

Monthly

VITAL STATISTICS REPORT

Hospital Discharge Survey Data



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Utilization of Short-Stay Hospitals—Summary of Nonmedical Statistics: United States, 1973

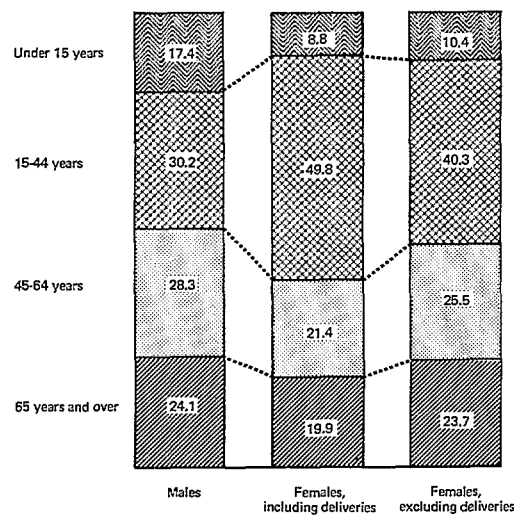
Estimates are shown in this report for the utilization of non-Federal short-stay hospitals by inpatients, excluding newborn infants, discharged during 1973. Data are shown for the number and rate of discharges and days of care, and average length of stay of patients discharged, by sex, age, and color; and by geographic region, bed size, and type of ownership (control) of hospitals.

The Hospital Discharge Survey has collected data on short-stay hospital utilization continuously since the beginning of 1965. Estimates for the 1973 survey are based on samples of hospital records on inpatients discharged from a national sample of non-Federal short-stay hospitals. Data were abstracted from about 225,000 hospital records of inpatients discharged from 424 hospitals participating in the survey.

An estimated 32.1 million inpatients were discharged from non-Federal short-stay hospitals in 1973. Approximately 249.4 million days of care were utilized by these patients and their average length of stay was 7.8 days (table 1). The annual rate of discharges for 1973 was 156.1 per 1,000 persons in the civilian, noninstitutionalized population. The rate for days of care per 1,000 population was 1,211.6.

Patterns of hospital utilization by age and sex for 1973 were similar to those observed in the data collected by the survey for previous years. The percent distribution of discharges varied by sex for ages under 15 years and 15-44 years, with a significantly larger percentage of males falling in the youngest age category, and conversely, significantly more females represented in the 15-44 year age group (figure 1). Discharge rates increased with age for patients of both sexes (excluding deliveries) (table 1). The overall rate for females, excluding deliveries, was higher than for males—151.8 discharges per 1,000 population

Figure 1. PERCENT DISTRIBUTION OF DISCHARGES FROM SHORT-STAY HOSPITALS, BY AGE AND SEX: UNITED STATES, 1973



for females compared to 129.2 for males. Within age groups differences in utilization among males and females were apparent. Males under 15 years of age and 65 years and over had higher discharge rates than did comparably aged females, while the rate for females aged 15-44 years was higher than for males. For both sexes, rates of days of care and average length of stay increased consistently with age for all discharges (table 1).

The number of discharges and average length of stay by color and age are shown in table 2. Color was

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Table 1. Number and rate of inpatients discharged from short-stay hospitals, number and rate of days of care, and average length of stay, by age and sex: United States, 1973

[Excludes newborn infants and Federal hospitals]

| Age | Both sexes ¹ | Male | Female | |
|---|-------------------------|---------|----------------------|----------------------|
| | | | Including deliveries | Excluding deliveries |
| Number of discharges in thousands | | | | |
| All ages----- | 32,125 | 12,835 | 19,266 | 16,173 |
| Under 15 years----- | 3,933 | 2,231 | 1,700 | 1,685 |
| 15-44 years----- | 13,482 | 3,873 | 9,598 | 6,524 |
| 45-64 years----- | 7,772 | 3,637 | 4,131 | 4,126 |
| 65 years and over----- | 6,937 | 3,094 | 3,837 | 3,837 |
| Rate of discharges per 1,000 population | | | | |
| All ages----- | 156.1 | 129.2 | 180.9 | 151.8 |
| Under 15 years----- | 70.8 | 78.8 | 62.4 | 61.8 |
| 15-44 years----- | 154.4 | 91.7 | 212.9 | 144.7 |
| 45-64 years----- | 182.2 | 179.1 | 185.0 | 184.8 |
| 65 years and over----- | 341.8 | 367.0 | 323.5 | 323.5 |
| Number of days of care in thousands | | | | |
| All ages----- | 249,389 | 105,911 | 143,271 | 130,869 |
| Under 15 years----- | 17,884 | 10,006 | 7,861 | 7,811 |
| 15-44 years----- | 76,732 | 26,337 | 50,324 | 37,989 |
| 45-64 years----- | 70,828 | 33,761 | 37,025 | 37,007 |
| 65 years and over----- | 83,944 | 35,807 | 48,061 | 48,061 |
| Rate of days of care per 1,000 population | | | | |
| All ages----- | 1,211.6 | 1,066.5 | 1,344.9 | 1,228.5 |
| Under 15 years----- | 321.9 | 353.4 | 288.5 | 286.7 |
| 15-44 years----- | 878.5 | 623.3 | 1,116.1 | 842.6 |
| 45-64 years----- | 1,661.0 | 1,662.3 | 1,658.0 | 1,657.2 |
| 65 years and over----- | 4,136.4 | 4,247.1 | 4,051.7 | 4,051.7 |
| Average length of stay in days | | | | |
| All ages----- | 7.8 | 8.3 | 7.4 | 8.1 |
| Under 15 years----- | 4.5 | 4.5 | 4.6 | 4.6 |
| 15-44 years----- | 5.7 | 6.8 | 5.2 | 5.8 |
| 45-64 years----- | 9.1 | 9.3 | 9.0 | 9.0 |
| 65 years and over----- | 12.1 | 11.6 | 12.5 | 12.5 |

¹ Figures include data for sex not stated.

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Table 2. Number of inpatients discharged from short-stay hospitals and average length of stay, by color, age, and sex: United States, 1973

[Excludes newborn infants and Federal hospitals]

| Color and age | Both sexes ¹ | Male | Female | | Both sexes ¹ | Male | Female | |
|-------------------------|-----------------------------------|--------|----------------------|----------------------|--------------------------------|------|----------------------|----------------------|
| | | | Including deliveries | Excluding deliveries | | | Including deliveries | Excluding deliveries |
| <u>Total</u> | Number of discharges in thousands | | | | Average length of stay in days | | | |
| All ages----- | 32,125 | 12,835 | 19,266 | 16,173 | 7.8 | 8.3 | 7.4 | 8.1 |
| Under 15 years----- | 3,933 | 2,231 | 1,700 | 1,685 | 4.5 | 4.5 | 4.6 | 4.6 |
| 15-44 years----- | 13,482 | 3,873 | 9,598 | 6,524 | 5.7 | 6.8 | 5.2 | 5.8 |
| 45-64 years----- | 7,772 | 3,637 | 4,131 | 4,126 | 9.1 | 9.3 | 9.0 | 9.0 |
| 65 years and over----- | 6,937 | 3,094 | 3,837 | 3,837 | 12.1 | 11.6 | 12.5 | 12.5 |
| <u>White</u> | | | | | | | | |
| All ages----- | 24,402 | 9,899 | 14,497 | 12,350 | 7.8 | 8.2 | 7.5 | 8.1 |
| Under 15 years----- | 2,898 | 1,638 | 1,259 | 1,255 | 4.3 | 4.3 | 4.2 | 4.2 |
| 15-44 years----- | 9,727 | 2,864 | 6,862 | 4,723 | 5.6 | 6.6 | 5.2 | 5.7 |
| 45-64 years----- | 6,160 | 2,898 | 3,261 | 3,257 | 9.0 | 9.1 | 8.9 | 8.9 |
| 65 years and over----- | 5,616 | 2,499 | 3,116 | 3,116 | 12.1 | 11.6 | 12.5 | 12.5 |
| <u>All Other</u> | | | | | | | | |
| All ages----- | 3,619 | 1,316 | 2,301 | 1,766 | 8.0 | 9.4 | 7.3 | 8.3 |
| Under 15 years----- | 527 | 305 | 222 | 214 | 6.3 | 5.9 | 6.8 | 7.0 |
| 15-44 years----- | 1,977 | 505 | 1,471 | 945 | 6.2 | 8.5 | 5.5 | 6.3 |
| 45-64 years----- | 664 | 296 | 367 | 366 | 11.1 | 11.9 | 10.4 | 10.4 |
| 65 years and over----- | 451 | 210 | 241 | 241 | 13.4 | 13.1 | 13.7 | 13.7 |
| <u>Color not stated</u> | | | | | | | | |
| All ages----- | 4,105 | 1,619 | 2,467 | 2,056 | 7.3 | 7.6 | 7.1 | 7.8 |
| Under 15 years----- | 508 | 288 | 218 | 217 | 4.3 | 3.9 | 4.8 | 4.8 |
| 15-44 years----- | 1,778 | 504 | 1,265 | 855 | 5.6 | 6.5 | 5.2 | 5.8 |
| 45-64 years----- | 949 | 443 | 503 | 503 | 8.4 | 8.5 | 8.4 | 8.4 |
| 65 years and over----- | 870 | 385 | 481 | 481 | 11.3 | 10.5 | 11.9 | 11.9 |

¹Figures include data for sex not stated.

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not stated on medical abstract summary sheets which represented approximately 4.1 million discharges, or 13 percent of the total discharges in 1973. The number of discharges with color not stated is greater than the corresponding figures for the "all other" category, and care should be exercised when interpreting the data.

Patients in the white category outnumbered those in the all other category by approximately 7 to 1. For white patients, about 1 in 5 were 65 years and over, while this same age group represented only 1 in 8 patients in the all other category. The average length of stay for white patients was less than for all other patients in each age group. Deliveries represented a smaller proportion of total discharges for white patients than for all other patients.

Variations were apparent in hospital utilization by geographic region. The number and rate of discharges and average length of stay are presented by region and age in table 3. The rate of discharges per 1,000 population varied from 141.4 in the West Region to 175.7 in the North Central. The average length of stay ranged from 6.4 days in the West to 9.0 days in the Northeast Region. Average length of stay for each age group was also shortest in the West and longest in the Northeast Region.

The number and percent distribution of discharges and days of care provided are shown in table 4 by bed size and type of ownership. Discharges varied from 5.5 million for hospitals with between 100-199 beds to 8.2 million for those with between 300-499 beds. The average length of stay varied directly with the size of the hospital, being lowest in hospitals with less than 100 beds, 6.4 days, and increasing steadily to 8.8 days in hospitals with 500 beds or more (table 5).

Voluntary nonprofit hospitals, including those operated by church groups and by other nonprofit organizations, accounted for 72.3 percent of all discharges in 1973. Those hospitals operated by State and local governments provided 20.6 percent, and privately owned proprietary hospitals 7.0 percent. The distribution of days of care was similar to that of the discharges. Length of stay was shortest in the proprietary hospitals and longest in the voluntary nonprofit ones.

Of the estimated 32.1 million patients discharged in 1973, 97.2 percent or 31.2 million were discharged alive. Patients discharged dead averaged stays of 13.6 days compared to 7.6 days for those discharged alive, primarily because patients discharged dead are likely to have been admitted with conditions characterized by a severe degree of morbidity.

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Table 3. Number and rate of inpatients discharged from short-stay hospitals and average length of stay, by geographic region and age: United States, 1973

[Excludes newborn infants and Federal hospitals]

| Age | All regions | Northeast | North Central | South | West |
|---|-------------|-----------|---------------|-------|-------|
| Number of discharges in thousands | | | | | |
| All ages----- | 32,125 | 7,208 | 9,975 | 9,905 | 5,036 |
| Under 15 years----- | 3,933 | 837 | 1,318 | 1,206 | 573 |
| 15-44 years----- | 13,482 | 2,961 | 4,110 | 4,243 | 2,168 |
| 45-64 years----- | 7,772 | 1,828 | 2,438 | 2,250 | 1,256 |
| 65 years and over----- | 6,937 | 1,582 | 2,110 | 2,206 | 1,039 |
| Rate of discharges per 1,000 population | | | | | |
| All ages----- | 156.1 | 148.6 | 175.7 | 153.6 | 141.4 |
| Under 15 years----- | 70.8 | 66.6 | 84.8 | 67.8 | 59.3 |
| 15-44 years----- | 154.4 | 145.7 | 170.7 | 155.0 | 139.4 |
| 45-64 years----- | 182.3 | 166.8 | 211.7 | 173.7 | 174.1 |
| 65 years and over----- | 341.8 | 310.9 | 374.4 | 345.9 | 325.6 |
| Average length of stay in days | | | | | |
| All ages----- | 7.8 | 9.0 | 8.0 | 7.3 | 6.4 |
| Under 15 years----- | 4.5 | 5.1 | 4.5 | 4.6 | 3.7 |
| 15-44 years----- | 5.7 | 6.3 | 6.0 | 5.4 | 4.7 |
| 45-64 years----- | 9.1 | 10.7 | 9.4 | 8.5 | 7.3 |
| 65 years and over----- | 12.1 | 14.3 | 12.4 | 11.1 | 10.3 |

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Table 4. Number and percent distribution of inpatients discharged from short-stay hospitals and of days of care, by bed size and type of ownership of hospitals: United States, 1973

[Excludes newborn infants and Federal hospitals]

| Bed size and type of ownership | Discharges | | Days of care | |
|--------------------------------|---------------------|----------------------|---------------------|----------------------|
| | Number in thousands | Percent distribution | Number in thousands | Percent distribution |
| All hospitals----- | 32,125 | 100.0 | 249,389 | 100.0 |
| <u>Bed size</u> | | | | |
| 6-99 beds----- | 6,604 | 20.5 | 42,534 | 17.1 |
| 100-199 beds----- | 5,485 | 17.1 | 39,727 | 15.9 |
| 200-299 beds----- | 5,625 | 17.5 | 43,152 | 17.3 |
| 300-499 beds----- | 8,228 | 25.6 | 69,271 | 27.8 |
| 500 beds or more----- | 6,183 | 19.2 | 54,704 | 21.9 |
| <u>Type of ownership</u> | | | | |
| Voluntary nonprofit----- | 23,235 | 72.3 | 184,924 | 74.2 |
| Government----- | 6,633 | 20.6 | 49,377 | 19.8 |
| Proprietary----- | 2,256 | 7.0 | 15,087 | 6.0 |

Table 5. Average length of stay of inpatients discharged from short-stay hospitals, by bed size, type of ownership of hospitals, and age: United States, 1973

[Excludes newborn infants and Federal hospitals]

| Bed size and type of ownership | All ages | Average length of stay in days | | | |
|--------------------------------|----------|--------------------------------|-------------|-------------|-------------------|
| | | Under 15 years | 15-44 years | 45-64 years | 65 years and over |
| All hospitals----- | 7.8 | 4.5 | 5.7 | 9.1 | 12.1 |
| <u>Bed size</u> | | | | | |
| 6-99 beds----- | 6.4 | 3.7 | 4.4 | 6.9 | 10.3 |
| 100-199 beds----- | 7.2 | 4.1 | 5.1 | 8.4 | 12.0 |
| 200-299 beds----- | 7.7 | 4.2 | 5.7 | 9.2 | 12.0 |
| 300-499 beds----- | 8.4 | 4.7 | 6.2 | 10.0 | 13.3 |
| 500 beds or more----- | 8.8 | 6.2 | 6.7 | 10.6 | 13.4 |
| <u>Type of ownership</u> | | | | | |
| Voluntary nonprofit----- | 8.0 | 4.5 | 5.8 | 9.3 | 12.5 |
| Government----- | 7.4 | 5.0 | 5.7 | 8.9 | 11.2 |
| Proprietary----- | 6.7 | 3.4 | 5.1 | 7.8 | 10.5 |

TECHNICAL NOTES

SOURCE OF DATA. The Hospital Discharge Survey collects data on patients discharged from noninstitutionalized short-stay hospitals located in the 50 States and the District of Columbia. This report excludes data for newborn infants and discharges from Federal hospitals. Information in this report is based on a sample of about 225,000 abstracts of medical records of patients discharged from a national sample of 424 short-stay hospitals that participated in the survey in 1973.

SAMPLING ERRORS. The estimates presented are subject to sampling error since a sample rather than the entire population has been surveyed. The standard errors appropriate for the estimates of the number of discharges are shown in table I and those for days of care are shown in table II.

Table I. APPROXIMATE STANDARD ERRORS OF ESTIMATED NUMBERS OF DISCHARGES

| Size of estimate | Standard error |
|------------------|----------------|
| 200,000----- | 12,500 |
| 500,000----- | 22,000 |
| 1,000,000----- | 38,000 |
| 5,000,000----- | 160,000 |
| 10,000,000----- | 310,000 |
| 20,000,000----- | 610,000 |
| 30,000,000----- | 900,000 |

Table II. APPROXIMATE STANDARD ERRORS OF ESTIMATED NUMBERS OF DAYS OF CARE

| Size of estimate | Standard error |
|------------------|----------------|
| 1,000,000----- | 122,000 |
| 5,000,000----- | 270,000 |
| 10,000,000----- | 400,000 |
| 50,000,000----- | 1,125,000 |
| 100,000,000----- | 1,920,000 |
| 200,000,000----- | 3,420,000 |
| 300,000,000----- | 5,100,000 |

ROUNDING. Due to rounding, detailed figures within tables may not add to totals. Rates, percents, and average lengths of stay presented were computed from unrounded numbers.

DEFINITIONS. *Short-stay hospitals* are general and short-term special hospitals that have six beds or more for inpatients use and an average length of stay of less than 30 days.

A *patient* or *inpatient* is a person who has been formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment.

A *discharge* is the formal release of an inpatient 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 number of discharges does not correspond to persons hospitalized more than once during the calendar year. "Discharges" and "patients (or inpatients) discharged" are used synonymously.

Discharge rate is the ratio of the number of hospital discharges during a specified year to the number of persons in the civilian, noninstitutionalized population as of July 1 of the specific year.

Days of care denotes the total number of inpatient days accumulated at time of discharge by patients discharged from short-stay hospitals. A stay of less than 1 day (inpatient admission and discharge on the same day) is counted as 1 day in the summation of total days of care.

Rate of days of care is the ratio of the number of inpatient days accumulated by patients discharged during a specified year to the number of persons in the civilian, noninstitutionalized population as of July 1 of the specific year.

Average length of stay is the total number of inpatient days accumulated by patients at time of discharge during a specified year divided by the number of patients discharged.

Color of patient is designated as either "white" or "all other." Mexicans and Puerto Ricans are considered white unless specifically identified as a member of another color category.