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VITAL STATISTICS REPORT

Hospital Discharge Survey—Provisional Data

FROM THE
NATIONAL CENTER FOR HEALTH STATISTICS

Utilization of Short-Stay Hospitals—Summary of Nonmedical Statistics: United States, 1966 and 1967

Estimates are presented in this report on the utilization of short-stay hospitals in the United States during 1966 and 1967. The data are based on information collected in the Hospital Discharge Survey from the hospital records of a national sample of patients discharged from short-stay hospitals. The data for 1966 exclude military and Veterans Administration hospitals, and the data for 1967 exclude all Federal hospitals. Well newborn infants in the participating hospitals are outside the scope of this study.

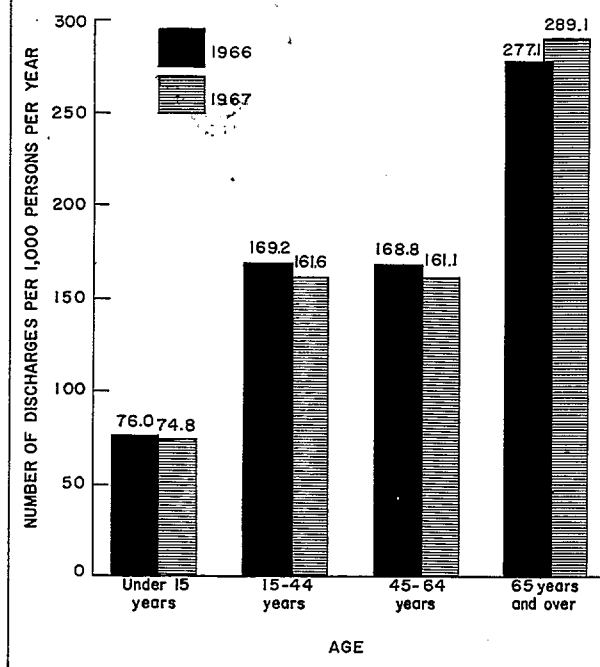
An estimated 28.8 million inpatients, other than well newborn infants, were discharged from short-stay hospitals in 1966, and 28.4 million were discharged in 1967 (table 1). The annual discharge rates per 1,000 persons in the civilian, noninstitutional population were 150.3 in 1966 and 146.9 in 1967. The trend for hospital discharges has been downward since 1965, the first full year of the survey, when an estimated 29.1 million patients were discharged at an annual rate of 153.4 per 1,000 persons. (See *Vital and Health Statistics*, Series 13, No. 3.)

The discharge rates were lower in 1967 than in 1966 for each age group under 65 years (fig. 1). In contrast, the discharge rate for patients 65 years and older increased slightly (about 4 percent). As shown in table 1, these differences in rates were about the same for both male and female patients.

Discharge rates increased with age for patients of both sexes (excluding deliveries). The discharge rates for persons 65 years and older in 1966 and 1967 were almost four times greater than for persons under 15 years of age. During both years the discharge rates were higher for males than those for females for the age groups under 15 years and 65 years and older. For females aged 15-44 years,

the discharge rates per 1,000 (excluding deliveries) were about 1½ times the comparable rates for males (141.8 compared with 97.2 in 1966 and 134.8 compared with 92.2 in 1967). For the age group 45-64 years, the discharge rates for females were slightly higher than those for males.

Figure 1. NUMBER OF DISCHARGES PER 1,000 PERSONS PER YEAR, BY AGE: UNITED STATES, 1966 AND 1967



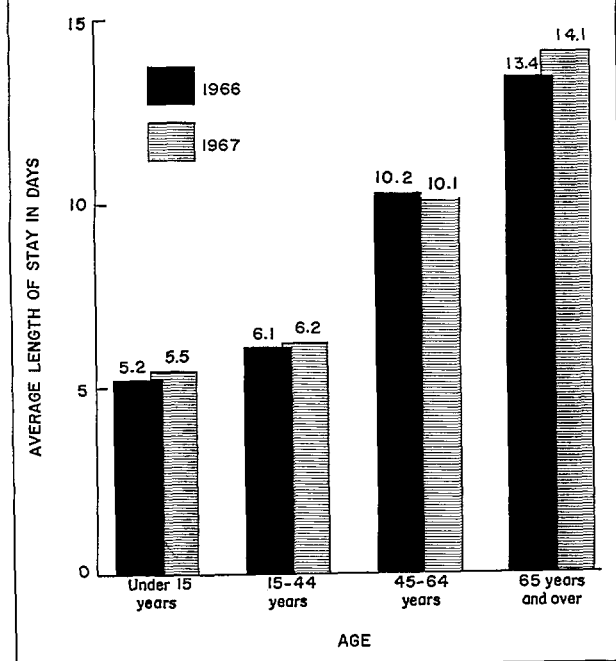
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Table 1. Number of inpatients discharged from short-stay hospitals, rate of discharges, days of care, and average length of stay, by age and sex: United States, 1966 and 1967

Age	1967				1966			
	Both sexes ¹	Male	Female		Both sexes ¹	Male	Female	
			In-cluding deliv-eries	Ex-cluding deliv-eries			In-cluding deliv-eries	Ex-cluding deliv-eries
Number of discharges in thousands								
All ages ² ---	28,417	11,202	17,140	13,575	28,804	11,389	17,362	13,714
Under 15 years----	4,474	2,497	1,960	1,949	4,551	2,569	1,972	1,962
15-44 years-----	12,279	3,323	8,934	5,386	12,693	3,470	9,208	5,577
45-64 years-----	6,386	2,998	3,370	3,364	6,589	3,079	3,496	3,489
65 years and over-	5,215	2,352	2,846	2,846	4,911	2,240	2,658	2,658
Rate of discharges per 1,000 population								
All ages ² ---	146.9	120.1	171.0	135.5	150.3	123.0	175.3	138.5
Under 15 years----	74.8	82.1	66.7	66.4	76.0	84.3	67.1	66.7
15-44 years-----	161.6	92.2	223.6	134.8	169.2	97.2	234.2	141.8
45-64 years-----	161.1	158.1	163.0	162.7	168.8	164.6	172.1	171.8
65 years and over-	289.1	300.7	278.5	278.5	277.1	289.9	265.9	265.9
Number of days of care in thousands								
All ages ² ---	239,688	100,594	138,391	121,929	234,055	99,081	134,405	118,405
Under 15 years----	24,570	13,617	10,841	10,797	23,872	13,790	10,034	9,995
15-44 years-----	76,004	24,362	51,519	35,121	76,921	24,770	52,059	36,128
45-64 years-----	64,797	30,683	33,932	33,911	67,069	31,588	35,294	35,264
65 years and over-	73,728	31,678	41,779	41,779	65,791	28,748	36,812	36,812
Average length of stay in days								
All ages ² ---	8.4	9.0	8.1	9.0	8.1	8.7	7.7	8.6
Under 15 years----	5.5	5.5	5.5	5.5	5.2	5.4	5.1	5.1
15-44 years-----	6.2	7.3	5.8	6.5	6.1	7.1	5.7	6.5
45-64 years-----	10.1	10.2	10.1	10.1	10.2	10.3	10.1	10.1
65 years and over-	14.1	13.5	14.7	14.7	13.4	12.8	13.8	13.8

¹Figures include data for sex not stated.²Figures include data for age not stated.

Figure 2. AVERAGE LENGTH OF STAY BY AGE:
UNITED STATES, 1966 AND 1967



Although the number of hospital discharges was smaller in 1967 than in 1966, the total number of hospital days increased in 1967 (240 million days in 1967 as compared with 234 million days in 1966). This resulted in an increase in the average length of stay from 8.1 days in 1966 to 8.4 days in 1967. The largest increase was experienced by patients 65 years and older; their average length of stay was 0.7 day longer in 1967 than in 1966 (fig. 2).

Data for discharges by color are presented in table 2 according to the two categories "white" and "all other." For about one out of every 10 of the discharged patients the designation of color was omitted from the hospital medical summary sheet. Therefore rates were not computed by color, and caution must be used in drawing any inferences from the data presented in table 2.

Some overall differences between patients in the two color groups are evident. Patients in the "white" category outnumbered patients in the "all other" category by approximately 8 to 1. These figures are based on the estimates of patients discharged during 1966 and 1967 for whom color was stated. Differences between patients in the two color groups are also apparent by age composition and length of stay in 1966 and 1967. For example, of the patients in the "white" category about 1 in 5 was 65 years of age or older compared with only 1 in 10 of the "all other" category. The average length of stay was slightly lower for white patients than for other patients and was lower in every age group. The differences were largest for patients under 15 years of age: the average length of stay for white patients in 1966 was 4.9 days compared with 8.5 days for all other patients, and in 1967 the average stays were 5.2 and 8.0 days, respectively.

The number of discharges and days of care for 1966 and 1967 are shown in table 3 by bed size, type of ownership, and geographic region of hospital. The average length of stay varied directly with the bed size of hospital. The average stay was longer in 1967 than in 1966 for every size of hospital group except those having 500 beds or more. Hospitals of this size experienced a decrease, 10.3 days in 1967 compared with 10.9 days in 1966.

Voluntary nonprofit hospitals, which include hospitals operated by church organizations and other types of nonprofit groups, accounted for 72 percent of all discharges from short-stay hospitals in 1966 and 1967. Hospitals owned by State and local governments accounted for about 19 percent of the discharges, and proprietary hospitals accounted for the remainder, about 9 percent. The average length of stay was shortest in the proprietary hospitals for both years.

The number of discharges by geographic region ranged from about $4\frac{1}{2}$ million in the West to about 9 million in the South in 1966 and 1967 (table 3). The average length of stay per episode of hospitalization ranged from 7.1 days in the West to 9.5 days in the Northeast in 1966, and from 7.0 days in the West to 9.8 days in the Northeast in 1967. The average length of stay was higher in 1967 than in 1966 for all regions except the West, where the average length of stay was about the same for both years. The largest increase was 0.5 day in the North Central Region.

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Table 2. Number and percent distribution of inpatients discharged from short-stay hospitals, days of care, and average length of stay, by age and color: United States, 1966 and 1967

Color and age	Discharges		Days of care		Average length of stay in days
	Number in thousands	Percent distribution	Number in thousands	Percent distribution	
1967					
Total ¹ -----	28,417	100.0	239,688	100.0	8.4
Under 15 years-----	4,474	15.7	24,570	10.3	5.5
15-44 years-----	12,279	43.2	76,004	31.7	6.2
45-64 years-----	6,386	22.5	64,797	27.0	10.1
65 years and over-----	5,215	18.4	73,728	30.8	14.1
White ² -----	22,796	100.0	192,784	100.0	8.5
Under 15 years-----	3,523	15.5	18,435	9.7	5.2
15-44 years-----	9,491	41.6	58,483	30.3	6.2
45-64 years-----	5,311	23.3	52,947	27.5	10.0
65 years and over-----	4,424	19.4	62,474	32.4	14.1
All other ² -----	2,830	100.0	24,584	100.0	8.7
Under 15 years-----	506	17.9	4,067	16.5	8.0
15-44 years-----	1,567	55.4	10,272	41.8	6.6
45-64 years-----	451	16.0	5,616	22.8	12.4
65 years and over-----	298	10.5	4,561	18.6	15.3
1966					
Total ¹ -----	28,804	100.0	234,055	100.0	8.1
Under 15 years-----	4,551	15.8	23,872	10.2	5.2
15-44 years-----	12,693	44.1	76,921	32.9	6.1
45-64 years-----	6,589	22.9	67,069	28.7	10.2
65 years and over-----	4,911	17.0	65,791	28.1	13.4
White ² -----	22,969	100.0	186,599	100.0	8.1
Under 15 years-----	3,569	15.5	17,555	9.4	4.9
15-44 years-----	9,784	42.6	59,101	31.7	6.0
45-64 years-----	5,456	23.8	54,286	29.1	10.0
65 years and over-----	4,114	17.9	55,344	29.7	13.5
All other ² -----	2,739	100.0	24,495	100.0	8.9
Under 15 years-----	485	17.7	4,126	16.8	8.5
15-44 years-----	1,536	56.1	10,055	41.1	6.5
45-64 years-----	446	16.3	6,123	25.0	13.7
65 years and over-----	266	9.7	4,151	16.9	15.6

¹Includes data for color and age not stated.²Includes data for age not stated.

Table 3. Number and percent distribution of inpatients discharged from short-stay hospitals, days of care, and average length of stay, by bed size of hospital, type of ownership, and geographic region: United States, 1966 and 1967

Bed size, type of ownership, and geographic region	Discharges		Days of care		Average length of stay in days
	Number in thousands	Percent distri- bution	Number in thousands	Percent distri- bution	
1967					
All hospitals-----	28,417	100.0	239,688	100.0	8.4
BED SIZE					
6-99 beds-----	6,328	22.3	47,340	19.8	7.5
100-199 beds-----	6,551	23.1	49,929	20.8	7.6
200-299 beds-----	4,945	17.4	42,808	17.9	8.7
300-499 beds-----	6,594	23.2	58,595	24.4	8.9
500 beds or more-----	3,999	14.1	41,016	17.1	10.3
TYPE OF OWNERSHIP					
Voluntary nonprofit-----	20,465	72.0	176,282	73.5	8.6
Government-----	5,510	19.4	46,879	19.6	8.5
Proprietary-----	2,442	8.6	16,527	6.9	6.8
GEOGRAPHIC REGION					
Northeast-----	6,221	21.9	61,021	25.5	9.8
North Central-----	8,710	30.7	77,250	32.2	8.9
South-----	8,908	31.3	69,560	29.0	7.8
West-----	4,577	16.1	31,858	13.3	7.0
1966					
All hospitals-----	28,804	100.0	234,055	100.0	8.1
BED SIZE					
6-99 beds-----	6,965	24.2	47,419	20.3	6.8
100-199 beds-----	6,321	21.9	46,032	19.7	7.3
200-299 beds-----	5,260	18.3	43,632	18.6	8.3
300-499 beds-----	6,069	21.1	51,425	22.0	8.5
500 beds or more-----	4,187	14.6	45,547	19.5	10.9
TYPE OF OWNERSHIP					
Voluntary nonprofit-----	20,609	71.6	169,059	72.2	8.2
Government-----	5,629	19.5	48,397	20.7	8.6
Proprietary-----	2,566	8.9	16,599	7.1	6.5
GEOGRAPHIC REGION					
Northeast-----	6,449	22.4	61,470	26.3	9.5
North Central-----	8,654	30.0	73,120	31.2	8.4
South-----	9,129	31.7	67,193	28.7	7.4
West-----	4,572	15.9	32,273	13.8	7.1

Technical Notes

SOURCE OF DATA. The Hospital Discharge Survey collects data on patients discharged from noninstitutional short-stay hospitals located in the 50 States and the District of Columbia. The data from the survey for 1966 exclude military and Veterans Administration hospitals and for 1967 exclude all Federal hospitals. In 1966 and 1967, a sample of about 140,000 patients from the civilian, noninstitutional population was obtained from a sample of approximately 300 hospitals. This report excludes data for well newborn infants.

SAMPLE. 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.

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

An *inpatient* is a person who has been formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment. "Patient" and "inpatient" are used synonymously in this report.

Well newborn infants are patients who satisfy the following criteria: (1) The birth was at term or was not otherwise specified, and there was no mention

of immaturity or prematurity, (2) no diagnosis of any disease, condition, disorder, syndrome, injury, malformation, or defect was made by the physician attending the birth, (3) no operation (other than a routine circumcision) was performed, and (4) the birth occurred under sterile conditions.

A *discharge* is the formal release of an inpatient by a hospital, that is, the termination of a period of hospitalization either by disposition to the patient's place of residence, to a nursing home, to another hospital, or by death. "Discharges" and "patients (or inpatients) discharged" are terms used synonymously in this report.

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

Days of care denotes the unit of measure for lodging facilities provided and services rendered to one inpatient between two successive dates (admission and discharge). A stay of less than 1 day (admission and discharge on the same calendar day) is counted as 1 day in the summations of inpatient days.

Average length of stay (inpatient) is the total number of inpatient days accumulated at time of discharge by patients discharged from short-stay hospitals during a specified calendar year divided by the number of patients discharged.

Table I. Approximate standard errors of estimated numbers of discharges

Size of estimate	Standard error
200,000-----	18,000
500,000-----	31,000
1,000,000-----	46,000
2,000,000-----	74,000
6,000,000-----	180,000
10,000,000-----	280,000
20,000,000-----	520,000
30,000,000-----	780,000

Table II. Approximate standard errors of estimated numbers of days of care

Size of estimate	Standard error
2,000,000-----	202,000
6,000,000-----	348,000
10,000,000-----	450,000
20,000,000-----	640,000
60,000,000-----	1,140,000
100,000,000-----	1,800,000
200,000,000-----	3,400,000
240,000,000-----	4,080,000

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