULATORY MONITORING.....89-6	821	42	137	336	173	133
RADIOISOTOPE SCAN.....92-0-92-1	759	28	111	204	220	195

NOTE: SEE "MEDICAL CODING AND EDIT," APPENDIX I, FOR CODING MODIFICATIONS FOR THE NATIONAL HOSPITAL DISCHARGE SURVEY.

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# Appendix I

## Technical notes on methods

### Statistical design of the National Hospital Discharge Survey

#### Scope of the survey

The National Hospital Discharge Survey (NHDS) covers patients discharged from noninstitutional hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals with six beds or more for patient use and those in which the average length of stay for all patients is less than 30 days are included in the survey. Discharges of patients from Federal hospitals are excluded.

#### Sample size

The Master Facility Inventory of Hospitals (MFI) is the universe from which the NHDS sample is drawn. A detailed description of the development, contents, maintenance plans, and assessment of coverage was published in 1965 (National Center for Health Statistics, 1965).

The original universe for the survey consisted of 6,965 short-stay hospitals contained in the 1963 MFI. This universe is updated periodically (table I). Data on the universe of short-stay non-Federal hospitals is now obtained from the American Hospital Association. The distribution of the hospitals currently in the American Hospital Association universe (American Hospital Association, 1986) and NHDS sample of in-scope hospitals for 1987 is given by bed size and geographic region in table II.

NOTE: A list of references follows the text.

**Table I. Number of hospitals in the National Hospital Discharge Survey (NHDS) universe, number of hospitals added to the NHDS sample, and year of addition, by year of Master Facility Inventory (MFI) used: United States, 1963-83**

MFI data year	NHDS universe and sample		
	Year added	Number added to universe	Number added to sample
1963 . . . . .	1965	6,965	315
1963 . . . . .	1969	---	150
1969 . . . . .	1972	442	32
1972 . . . . .	1975	223	14
1975 . . . . .	1977	273	24
1977 . . . . .	1979	114	9
1979 . . . . .	1981	63	6
1981 . . . . .	1983	50	3
1983 . . . . .	1985	45	5

**Table II. Number of short-stay hospitals in the National Hospital Discharge Survey universe and survey sample, by geographic region and bed size of hospital: United States, 1987**

Bed size of hospital	All regions	Northeast	Midwest	South	West
All sizes					
Number of hospitals					
Universe . . . . .	6,007	902	1,687	2,301	1,117
In-scope sample. . . . .	491	115	139	163	74
6-49 beds					
Universe . . . . .	1,351	73	420	527	331
In-scope sample. . . . .	31	6	9	11	5
50-99 beds					
Universe . . . . .	1,464	163	414	623	264
In-scope sample. . . . .	66	11	14	30	11
100-199 beds					
Universe . . . . .	1,410	204	374	574	258
In-scope sample. . . . .	89	15	21	39	14
200-299 beds					
Universe . . . . .	747	199	179	247	122
In-scope sample. . . . .	90	20	26	27	17
300-499 beds					
Universe . . . . .	706	177	196	214	119
In-scope sample. . . . .	118	37	38	26	17
500-999 beds					
Universe . . . . .	302	77	96	107	22
In-scope sample. . . . .	87	21	29	28	9
1,000 beds or more					
Universe . . . . .	27	9	8	9	1
In-scope sample. . . . .	10	5	2	2	1

The sample for 1987 consisted of 558 hospitals. Of these, 92 refused to participate and 66 were out of scope either because the hospital had gone out of business or because it failed to meet the definition of a short-stay hospital. Thus, 400 hospitals participated in the survey during 1987 and provided approximately 181,000 abstracts of medical records.

#### Sample design

All hospitals with 1,000 beds or more in the universe of short-stay hospitals were selected with certainty in the sample. All hospitals with fewer than 1,000 beds were stratified, the primary strata being the 24 size-by-region classes shown in table II. Within each primary stratum, the allocation of the hospitals was made through a controlled

selection technique so that hospitals in the sample would be distributed properly with regard to ownership and geographic division. Sample hospitals were drawn with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals.

The within-hospital sampling ratio for selecting sample discharges varied inversely with the probability of hospital selection. The smallest sampling fraction of discharged patients was taken in the largest hospitals, and the largest fraction was taken in the smallest hospitals. This sampling was done to compensate for hospitals that were selected with probabilities proportionate to their size class and to ensure that the overall probability of selecting a discharge would be approximately the same in each size class.

In nearly all hospitals using the traditional manual system of sample selection and data abstraction, the daily listing sheet of discharges was the frame from which the subsamples of discharges were selected. The sample discharges were selected by a random technique, usually on the basis of the terminal digit(s) of the patient's medical record number, which was assigned when the patient was admitted to the hospital. If the hospital's daily discharge listing did not show the medical record numbers, the sample was selected by starting with a randomly selected discharge and taking every  $k$ th discharge thereafter.

## Data collection and processing

### Data collection

Beginning in 1985, two data collection procedures were used for the survey. The first was the traditional manual system of sample selection and data abstraction. The second was an automated method, used in approximately 17 percent of the sample hospitals in 1987. It involved the purchase of data tapes from commercial abstracting services.

In the manual system, depending on the study procedure agreed on with the hospital administrator, the sample selection and the transcription of information from the hospital records to abstract forms were performed by either the hospital staff or by representatives of the National Center for Health Statistics (NCHS) or by both. In 1987, about 50 percent of the hospitals that participated in the manual NHDS system had the work performed by their medical records department. In the remaining hospitals using this system, the work was performed by personnel of the U.S. Bureau of the Census acting for NCHS. The completed forms were forwarded to NCHS for coding, editing, and weighting procedures.

For hospitals using the automated system, tapes containing machine-readable medical record data were purchased from commercial abstracting services. Upon receipt, these tapes were subject to NCHS sampling, editing, and weighting procedures. A detailed description of the automated process will be published.

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NOTE: A list of references follows the text.

The medical abstract form (figure I) and the abstract service data tapes contain items relating to the personal characteristics of the patient, including birth date, sex, race, and marital status, but not name and address; administrative information, including admission and discharge dates, discharge status, and medical record number; and medical information, including diagnoses and surgical and nonsurgical operations or procedures. Since 1977, patient ZIP Code, expected source of payment, and dates of surgery have also been collected. (The medical record number and patient ZIP Code are considered confidential information and are not available to the public.)

### Medical coding and edit

The medical information recorded on the sample patient abstracts that was collected by the manual system was coded centrally by NCHS staff. A maximum of seven diagnostic codes were assigned for each sample abstract; in addition, if the medical information included surgical or nonsurgical procedures, a maximum of four codes for these procedures were assigned. Following conversion of the data on the medical abstract to computer tape, a final medical edit was accomplished by computer inspection runs and a review of rejected abstracts. If the sex or age of the patient was incompatible with the recorded medical information, priority was given to the medical information in the editing decision.

NHDS medical coders code from abstracts of medical records in the order the diagnoses and procedures are entered. For most abstracts, this coding procedure is relatively free of problems. It was noted, however, that acute myocardial infarction frequently is not the lead entry in a group of circulatory diagnoses. For example, the patient's record may have arteriosclerosis listed first and arteriosclerotic heart disease listed second, with acute myocardial infarction listed third. If the usual procedure were followed, as it was until 1982, acute myocardial infarction would be coded in third place and retrievable only under the heading of all-listed diagnoses. A decision was made to reorder some acute myocardial infarction diagnoses. In the new procedure, based on accepted medical coding practice, whenever an acute myocardial infarction is encountered with other circulatory diagnoses and is other than the first entry, it is reordered to first position.

The system currently used for coding the diagnoses and procedures on the medical abstract forms and the data that appear on the commercial abstracting services data tape is the *International Classification of Diseases, 9th Revision, Clinical Modification*, or ICD-9-CM (Public Health Service and Health Care Financing Administration, 1980). Data for 1970-78 were coded according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*, or ICDA (NCHS, 1967a), with some modifications. These modifications, which were necessary because of incomplete or ill-defined terminology in the abstracts, are presented elsewhere (NCHS, 1980a). It has not been necessary, however, to modify the ICD-9-CM for use in NHDS.





Both the ICDA and the ICD-9-CM are divided into two main sections: diseases and injuries, and surgical and nonsurgical procedures. However, many differences exist between the two classifications. These differences are discussed in a previous report (NCHS, 1981).

Some ICD-9-CM diagnostic codes cannot appear alone. Specifically, the following codes cannot be first listed: 320.7, 321.1-321.8, 323.0-323.4, 323.6-323.7, 330.2-330.3, 331.7, 334.4, 336.2-336.3, 337.1, 357.1-357.4, 358.1, 359.5-359.6, 362.01-362.02, 362.71-362.72, 364.11, 365.41-365.44, 366.41-366.44, 370.44, 372.15, 372.31-372.33, 373.4-373.6, 374.51, 376.13-376.22, 380.13, 380.15, 382.02, 420.0, 421.1, 422.0, 424.91, 425.7-425.8, 443.81, 456.20-456.21, 484.1-484.8, 516.1, 517.1-517.8, 567.0, 573.1-573.2, 580.81, 581.81, 582.81, 583.81, 590.81, 595.4, 598.01, 601.4, 604.91, 608.81, 616.11, 616.51, 628.1, 711.10-711.89, 712.10-712.39, 713.0-713.8, 720.81, 727.01, 730.70-730.89, 731.1, 731.8, 737.40-737.43, 774.0, 774.31, 774.5. In addition, all discharges with the diagnostic codes 640.0-643.9 and 645.0-676.9 with a fifth digit of 1 or 2 or with code 650 (indicating delivery) must have a code V27.0-V27.9 as a first-listed diagnosis. Conversely, every discharge with a first-listed diagnosis of V27.0-V27.9 also must have one of these delivery codes.

Prior to 1979, data on radiotherapy and physical medicine and rehabilitation (ICDA codes R1-R4) and some obstetrical procedures were not collected by means of NHDS. The obstetrical procedures not coded were artificial rupture of membranes; external, internal, and combined version; outlet and low forceps delivery with and without episiotomy; and episiotomy (ICDA codes 75.0-75.6 and 75.9). In addition, data for diagnostic endoscopy, radiography, and other nonsurgical procedures (ICDA codes A4-A9 and R9), although coded, were not published. Starting with 1979 data, however, the procedures coding has followed guidelines of the Uniform Hospital Discharge Data Set (UHDDS). (See U.S. National Committee on Vital and Health Statistics, 1978, and NCHS, 1980b.) The UHDDS is a minimum data set of items uniformly defined and abstracted from hospital medical records. These items were selected on the basis of their continuous usefulness to organizations and agencies requiring hospital information.

According to the UHDDS guidelines, all procedures are allocated into one of four classes. Classes 1-3 consist of procedures that carry an operative or anesthetic risk or require highly trained personnel, special facilities, or special equipment. Class 4 procedures do not meet these criteria. See appendix II for the procedure codes included in these classes.

Until 1983, the only Class 4 procedures coded in NHDS were circumcision (ICD-9-CM code 64.0), episiotomy (code 73.6), and removal of intrauterine contraceptive device (code 97.71). The coding of additional Class 4 procedures, listed in appendix II, that are used in the assignment of diagnosis-related groups (DRG's) was begun in mid-1983. DRG's, developed at the Yale School of

Organization and Management, are being used by the Health Care Financing Administration, some States, and some third-party payers to reimburse hospitals for inpatient care. A report on the conversion of NHDS data to DRG's has been published (NCHS, 1987).

## Presentation of estimates

### Grouping of diagnoses and procedures

In this report the diagnostic chapters, the broadest groupings of diseases and injuries shown, correspond to ICD-9-CM chapters 1-17 and the supplementary classification of factors influencing health status and contact with health services. The diagnostic categories, the most detailed groupings of diseases and injuries shown, are subsets of the major groups or chapters. The titles and the ordering of the categories in the tabular list developed for NHDS follow the format of the ICD-9-CM tabular list as closely as possible.

The procedure groupings used in this report are the groups numbered 1-16 in the ICD-9-CM section entitled "Procedure Classification." Specific categories of operations or procedures, the most detailed of these groupings shown, are subsets of the major groups and are based on the 4-digit codes provided by the ICD-9-CM.

In developing the tables of diagnoses and of procedures, an effort was made to maximize specificity of the conditions or procedures consistent with clarity of characterization, the frequency of their occurrence, and their interest.

### Patient characteristics not stated

The age and sex of the patient were not stated on the hospital record (the face sheet of the patient's medical record) for about 0.6 percent of the discharges. Imputations of these missing items were made by assigning the patient an age or sex consistent with the age or sex of other patients with the same diagnostic code. During 1987, 12.0 percent of the hospital records had no race identified.

If the dates of admission or discharge were not given and could not be obtained from the monthly sample listing sheet transmitted by the sample hospital, a length of stay was imputed by assigning the patient a length of stay characteristic of the stays of other patients of the same age. During 1987, only 0.08 percent of the records were missing the date of admission or discharge.

### Rounded numbers

Estimates of the numbers of inpatient discharges, days of care, discharges with procedures, all-listed diagnoses, and all-listed procedures have been rounded to the nearest thousand for tabular presentation. Therefore, detailed figures within the tables do not always add to totals. Rates and percents were calculated on the basis of unrounded figures and will not necessarily agree with computations made from the rounded data.

NOTE: A list of references follows the text.

**Table III. Civilian population, by selected characteristics: United States, July 1, 1987**

[Population estimates consistent with Series P-25, *Current Population Reports*, U.S. Bureau of the Census]

<i>Age, geographic region, and race</i>	<i>Both sexes</i>	<i>Male</i>	<i>Female</i>
Population in thousands			
<b>All ages</b>			
Total . . . . .	241,661	116,959	124,702
Region:			
Northeast . . . . .	50,161	23,965	26,196
Midwest . . . . .	59,393	28,841	30,553
South . . . . .	82,978	39,968	43,010
West . . . . .	49,128	24,184	24,944
Race:			
White . . . . .	204,471	99,356	105,116
All other . . . . .	37,190	17,603	19,587
<b>Under 15 years</b>			
Total . . . . .	52,398	26,827	25,569
Under 1 year . . . . .	3,771	1,931	1,841
1-4 years . . . . .	14,481	7,411	7,070
5-14 years . . . . .	34,146	17,486	16,659
Region:			
Northeast . . . . .	9,818	5,027	4,791
Midwest . . . . .	12,892	6,607	6,284
South . . . . .	18,423	9,426	8,997
West . . . . .	11,264	5,767	5,497
Race:			
White . . . . .	42,240	21,675	20,564
All other . . . . .	10,157	5,151	5,005
<b>15-44 years</b>			
Total . . . . .	114,170	56,372	57,797
15-24 years . . . . .	37,491	18,643	18,848
25-34 years . . . . .	42,655	21,084	21,570
35-44 years . . . . .	34,024	16,645	17,379
Region:			
Northeast . . . . .	23,390	11,450	11,937
Midwest . . . . .	27,916	13,876	14,040
South . . . . .	38,984	19,108	19,876
West . . . . .	23,884	11,940	11,944
Race:			
White . . . . .	95,948	47,775	48,173
All other . . . . .	18,223	8,598	9,625
<b>45-64 years</b>			
Total . . . . .	45,258	21,639	23,619
45-54 years . . . . .	23,240	11,275	11,965
55-64 years . . . . .	22,018	10,364	11,654
Region:			
Northeast . . . . .	10,167	4,812	5,357
Midwest . . . . .	11,072	5,336	5,734
South . . . . .	15,408	7,294	8,115
West . . . . .	8,611	4,197	4,414
Race:			
White . . . . .	39,417	19,000	20,419
All other . . . . .	5,840	2,639	3,200
<b>65 years and over</b>			
Total . . . . .	29,835	12,119	17,716
65-74 years . . . . .	17,667	7,824	9,844
75-84 years . . . . .	9,301	3,489	5,812
85 years and over . . . . .	2,867	806	2,061
Region:			
Northeast . . . . .	6,787	2,675	4,111
Midwest . . . . .	7,516	3,021	4,494
South . . . . .	10,163	4,141	6,023
West . . . . .	5,369	2,281	3,088
Race:			
White . . . . .	26,865	10,905	15,960
All other . . . . .	2,970	1,214	1,756

## Population estimates

The population estimates used in computing rates are from published and unpublished estimates for the U.S. civilian population on July 1 of the data year provided by the U.S. Bureau of the Census. The estimates by age, sex, race, and geographic region are presented in table III and are consistent with the population estimates published in *Current Population Reports*, Series P-25.

Although the civilian noninstitutionalized population was used prior to 1981, it has been determined that the civilian population is more appropriate to use for NHDS, as persons in institutions usually are hospitalized in short-stay hospitals. This is true especially for elderly residents of nursing homes. A comparison of NHDS rates based on the civilian population with rates based on the civilian noninstitutionalized population is available in another publication (NCHS, 1984).

## Reliability of estimates

### Estimation

Statistics produced by NHDS are derived by a complex estimating procedure. The basic unit of estimation is the sample inpatient discharge abstract. The estimating procedure used to produce essentially unbiased national estimates in NHDS has three principal components: inflation by reciprocals of the probabilities of sample selection, adjustment for nonresponse, and ratio adjustment to fixed totals. These components of estimation are described in appendix I of two earlier publications (NCHS, 1967b, 1967c).

### Measurement errors

As in any survey, results are subject to nonsampling or measurement errors, which include errors because of hospital nonresponse, missing abstracts, information incompletely or inaccurately recorded on abstract forms, and processing errors. Some of these errors were discussed in an earlier section entitled "Patient characteristics not stated."

The Institute of Medicine (IOM) has conducted three studies on the reliability of hospital abstract data collection; the most recent study was on NHDS. The IOM NHDS study was performed by using data coded according to the ICDA; however, some of the findings are relevant to the 1981 NHDS data even though these data were coded according to the ICD-9-CM. Of special interest to this report is the finding that, in a number of cases, the first-listed diagnosis in NHDS was not the principal diagnosis as determined by IOM after a study of the entire medical record. For example, when diagnoses at the ICDA class level were examined, the principal diagnosis from IOM matched the first-listed diagnosis from the NHDS in

NOTE: A list of references follows the text.

approximately 86 percent of the cases. Detailed accounts of this and other IOM findings have been published (IOM, 1977a, 1977b, 1980).

### Sampling errors

The standard error is primarily a measure of the variability attributed to a value obtained from a sample as an estimate of a population value. In this report it also reflects part of the measurement error. The value that would have been obtained if a complete enumeration of the population had been made will be contained in an interval represented by the sample estimate plus or minus 1 standard error about 68 out of 100 times and by the estimate plus or minus 2 standard errors about 95 out of 100 times.

The relative standard error is obtained by dividing the standard error by the estimate. The resulting value is multiplied by 100, so the standard error is expressed as a percent of the estimate.

The standard error of one statistic generally is different from that of another, even when the two come from the same survey. To derive standard errors that are applicable to a wide variety of statistics and can be prepared at a moderate cost, a number of approximations are required. As a result, figures II–IV provide general relative standard errors for a wide variety of estimates rather than the specific error for a particular statistic.

Approximate relative standard errors and standard errors have been prepared for measuring the variances applicable to (1) estimates of discharges or first-listed diagnoses and days of care for patient characteristics (for example, age, sex, and race) and hospital characteristics (for example, region, bed size, and ownership) and patient characteristics cross-tabulated by hospital characteristics; and (2) estimates of all procedures performed by the specific procedure for the patient characteristics age, sex, and race and the hospital characteristics geographic region and bed size.

The relative standard errors applicable to patients discharged or first-listed diagnoses, all-listed diagnoses, days of care, and procedures are provided in figures II–IV. The curves for relative standard errors of the estimates in each figure relate to the variables by which estimates are presented in this report. In these figures, curves are shown for variables the relative standard errors of which are different from those in the curve for “all other variables,” which is relevant to most of the estimates. For example, one curve is applicable only to estimates of discharges by region, a second curve is concerned with discharges from hospitals by bed size, and a third curve pertains to estimates of days of care for white patients.

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NOTE: A list of references follows the text.

The selection of the appropriate relative standard error curve is made as follows:

1. *Discharges for first-listed diagnoses and all-listed diagnoses for patient and hospital characteristics:* Relative standard errors of the estimated number of discharges and of all-listed diagnoses are obtained from the curves in figure II.
2. *Days of care for discharges or first-listed diagnoses for patient and hospital characteristics:* Relative standard errors of the estimated number of days of care are obtained from the curves in figure III.
3. *Procedures:* Relative standard errors for procedures are obtained from the curves in figure IV.

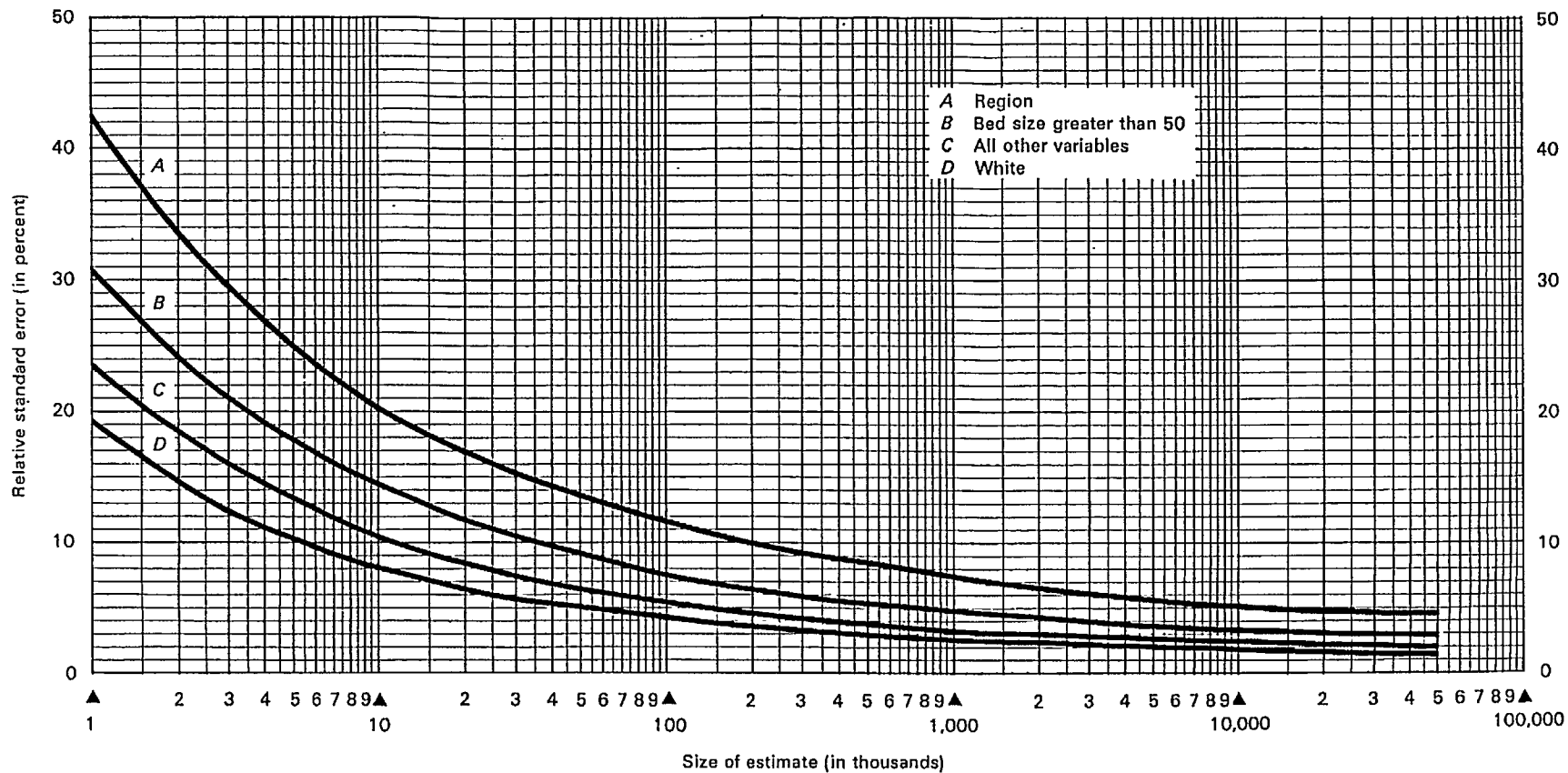
The presentation of estimates for NHDS is based on the relative standard error of the estimate and the number of sample records on which the estimate is based (referred to as the sample size). Estimates are not presented unless a reasonable assumption regarding the probability distribution of the sampling error is possible. The Central Limit Theorem is used to determine the distribution of the sampling errors. The Central Limit Theorem states that, given a sufficiently large sample size, the sample estimate is approximately normally distributed and approximates the population estimate.

Based on consideration of the complex sample design of NHDS, the following guidelines are used for presenting NHDS estimates:

1. If the sample size is less than 30, the value of the estimate is not reported. Only an asterisk (\*) is shown in the tables.
2. If the sample size is 30–59, the value of the estimate is reported but should be used with caution. The estimate is preceded by an asterisk (\*) in the tables.
3. If the sample size is 60 or more but the relative standard error is more than 30 percent, the estimate is reported but should be used with caution. The estimate is preceded by an asterisk (\*) in the tables.

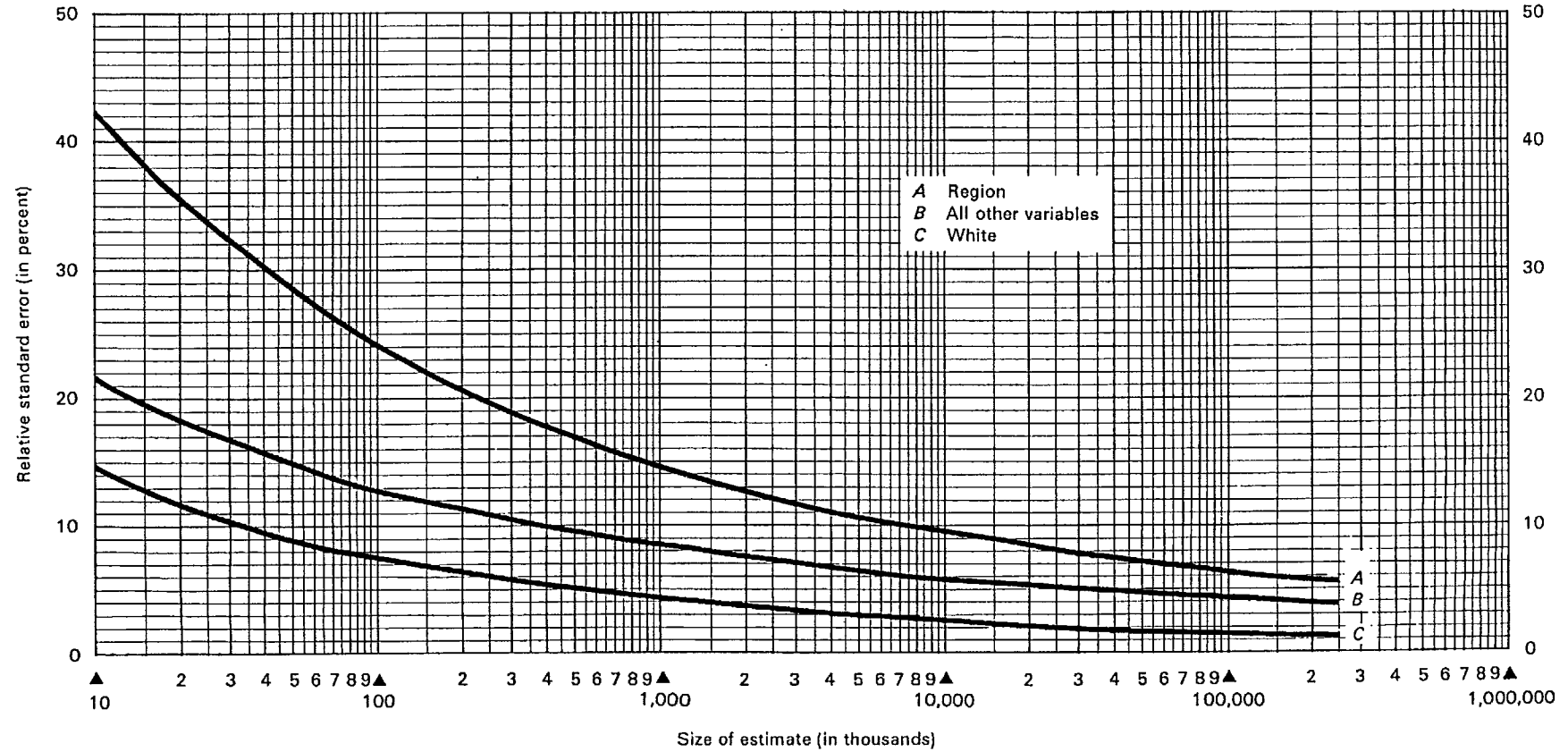
### Tests of significance

In this report, the determination of statistical inference is based on the *t*-test with a critical value of 1.96 (0.05 level of significance). Terms relating to differences, such as “higher” and “less,” indicate that the differences are statistically significant. Terms such as “similar” and “no difference” mean that no statistically significant difference exists between the estimates being compared. A lack of comment on the difference between any two estimates does not mean that the difference was tested and found to be not significant.



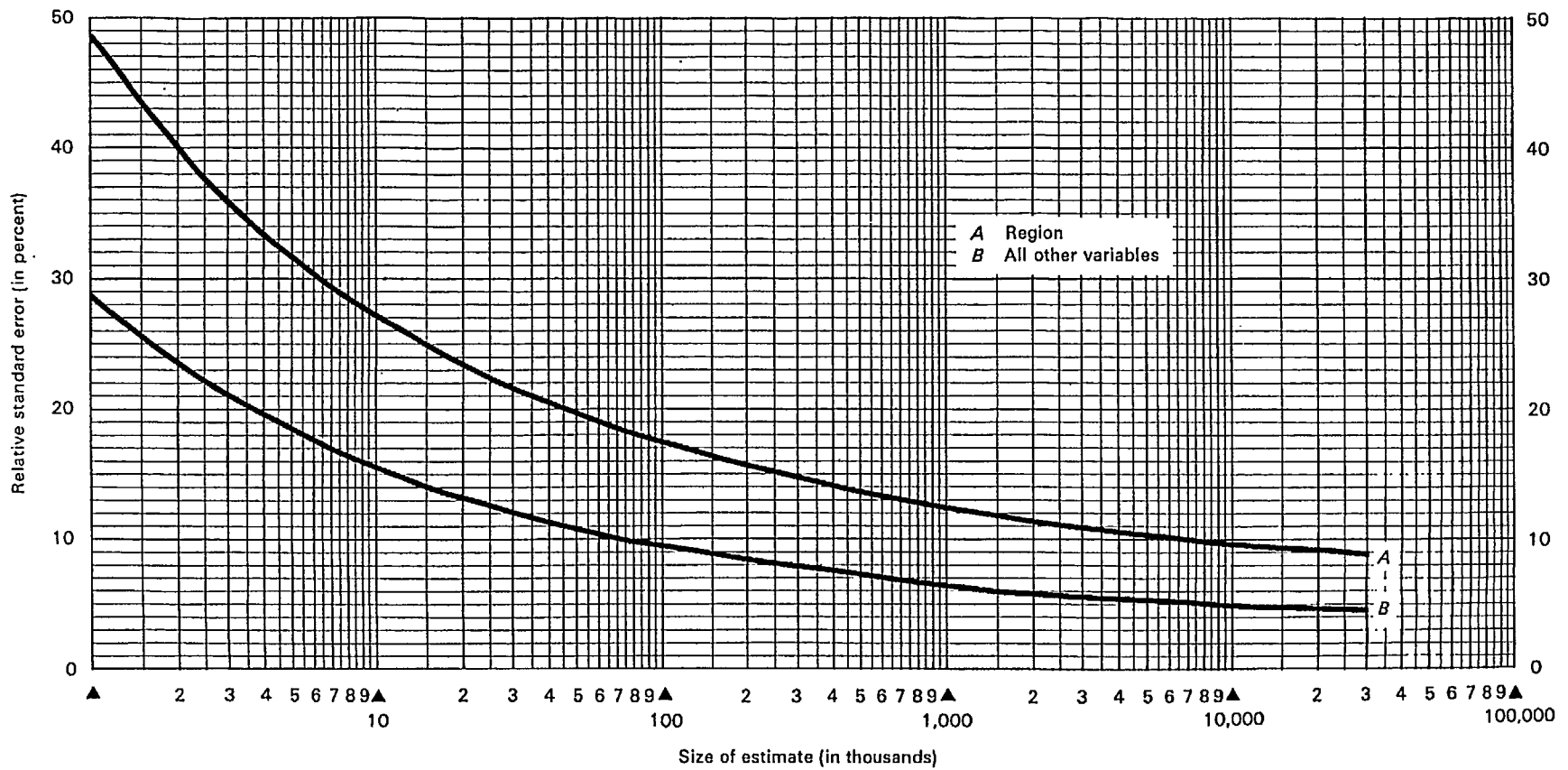
EXAMPLE: As shown in table 4, an estimated 4,467,000 patients 45-64 years of age were discharged from non-Federal short-stay hospitals with 100-499 beds during 1987. The relative standard error of this estimate as read from curve B is approximately 4.0 percent. Thus, the standard error is approximately 178,680 (4.0 percent of 4,467,000).

Figure II. Approximate relative standard errors of estimated numbers of patients discharged, or first-listed diagnoses, and of all-listed diagnoses, by selected patient and hospital



EXAMPLE: As shown in table 2, an estimated 7,242,000 days of care were provided during 1987 to male patients under 15 years of age discharged from short-stay hospitals. The relative standard error of this estimate as read from curve B is approximately 6.0 percent. Thus, the standard error is approximately 434,520 (6.0 percent of 7,242,000).

Figure III. Approximate relative standard errors of estimated numbers of days of care, by selected patient and hospital characteristics



EXAMPLE: As shown in table 17, an estimated 655,000 hysterectomies were performed during 1987 on females discharged from short-stay hospitals. The relative standard error of this estimate as read from curve B is approximately 7.0 percent. Thus, the standard error is approximately 45,850 (7.0 percent of 655,000).

Figure IV. Approximate relative standard errors of estimated numbers of procedures for patients discharged, by selected patient and hospital characteristics

# Appendix II

## Definitions of terms

### Hospitals and hospital characteristics

*Hospitals*—Short-stay special and general hospitals have six beds or more for inpatient use and an average length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included.

*Bed size of hospital*—Size is measured by the number of beds, cribs, and pediatric bassinets regularly maintained (set up and staffed for use) for patients; bassinets for newborn infants are not included. In this report the classification of hospitals by bed size is based on the number of beds at or near midyear as reported by the hospitals.

*Type of ownership of hospital*—The type of ownership is determined by the organization that controls and operates the hospital. Hospitals are grouped as follows:

- *Voluntary nonprofit*—Hospitals operated by a church or another nonprofit organization.
- *Government*—Hospitals operated by State or local governments.
- *Proprietary*—Hospitals operated by individuals, partnerships, or corporations for profit.

*Patient*—A person who is formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment is considered a patient. In this report the number of patients refers to the number of discharges during the year, including any multiple discharges of the same individual from one short-stay hospital or more. Infants admitted on the day of birth, directly or by transfer from another medical facility, with or without mention of a disease, disorder, or immaturity, are included. In this report newborn infants, defined as those admitted by birth to the hospital, are excluded from all tables except those in the newborn section. The terms “patient” and “inpatient” are used synonymously.

*Newborn infant*—A newborn infant is defined as a patient admitted by birth to a hospital.

*Discharge*—Discharge is the formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death or by disposition to place of residence, nursing home, or another hospital. The terms “discharges” and “patients discharged” are used synonymously.

*Discharge rate*—The ratio of the number of hospital discharges during a year to the number of persons in the

civilian population on July 1 of that year determines the discharge rate.

*Days of care*—The total number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year constitutes days of care. A stay of less than 1 day (patient admission and discharge on the same day) is counted as 1 day in the summation of total days of care. For patients admitted and discharged on different days, the number of days of care is computed by counting all days from (and including) the date of admission to (but not including) the date of discharge.

*Rate of days of care*—The rate of days of care is the ratio of the number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year to the number of persons in the civilian population on July 1 of that year.

*Average length of stay*—The average length of stay is the total number of patient days accumulated at time of discharge by patients discharged during the year divided by the number of patients discharged.

### Diagnoses

*Discharge diagnoses*—A discharge diagnosis is a disease or injury (or some factor that influences health status and contact with health services that is not itself a current illness or injury) listed by the attending physician on the medical record of patients. In NHDS all discharge (or final) diagnoses listed on the fact sheet (summary sheet) of the medical record for patients discharged from the inpatient service of short-stay hospitals are transcribed in the order listed. Each sample discharge is assigned a maximum of seven 5-digit codes according to the *International Classification of Diseases, 9th Revision, Clinical Modification*, or ICD-9-CM (Public Health Service and Health Care Financing Administration, 1980). The number of principal or first-listed diagnoses is equivalent to the number of discharges.

*Principal diagnosis*—The condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care is called the principal diagnosis.

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NOTE: A list of references follows the text.

*First-listed diagnosis*—The coded diagnosis identified as the principal diagnosis or listed first on the face sheet of the medical record is the first-listed diagnosis. The number of first-listed diagnoses is equivalent to the number of discharges.

*All-listed diagnoses*—All-listed diagnoses are an estimated number of discharge (or final) diagnoses, up to a maximum of seven, that are listed on the face sheet of the medical record for inpatients discharged from non-Federal short-stay hospitals during the year.

*Obstetrical diagnosis*—A diagnosis relating to conditions arising from or affecting the management of pregnancy, childbirth, and the puerperium (the period following childbirth) is an obstetrical diagnosis. These are code numbers 640-676 of the ICD-9-CM.

*Normal delivery*—A normal delivery is a delivery without abnormality or complication of pregnancy, childbirth, or the puerperium and with spontaneous cephalic delivery (that is, presentation of the child headfirst and delivery of the child without external aid). If no mention of fetal manipulation or instrumentation is made, ICD-9-CM code 650 is assigned.

*Complicated delivery*—All deliveries not considered normal, including deliveries of multiple gestation, are included. ICD-9-CM code numbers 640-648 and 651-676 are assigned.

## Surgical and nonsurgical procedures

*Discharges with procedures*—The estimated number of patients discharged from non-Federal short-stay hospitals during the year who underwent at least one procedure during their hospitalization are termed “discharges with procedures.”

*Procedure*—A procedure is one or more surgical or nonsurgical operations, diagnostic procedures, or special treatments assigned by the physician to the medical record of patients discharged from the inpatient service of short-stay hospitals. In NHDS all terms listed on the face sheet of the medical record under captions such as “operation,” “operative procedures,” and “operations and/or special treatments” are transcribed in the order listed. A maximum of four 4-digit codes are assigned per sample discharge according to ICD-9-CM and NHDS directives. (See “Medical coding and edit” in the “Data collection and processing” section of appendix I for further details.)

*All-listed procedures*—All coded procedures that are listed on the face sheet of the medical record, exclusive of most Class 4 procedures, are included.

*Uniform Hospital Discharge Data Set (UHDDS) classes of procedures*—Procedures are categorized into four classes according to UHDDS guidelines. Classes 1-3 consist of significant procedures—that is, procedures that carry an operative or anesthetic risk or require highly trained personnel, special facilities, or special equipment. Class 4 procedures do not meet these criteria.

*UHDDS Class 1 procedures*—All procedures not categorized as Class 2, 3, or 4 procedures are included.

*UHDDS Class 2 procedures*—The following ICD-9-CM procedure codes identify Class 2 procedures as categorized by the UHDDS:

03.31, 03.91-03.92, 04.80-04.89, 21.01, 24.7, 31.41-31.42, 34.91-34.92, 37.92-37.93, 42.22-42.23, 44.12-44.13, 45.12-45.13, 45.22-45.24, 48.22, 50.92, 54.91, 54.97-54.98, 57.31, 58.22, 59.95, 62.91, 66.8, 69.6-69.7, 69.93, 70.0, 73.01-73.1, 73.3, 73.51-73.59, 76.96, 81.91-81.92, 82.92-82.96, 83.94-83.98, 85.91-85.92, 86.01, 87.03-87.08, 87.13-87.15, 87.31-87.35, 87.38, 87.41-87.42, 87.51-87.52, 87.54-87.66, 87.71-87.73, 87.75, 87.77-87.78, 87.81-87.84, 87.91, 87.93-87.94, 88.01-88.03, 88.12-88.15, 88.38, 88.71-88.89, 89.14, 89.21-89.25, 89.32, 89.41-89.44, 89.54, 89.61-89.65, 89.8, 92.01-92.29, 93.45-93.54, 93.56-93.59, 93.92-93.93, 93.95, 93.97, 94.24, 94.26-94.27, 95.04, 95.12-95.13, 95.16-95.26, 96.01-96.08, 96.21-96.25, 96.31-96.33, 97.11-97.13, 98.02-98.04, 98.14-98.16, 98.19, 99.01, 99.60-99.69, 99.81.

*UHDDS Class 3 procedures*—The following ICD-9-CM procedure codes identify Class 3 procedures as categorized by the UHDDS:

29.11, 57.94-57.95, 60.19, 84.41-84.43, 84.45-84.47, 86.26, 93.98, 98.01, 98.05-98.13, 98.17, 98.18, 98.20-98.29, 99.25.

*UHDDS Class 4 procedures*—From 1979 through the middle of 1983 only three Class 4 procedures were coded for NHDS: circumcision (ICD-9-CM code 64.0), episiotomy (code 73.6), and removal of intrauterine contraceptive device (code 97.71). The ICD-9-CM codes for the Class 4 procedures coded since the last half of 1983 are as follows:

01.18-01.19, 03.39, 04.19, 05.19, 06.19, 07.19, 08.91-08.93, 09.19, 09.41-09.49, 10.29, 11.29, 12.29, 14.19, 15.09, 16.29, 20.39, 28.19, 33.28-33.29, 34.28-34.29, 38.29, 40.19, 50.19, 51.19, 52.19, 54.29, 55.29, 56.39, 57.39, 59.29, 60.18, 62.19, 63.09, 64.0, 65.19, 66.19, 67.19, 68.19, 70.29, 71.19, 73.6, 76.19, 78.8, 81.98, 83.29, 97.71.

The following ICD-9-CM procedure codes identify Class 4 procedures not coded by the NHDS:

08.19, 16.21, 18.01, 18.11, 18.19, 21.21, 21.29, 22.19, 24.19, 25.09, 25.91, 26.19, 27.29, 27.91, 29.19, 31.48-31.49, 37.29, 41.38-41.39, 42.29, 44.19, 45.19, 45.28-45.29, 48.23, 48.29, 49.21, 49.29, 49.41, 58.29, 61.19, 64.19, 64.91, 64.94, 69.92, 70.21, 73.91-73.92, 75.35, 85.19, 86.19, 86.92, 87.09-87.12, 87.16-87.17, 87.22-87.29, 87.36-87.37, 87.39, 87.43-87.49, 87.69, 87.79, 87.85-87.89, 87.92, 87.95-87.99, 88.09, 88.16-88.31, 88.33, 88.35, 88.37, 88.39, 89.01-89.13, 89.15-89.16, 89.26-89.31, 89.33-89.39, 89.45-89.53, 89.55-89.59, 89.66, 89.7, 90.01-91.99, 93.01-93.25, 93.27-93.28, 93.31-93.39, 93.42-93.44, 93.61-93.91, 93.94, 93.96, 93.99-94.23, 94.25, 94.29-95.03, 95.05-95.11, 95.14-95.15, 95.31-95.49, 96.09-96.19,



96.26–96.28, 96.34–97.04, 97.14–97.69, 97.72–97.89, 99.02–99.24, 99.26–99.59, 99.71–99.79, 99.82–99.99.

*Surgical operations*—All procedures except those listed under “nonsurgical procedures” are listed as surgical operations.

*Biopsy*—Biopsy is excision of tissue for microscopic examination. The ICD–9–CM biopsy codes are as follows:

0.11–0.15, 03.32, 04.11–04.12, 05.11, 06.11–06.13, 07.11–07.17, 08.11, 09.11–09.12, 10.21, 11.22, 12.22, 15.01, 16.23, 18.12, 20.32, 21.22, 22.11, 24.11–24.12, 25.01, 25.02, 26.11, 27.21–27.24, 28.11, 29.12, 31.43–31.44, 33.24–33.27, 34.23–34.27, 37.24–37.25, 38.21, 40.11, 41.31–41.33, 42.24, 44.14–44.15, 45.14–45.15, 45.25–45.27, 48.24–48.26, 49.22–49.23, 50.11–50.12, 51.12–51.13, 52.11–52.12, 54.22–54.23, 55.23–55.24, 56.32–56.33, 57.33–57.34, 58.23–58.24, 59.21, 60.11–60.15, 61.11, 62.11–62.12, 63.01, 64.11, 65.11–65.12, 66.11, 67.11–67.12, 68.13–68.14, 70.23–70.24, 71.11, 76.11, 77.40–77.49, 80.30–80.39, 83.21, 85.11–85.12, 86.11.

*Nonsurgical procedures*—Procedures generally not considered to be surgery are listed as nonsurgical procedures. These include diagnostic endoscopy and radiography, radiotherapy and related therapies, physical medicine and rehabilitation, and other nonsurgical procedures—*International Classification of Diseases, Adapted for Use in the United States* (ICDA) codes A4–A9 and R1–R9. The following ICD–9–CM codes are for diagnostic and nonsurgical procedures:

03.31, 11.21, 12.21, 14.11, 16.22, 20.31, 29.11, 31.41–31.42, 33.21–33.23, 34.21–34.22, 39.95, 42.21–42.23, 44.11–44.13, 45.11–45.13, 45.21–45.24, 48.21–48.22, 51.11, 54.21, 55.21–55.22, 56.31, 57.31–57.32, 58.21–58.22, 60.19, 68.11–68.12, 70.22, 80.20–80.29, 87.01–99.99.

*Rate of procedures*—The ratio of the number of all-listed procedures during a year to the number of persons in the civilian population on July 1 of that year determines the rate of procedures.

## Demographic terms

*Population*—The civilian population is the resident population excluding members of the Armed Forces. The civilian noninstitutionalized population is the civilian population not residing in institutions.

*Age*—Patient’s age refers to age at birthday prior to admission to the hospital inpatient service.

*Race*—Patients are classified into two groups: “white” and “all other.” The all other classification includes all categories other than white. In addition, 12.0 percent of the patients had no race stated on the face sheet of the record.

*Geographic region*—Hospitals are classified by location in one of the four geographic regions of the United States that correspond to those used by the U.S. Bureau of the Census.

<i>Region</i>	<i>States included</i>
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

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