Data from the NATIONAL HEALTH SURVEY

Utilization of Short - Stay Hospitals Summary of Nonmedical Statistics

United States - 1967

Presents statistics on the utilization of short-stay hospitals, based on data abstracted by the Hospital Discharge Survey from a national sample of medical records of discharged patients. Discharges, days of care, and average length of stay are reported by age, sex, and color of the discharged patients, and by geographic region, bed size, and type of ownership of the hospitals. Some comparisons of data for 1967 are made with those for 1965 and 1966 to identify changes in patterns of hospitalization after the institution of Medicare.

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U.S. DEPARTMENT, OF HEALTH, EDUCATION, AND WELFARE Public Health Service

> Health Services and Mental Health Administration National Center for Health Statistics Rockville, Md. May 1972



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Vital and Health Statistics-Series 13-No. 9

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402 - Price 50 cents

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Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State or private agencies.

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Vital and Health Statistics-Series 13-No. 9

DHEW Publication No. (HSM) 72-1058 Library of Congress Catalog Card Number 70-179933

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UTILIZATION OF SHORT-STAY HOSPITALS SUMMARY OF NONMEDICAL STATISTICS

Abraham L. Ranofsky, Division of Health Resources Statistics

INTRODUCTION

This report presents estimates on the utilization of short-stay hospitals in the United States based on information collected by the Hospital Discharge Survey (HDS), which is a continuous nationwide survey conducted by the National Center for Health Statistics.

National estimates are shown for 1967 on the number of discharges, days of care, and average length of stay, by patient characteristics such as age, sex, and color, and by hospital characteristics such as bed size, type of ownership, or control, and location (geographic region).

The estimates are based on information abstracted from the medical records of a sample of patients discharged from a national sample of general and special short-stay hospitals, excluding Federal hospitals. In this report data are excluded for well newborn infants. Approximately 145,000 abstracts of hospital medical records were received and processed from about 300 hospitals which participated in the HDS in 1967. For a description of the sample design, data collection procedures, and the estimation process see appendix I. A report has been published which provides a detailed description of the HDS design, estimating techniques, and quality control.¹

Hospital utilization data for 1967 are of special interest insofar as 1967 was the first full calendar year of Medicare, the Federal program of hospital insurance for the aged, which became effective July 1, 1966. Therefore, estimates for 1967 are compared with data collected for 1965 and 1966 to identify changes in the patterns of hospitalization following the enactment of Medicare. Detailed estimates of nonmedical hospital data for 1965 and 1966 are available in five previous publications.²⁻⁶ Data on hospital utilization by diagnosis and operations performed are also available for 1965.^{7,8}

Appendix II contains definitions of terms relating to hospitalization and the characteristics of patients and hospitals used in this report. Since several of the terms have specialized meanings in the HDS, familiarity with these definitions will aid in interpreting the data.

SELECTED FINDINGS

An estimated 28.4 million inpatients were discharged from non-Federal short-stay hospitals in the United States during 1967. These patients received an estimated 239.7 million days of care, and the average length of stay was 8.4 days per hospital episode.

Expressed in terms of annual rates of hospital utilization, in 1967 there were 146.9 discharges and 1,238.9 days of care per 1,000 persons in the civilian, noninstitutional population. The discharge rates ranged from 74.8 per 1,000 population under 15 years of age to 289.1 per 1,000 population aged 65 and over. There was an even greater disparity between the rates of days of care for these age groups—410.9 days of care per 1,000 population under age 15 and 4,086.2

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days per 1,000 population 65 years and over. Average length of stay per hospital episode increased with each successive age group from 5.5 days for patients under age 15 to 14.1 days for patients 65 years and over.

There were also differences in hospital utilization by sex. Rates of discharge and of days of care were higher for females than for males. The discharge rate for females,171.0 discharges per 1,000 population, was 42 percent higher than that for males,120.1 discharges per 1,000 population. When hospitalization for deliveries was excluded, the discharge rate for females was only 13 percent higher than the rate for males. The average length of stay was the same for males and females exclusive of deliveries--9.0 days. The average stay for females was only 8.1 days when deliveries were included.

Data on hospital utilization by color are grouped according to the categories "white" and "all other." However, the number of discharged patients with color not reported was almost as large as the all other category. As a result, the data by color must be regarded with caution. Based on the estimates of patients discharged for whom color was stated, patients identified as white outnumbered the all other group by 8 to 1. White patients, as a group, were older than the all other. Although the average length of stay was about the same overall for white patients (8.5 days) and for all other patients (8.7 days), in each age group and by sex the average stay was shorter for white than for all other patients.

Differences in hospital utilization in 1967 were also evident by geographic region, bed size of hospital, and type of ownership (control) of hospital. Discharges by region ranged from 131.8 per 1,000 population in the Northeast Region to 160.2 in the North Central Region. The average length of stay was shortest in the West (7.0 days) and longest in the Northeast (9.8 days). By bed size of hospital, average length of stay increased as hospital size increased-ranging from 7.5 days in hospitals with 6-99 beds to 10.3 days in hospitals with 500 beds or more. By type of ownership of hospital, voluntary nonprofit hospitals cared for the most patients (72 percent) and provided the largest number of days of care by far-176.3 million days or 74 percent of the total. The average length of stay was 6.8 days in proprietary hospitals, 8.5 days in government (State and local) hospitals, and 8.6 days in voluntary nonprofit hospitals.

Comparisons of the estimates of hospital utilization for 1967 with 1965 and 1966 showed a decrease in the number of patients discharged accompanied by an increase in the number of days of care and in the average length of stay. In 1967 the discharge rate was 146.9 per 1,000 population compared with 153.4 in 1965. The days of care rate increased from 1,203.4 per 1,000 population in 1965 to 1,238.9 in 1967, and the average length of stay increased from 7.8 to 8.4 days over the 3-year period.

Increased hospital utilization by the aged following the institution of Medicare was the outstanding change which occurred during 1965-67. In 1967 the discharge rate per 1,000 persons aged 65 and over was 10 percent higher, and the days of care rate was 19 percent higher than in 1965, the baseline year prior to the Medicare program. The average length of stay for persons 65 years and older increased from 13.0 days in 1965 to 14.1 days in 1967.

DISCHARGES AND DISCHARGE RATES

There were an estimated 28.4 million patients discharged from short-stay hospitals during 1967, excluding well newborn infants. This represented an annual rate of 146.9 discharges per 1,000 persons in the civilian, noninstitutional population (table 1).

Age and Sex

The discharge rate was lowest for persons under 15 years of age, 74.8 per 1,000 population, and was highest for persons 65 years and over, 289.1 per 1,000 population (table 1). However, in the former age group, the rate for under 1 year of age was 287.4 discharges per 1,000 population, or about the same as for persons 65 years and older.

Females were discharged at the rate of 171.0 discharges per 1,000 population, 42 percent higher than the discharge rate of 120.1 for males. When hospitalization for deliveries was excluded, the discharge rate for females was only 13 percent higher than that for males (figure 1). These higher discharge rates for females were due



Figure 1. Number of discharges per 1,000 population per year, by age and sex, including and excluding deliveries: United States, 1967.

mainly to the large number of females hospitalized during the childbearing years, ages 15-44. In fact, discharge rates were higher for males than for females under age 15 and at age 65 and over, and the discharge rate for women aged 45-64 years was only slightly higher than the rate for men. Hospital utilization increased with age for both males and females, excluding deliveries.

The hospital experience for 1967 covered the first full calendar year of the Medicare program, which became effective July 1, 1966. The measures of hospital utilization for 1967 are compared in table A with those for 1965 and 1966 by age (all ages, under 65, and 65 years and over) and by sex. The estimated number of discharges per 1,000 persons aged 65 years and older was 10 percent higher than before Medicare (1965). At these older ages the discharge rate for men was 9 percent higher and for women 10 percent higher in 1967 than in 1965.

While a larger number of aged persons were hospitalized, the number of discharges per 1,000 population under age 65 was 7 percent lower in 1967 than in 1965. There was a 5-percent decrease in the discharge rate for males and an 8-percent decrease for females. The discharge rates decreased over the 3-year period for each age group under 65 years (figure 2).

Color

The data for patients discharged by color are presented in table 2 according to the two categories "white" and "all other." An estimated 22.8 million white patients and 2.8 million all other persons for whom color was reported were discharged from short-stay hospitals in 1967 (table 2). Color was omitted from the hospital medical record summary sheets of about 2.8 million patients—an amount about equal to the number of patients identified as all other. Therefore, rates were not computed by color and comparisons with previous years were not made. Caution must be exercised in drawing conclusions from the data in this report by color.

Some overall differences between the patients in the two color groups were evident. White

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	All ages ¹			Under 65 years			65 years and over		
Year	Both sexes ²	Male	Female	Both sexes ²	Male	Female	Both sexes ²	Ma1e	Female
			Numb	er of dis	er of discharges in thousan				
1965 1966 1967	29,120 28,804 28,417	11,361 11,389 11,202	17,709 17,362 17,140	24,377 23,832 23,139	9,188 9,118 8,819	15,152 14,676 14,264	4,601 4,911 5,215	2,114 2,240 2,352	2,474 2,658 2,846
	:	Num	ber of dis	charges p	er 1,000) populatio	n per yea	r	
1965 1966 1967	153.4 150.3 146.9	123.5 123.0 120.1	181.1 175.3 171.0	141.4 137.0 131.9	108.9 107.4 103.2	172.2 164.8 158.5	263.9 277.1 289.1	276.3 289.9 300.7	252.9 265.9 278.5
			Numbe	r of ďays	of care	in thousa	nds		
1965 1966 1967	228,398 234,055 239,688	95,514 99,081 100,594	132,405 134,405 138,391	167,343 167,863 165,371	68,999 70,149 68,662	98,088 97,387 96,292	60,035 65,791 73,728	26,070 28,748 31,678	33,752 36,812 41,779
		Numb	er of days	s of care	per 1,00	00 populati	on per ye	ar	
1965 1966 1967	1,203.4 1,221.4 1,238.9	1,038.3 1,070.0 1,078.6	1,353.9 1,357.1 1,380.9	970.9 965.2 942.6	818.1 826.5 803.7	1,114.5 1,093.7 1,070.0	3,443.4 3,712.0 4,086.2	3,407.0 3,720.0 4,048.8	3,450.1 3,682.7 4,088.4
	Average length of stay in days								
1965 1966 1967	7.8 8.1 8.4	8.4 8.7 9.0	7.5 7.7 8.1	6.9 7.0 7.1	7.5 7.7 7.8	6.5 6.6 6.8	13.0 13.4 14.1	12.3 12.8 13.5	13.6 13.8 14.7

Table A. Selected measures of utilization of short-stay hospitals by patients under age 65 and 65 and over, by sex: United States, 1965-67

 $^1 {\rm Includes}$ discharged patients for whom age was not stated. $^2 {\rm Includes}$ discharged patients for whom sex was not stated.

patients outnumbered all other patients by 8 to 1. Differences between patients in the two color groups were also apparent by sex and age. White patients included 40 percent males and 60 percent females compared with 35 percent males and 65 percent females for patients in the all other group. These differences were due largely to a smaller percentage of white than of all other patients hospitalized for deliveries. As a group, white patients were older than all other patients—43 percent of the whites were age 45 and older compared with 26 percent of all others. Approximately 1 in 5 of the estimated number of white patients was 65 years of age and over compared with only 1 in 10 among patients of races other than white.

Geographic Region

The estimated number of discharges from short-stay hospitals in 1967 was highest in the South Region with 8.9 million patients discharged and lowest in the West Region with 4.6 million discharges (table 3). Regional variations in population sizes accounted for most of this large difference.

The discharge rates per 1,000 population were higher in the North Central and South



Figure 2. Number of discharges per 1,000 population per year, by age: United States, 1965-67.

Regions with rates of 160.2 and 148.7, respectively, and were lower in the West and Northeast Regions with rates of 142.9 and 131.8, respectively (table 4). In general, the regional levels of discharge rates by age and sex were relatively about the same as the total rates for the regions. For example, the Northeast Region had the lowest discharge rate and was also lowest among the regions in the rates for each age and sex group, except under 15 years. Regional differences were largest for persons aged 65 and over, for whom the discharge rate ranged from 247.0 per 1,000 population in the Northeast to 319.6 in the North Central.

Table B compares the number of discharged patients by region for the period 1965-67. For patients aged 65 and over, the number of discharges per 1,000 population in 1967 was higher in all geographic regions than in 1965. Discharge rates for the aged increased by 12 percent in the Northeast and North Central Regions, by 8 percent in the South Region, and by 4 percent in the West Region. Conversely, persons under 65 years of age experienced lower discharge rates in 1967 than in 1965 in every region. The range of the declines was from 3 percent in the North Central Region to 10 percent in the South Region.

Size of Hospital

The 28.4 million patients discharged from short-stay hospitals in 1967 were distributed by size of hospital as shown below:

Size of hospital	Number of discharges in thousands	Percent distri- bution
All sizes	28,417	100.0
6-99 beds 100-199 beds 200-299 beds 300-499 beds 500 beds or more-	6,328 6,551 4,945 6,594 3,999	22.3 23.1 17.4 23.2 14.1

Table B. Selected measures of utilization of short-stay hospitals by patients under age 65 and 65 and over, by geographic region: United States, 1965-67

		1965			1966		1967		
Geographic region	All ages ¹	Under 65 years	65 years and over	All ages ¹	Under 65 years	65 years and over	All ages1	Under 65 years	65 years and over
		· Nu	mber of di	scharges	per 1,000 p	oopulation	per year		
All regions-	153.4	141.4	263.9	150.3	137.0	277.1	146.9	131.9	289.1
Northeast North Central South West	140.3 160.4 160.8 147.3	130.7 146.6 148.4 135.4	220.3 285.2 278.4 272.8	137.3 160.4 154.1 145.2	125.0 145.8 140.5 133.4	246.1 293.6 291.6 271.0	131.8 160.2 148.7 142.9	118.6 142.7 133.7 129.7	247.0 319.6 299.7 282.7
		Nu	mber of da	ys of car	e per 1,000) populatio	on per yea	r	
All regions-	1,203.4	970.9	3,443.6	1,221.4	965.2	3,712.0	1,238.9	942.6	4,086.2
Northeast North Central South West	1,270.0 1,317.7 1,157.1 994.5	1,023.6 1,037.8 954.7 812.2	3,430.1 3,930.4 3,214.2 2,970.3	1,308.9 1,355.5 1,134.3 1,024.9	1,020.2 1,061.9 918.0 809.8	3,885.0 4,078.2 3,369.5 3,350.2	1,293.3 1,421.1 1,161.1 994.8	975.4 1,061.8 902.8 769.9	4,091.1 4,726.5 3,790.9 3,409.3
	Average length of stay in days								
All regions-	7.8	6.9	13.0	8.1	7.0	13.4	8.4	7.1.	14.1
Northeast North Central South West	9.1 8.2 7.2 6.8	7.8 7.1 6.4 6.0	15.6 13.8 11.5 10.9	9.5 8.4 7.4 7.1	8.2 7.3 6.5 6.1	15.8 13.9 11.6 12.4	9.8 8.9 7.8 7.0	8.2 7.4 6.8 5.9	16.6 14.8 12.7 12.1

¹Includes discharged patients for whom age was not stated.

The discharges from each size-of-hospital group are distributed by age and sex in table 5. There were only small differences in the agesex distributions by size of hospital. The largest variations occurred among patients aged 65 and over, who accounted for as little as 15 percent of the discharges from hospitals with 500 beds or more to as much as 22 percent of the discharges from hospitals with fewer than 100 beds.

During 1965-67 an upward trend was evident in the number of aged patients discharged in all bed-size groups of hospitals. The percent increase ranged from 9 percent in hospitals with 500 beds or more to 19 percent in hospitals with 300-499 beds (table C). In contrast with the trend for the older patients, there were 5 percent fewer persons under age 65 discharged in 1967 than in 1965; the declines for this age group occurred in hospitals with less than 300 beds (12percent decrease). Larger hospitals (300 beds or more) discharged 10 percent more patients under age 65 in 1967 than in 1965.

Type of Ownership (Control) of Hospital

Voluntary nonprofit hospitals (church- and other nonprofit-operated) cared for 20.5 million patients, or 72 percent of all patients discharged from short-stay hospitals in 1967 (table 6). Government hospitals (controlled by State and local governments) accounted for 5.5 million discharges, or 19 percent of all patients discharged, and proprietary hospitals discharged 2.4 million patients, or 9 percent.

The number of discharges from each ownership type of hospital are distributed by age and sex in table 6. There were relatively small differences in the percent distributions by age and sex groups. For example, the largest difference was in the percentage of discharged men aged 15-44 years, which ranged from 29 percent in voluntary nonprofit hospitals to 34 percent in proprietary hospitals.

During the 3-year period 1965-67 the number of discharges by type of hospital ownership for

Cine of beenited		1965			1966			1967	
Size of Hospital	A11 ages ¹	Under 65 years	65 years and over	A11 ages ¹	Under 65 years	65 years and over	All ages ¹	Under 65 years	65 years and over
			Nu	mber of d	ischarges i	n thousand	ls	-	
All sizes	29,120	24,377	4,601	28,804	23,832	4,911	28,417	23,139	5,215
6-99 beds 100-199 beds 200-299 beds 300-499 beds 500 beds or more	7,303 6,796 5,441 5,921 3,659	5,984 5,752 4,575 4,980 3,086	1,262 1,017 849 917 556	6,965 6,321 5,260 6,069 4,187	5,573 5,274 4,331 5,110 3,544	1,376 1,034 920 944 637	6,328 6,551 4,945 6,594 3,999	4,904 5,369 3,994 5,492 3,380	1,405 1,171 943 1,088 608
			Numb	er of day:	s of care i	n thousand	s		
All sizes	228,398	167,343	60,035	234,055	167,863	65,791	239,688	165,371	73,728
6-99 beds 100-199 beds 200-299 beds 300-499 beds 500 beds or more	48,166 46,196 44,406 50,087 39,543	33,047 33,800 32,340 37,350 30,807	14,808 12,225 11,876 12,583 8,543	47,419 46,032 43,632 51,425 45,547	30,856 33,310 30,961 38,157 34,579	16,477 12,653 12,607 13,147 10,906	47,340 49,929 42,808 58,595 41,016	28,771 33,926 29,151 42,310 31,214	18,392 15,873 13,577 16,181 9,705
	Average length of stay in days								
All sizes	7.8	6.9	13.0	8.1	7.0	13.4	8.4	7.1	14.1
6-99 beds 100-199 beds 200-299 beds 300-499 beds 500 beds or more	6.6 6.8 8.2 8.5 10.8	5.5 5.9 7.1 7.5 10.0	11.7 12.0 14.0 13.7 15.4	· 6.8 7.3 8.3 8.5 10.9	5.5 6.3 7.1 7.5 9.8	12.0 12.2 13.7 13.9 17.1	7.5 7.6 8.7 8.9 10.3	.5.9 6.3 7.3 7.7 9.2	$ 13.1 \\ 13.6 \\ 14.4 \\ 14.9 \\ 16.0 $

Table C. Number of discharges and days of care, and average length of stay for patients under age 65 and 65 and over, by size of hospital: United States, 1965-67

¹Includes discharged patients for whom age was not stated.

patients under age 65 and aged 65 and over was distributed as follows:

Age and type of ownership	1965	1966	1967
<u>Under 65 years</u>	Number in	of disc thousan	harges ds
Voluntary non- profit Government Proprietary	17,191 4,736 2,450	17,032 4,631 2,170	16,600 4,495 2,045
65 years and over			
Voluntary non- profit Government Proprietary	3,213 1,038 350	3,537 985 388	3,823 1,001 392

The discharge trends for 1965-67 were markedly different by hospital ownership. Discharges of patients aged 65 and over increased in voluntary nonprofit hospitals by 19 percent and in proprietary hospitals by 12 percent, while government hospitals experienced a 4-percent decrease. All hospital ownership groups discharged fewer patients under age 65 in 1967 than in 1965-3 percent fewer discharges in voluntary nonprofit hospitals, 5 percent fewer in government hospitals, and 16 percent fewer in proprietary hospitals.

DAYS OF CARE AND LENGTH OF STAY

An estimated 239.7 million days of care were received by the 28.4 million patients discharged from short-stay hospitals in 1967 (table 7). The days of ćare rate was 1,238.9 per 1,000 persons in the civilian, noninstitutional population. For each episode of hospitalization the average length of stay was 8.4 days.

Age and Sex

The days of care rates by detailed age groups ranged from 253.2 days per 1,000 population aged 5-14 years to 5,492.9 days for persons 75 years and over (table 7). Beginning with age group 5-14 years the days of care rate increased with each advance in age. The rate for patients under 1 year of age (2,361.6 days per 1,000 population) was highest among the age groups under age 65.

The rates for days of care were higher for females than for males in all age groups shown in figure 3 except under age 15. However, deliveries exerted less influence on the days of care rate than on the discharge rate for females because of the relatively short average length of stay per hospital episode. At ages 65 and over the days of care rate for women, 4,088.4 per 1,000 population, exceeded the rate for men, 4,048.8 per 1,000 population, even though the discharge rate was higher for men (278.5 discharges



Figure 3. Number of days of care per 1,000 population per year, by age and sex, including and excluding deliveries: United States, 1967.

for women and 300.7 discharges for men per 1,000 population).

The average length of stay for patients discharged during 1967 was 8.4 days (table 7). Males were hospitalized for an average of 9.0 days and females for an average of 8.1 days. Average length of stay increased with each successive broad age group from 5.5 days for patients under age 15 to 14.1 days for patients aged 65 and over. Average duration of hospitalization for males and females also increased with age.

The discharges for 1967 are distributed by number of days hospitalized according to age and sex in table 8. About two-thirds of patients hospitalized were discharged within a week. More females (70 percent) than males (64 percent) were hospitalized for a week or less. In comparing age groups, older patients remained longer. Of the patients discharged, 67 percent under age 15 and 58 percent 15-44 years of age were discharged within 4 days after admission. In the older age groups, only 34 percent of patients aged 45-64 and 22 percent of patients aged 65 and older required only 4 or fewer days of care. The percent of patients who were hospitalized for longer than a week ranged from 16 percent for patients under age 15 to 59 percent for those age 65 and over.

The rates of days of care are presented in table A and figure 4 for the 3-year period 1965-67. Compared with 1965, before the Medicare program was instituted, the days of care rates for patients aged 65 years and over were 8 percent higher in 1966 and 19 percent higher in 1967. For persons



Figure 4. Number of days of care per 1,000 population per year, by age: United States, 1965-67.

under 65 years of age the rates by age group were slightly lower or about the same (figure 4) over the 3 years.

The average length of stay for patients aged 65 years and older increased from 13.0 days in 1965 to 14.1 days in 1967, an increase that was experienced by both men and women (figure 5). The longer average length of stay for the aged in 1967 than in 1965 is accounted for by a 19-per-cent increase in the days of care rate accompanied by an increase of 10 percent in the discharge rate. The average length of stay also increased for patients under 65 years of age during this period, but only slightly.

was about the same for the two color groups because the white group of discharged patients included a larger percentage of older patients with long hospital stays than did the all other group. However, the average stay per hospital episode for every age and sex group was noticeably shorter for white than for all other patients. The difference was largest for patients under age 15 years, whose average length of stay was 5.2 days for white patients and 8.0 days for others.

The data by color should be regarded with caution since color of patient was not stated on



Figure 5. Average length of stay for patients discharged, by age and sex: United States, 1965-67.

Color

There were differences between the age and sex distributions of days of care utilized by white and all other patients for whom color was stated (table 9). White patients under age 15 used a smaller percentage (9.6 percent) of the days of care in 1967 than did all other patients (16.5 percent) in this age group. On the other hand, for ages 65 years and over white patients—both men and women—used a considerably larger percentage (32.4 percent) of the days of care than did all other patients (18.6 percent).

There was no appreciable difference in average stay for all discharges by color-8.5 days for white patients compared with 8.7 days for all other patients (table 10). Average length of stay the medical record summary sheets of 2.8 million discharged patients who were provided an estimated 22.3 million days of care, or about 9 percent of the total number of days of care. Because of the large number of records with color not stated, rates of days of care were not computed and data for 1967 by color were not compared with previous years.

Geographic Region

The number of days of care provided to patients of short-stay hospitals in 1967 are shown in table 11 by geographic region according to age and sex.

The estimated number of days of care per 1,000 population was lowest in the West Region and highest in the North Central Region (table 12). These rates were 994.8 days and 1,421.1 days, respectively, a difference of 43 percent. By age, the days of care rate in the North Central Region as compared with the West Region was 67 percent higher for under age 15, 33 percent higher for persons aged 15-44 years, 31 percent higher for persons aged 45-64 years, and 39 percent for persons aged 65 and over.

The average length of stay per hospital episode was shortest in the West Region with an average of 7.0 days and was longest in the Northeast Region with an average of 9.8 days (table 13). The regional ranks of average stay by age and sex were the same.

Table B presents the days of care rate and the average length of stay by geographic region for 1965-67. The number of days of care per 1,000 population aged 65 and over was higher in all regions for 1967 than for 1965. The increases ranged from 15 percent in the West to 20 percent in the North Central. The average length of stay for the aged was about a day longer in 1967 than in 1965 in all regions.

For persons under age 65 the days of care rate was lower in 1967 than in 1965 in all regions but the North Central (table B). However, for this age group there was a small increase in the average length of stay in each region except the West, which was about the same in 1967 as in 1965.

Size of Hospital

Days of care according to size of hospital varied by age and sex. The variations were greatest for patients aged 65 and over (table 14), who utilized as little as 24 percent of all days of care provided by hospitals with 500 beds or more and as much as 39 percent in hospitals with 6-99 beds. The number of days of care accounted for by patients under age 15 was only 8 percent in hospitals with fewer than 100 beds and 13 percent in the largest hospitals. The average length of stay ranged from 7.5 days in hospitals of less than 100 beds to 10.3 days in hospitals with 500 beds or more (table 15). A similar relationship of length of stay to size of hospital was evident by age and sex. Both male and female patients under age 15, for example, were hospitalized about twice as long in the largest as in the smallest hospitals.

Regardless of hospital size, patients aged 65 and over received a larger number of days of care in 1967 than in 1965 (table C). Increases ranged from 14 percent in hospitals with 500 beds or more to 30 percent in hospitals with 100-199 beds. The number of days of care provided to patients under 65 years decreased or was about the same in 1967 as in 1965 in all hospitals except those with 300-499 beds, for which there was a 13-percent increase.

The average length of stay was longer in 1967 than in 1965 for patients aged 65 and over in every size-of-hospital group. The increases ranged from 0.4 days in hospitals with 200-299 beds to 1.6 days in hospitals with 100-199 beds. For patients under age 65 the average length of stay increased slightly in all size-of-hospital groups except hospitals with 500 beds or more.

Type of Ownership (Control) of Hospital

The 239.7 million days of care utilized by patients in 1967 were distributed by ownership of hospital as follows: voluntary nonprofit hospitals provided 176.3 million days, or 74 percent; government hospitals provided 46.9 million days, or 20 percent; and proprietary hospitals provided 16.5 million days, or 7 percent (table 16). Average lengths of stay were 8.6 days in voluntary nonprofit hospitals, 8.5 days in government hospitals, and 6.8 days in proprietary hospitals (table 17). The average hospital stay in proprietary hospitals was shorter than in the other hospital ownership groups for all age groups and by sex.

A comparison of 1965-67 data for the days of care provided to patients under age 65 and 65 and

over by type of hospital ownership is shown below:

Age and type of ownership	1965	1966	1967
Under 65 years	Numbe care	er of day in thous	ys of sands
Voluntary non- profit Government Proprietary	119,210 34,354 13,781	120,665 34,733 12,465	120,591 32,899 11,881
65 years and over			
Voluntary non- profit Government Proprietary	43,462 13,153 3,420	48,131 13,584 4,076	55,277 13,834 4,617

All three types of hospitals provided patients aged 65 and older with more days of care in 1967 than in 1965: proprietary hospitals, 35 percent more days; voluntary nonprofit hospitals, 27 percent more days; and government hospitals, 5 percent more days. Patients under age 65 in government and proprietary hospitals required fewer days in 1967 than in 1965, and in voluntary nonprofit hospitals slightly more days were provided. The 1965-67 trend in average length of stay for patients under age 65 and age 65 and over was as follows:

Age and type of ownership	1965	1966	1967
Under 65 years	Avera sta	ch of rs	
Voluntary non- profit Government Proprietary	6.9 7.3 5.6	7.1 7.5 5.7	7.3 7.3 5.8
65 years and over			
Voluntary non- profit Government Proprietary	13.5 12.7 9.8	13.6 13.8 10.5	14.5 13.8 11.8

The average hospital stay for patients 65 years and over in voluntary nonprofit and government hospitals was about a day longer in 1967 than in 1965, and in proprietary hospitals about 2 days longer. The average stays in 1967 for patients under 65 years of age were slightly higher or about the same as in 1965.

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Table 1. Number, percent distribution, and annual rate of discharges by age, according to sex: United States, 1967

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

	Discharges				
Sex and age	Number in thousands	Percent distribution	Rate per 1,000 population		
Both sexes ¹					
All ages	28,417	100.0	146.9		
Under 15 years	4,474 1,015 453 562 1,185 2,274 12,279 4,846 4,011 3,423 6,386 3,328 3,057 5,215 2,818 2,397 62	15.7 3.6 1.6 2.0 4.2 8.0 43.2 17.1 14.1 12.0 22.5 11.7 10.8 18.4 9.9 8.4 0.2	74.8 287.4 75.9 56.0 161.6 158.9 181.3 146.3 161.1 149.2 176.3 289.1 246.6 362.4		
Male					
All ages	11,202	100.0	120.1		
Under 15 years	2,497 571 245 325 670 1,257 3,323 1,157 953 1,213 2,998 1,452 1,546 2,352 1,332	22.3 5.1 2.2 2.9 6.0 11.2 29.7 10.3 8.5 10.8 26.8 13.0 13.8 21.0 11.9	82.1 316.7 84.0 60.9 92.2 81.1 90.2 108.2 158.1 135.3 187.8 300.7 262.1		
75 years and over Age not stated	1,020 31	- <u>9</u> .1 0.3	372.0		

 $^1 {\rm Includes}$ discharged patients for whom sex was not stated.

Table 1. Number, percent distribution, and annual rate of discharges by age, according to sex: United States, 1967 - Con.

	Discharges						
Sex and age	Number in thousands	Percent distribution	Rate per 1,000 population				
Female							
All ages	17,140	100.0	171.0				
Under 15 years Under 1 year Newborn Other infants 1-4 years 5-14 years	1,960 439 205 234 512 1,009	11.4 2.6 1.2 1.4 3.0 5.9	66.7 254.0 66.9 50.5				
15-44 years 15-24 years 25-34 years 35-44 years	8,934 3,681 3,052 2,202	52.1 21.5 17.8 12.8	223.6 227.0 263.8 180.9				
45-64 years 45-54 years 55-64 years	3,370 1,869 1,501	19.7 10.9 8.8	163.0 161.5 164.8				
65 years and over 65-74 years 75 years and over	2,846 1,478 1,368	16.6 8.6 8.0	278.5 232.9 353.4				
Age not stated	30	0.2	•••				

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

Table 2. Number and percent distribution of discharges by age, according to sex and color:United States, 1967

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

	D. II	7	Fema	le	Detth		Fema	1e
Color and age	sexes ¹	Male	Including deliveries	Excluding deliveries	sexes ¹	Male	Including deliveries	Excluding deliveries
	·				·			
<u>Total</u>	Numl	per of di in t	scharged pat housands	ients		Percent	distributic	n
All ages ²	28,417	11,202	17,140	13,575	100.0	100.0	100.0	100.0
Under 15 years	4,474	2,497	1,960	1,949	15.7	22.3	11.4	14.4
15-44 years	12,279	3,323	8,934	5,386	43.2	29.7	52.1	39.7
45-64 years	6,386	2,998	3,370	3,364	22.5	26.8	19.7	24.8
65 years and over	5,215	2,352	2,846	2,846	18.4	21.0	16.6	21.0
White								•
A11 ages ²	22,796	9,105	13,638	11,003	100.0	100.0	100.0	100.0
Under 15 years	3,523	1,968	1,543	1,538	15.5	21.6	11.3	14.0
15-44 years	9,491	2,651	6,824	4,197	41.6	29.1	50.0	38.1
45-64 years	5,311	2,494	2,804	2,801	23.3	27.4	20.6	25.5
65 years and over	4,424	1,969	2,443	2,443	19.4	21.6	17.9	22.2
All other								
 A11 ages ²	2,830	990	1,832	1,255	100.0	100.0	100.0	100.0
Under 15 years	506	283	220	. 214	17.9	28.6	12.0	17.1
15-44 years	1,567	339	1,227	656	55.4	34.2	66.9	52.3
45-64 years	451	221	229	227	16.0	22.3	12.5	18.1
65 years and over	298	143	155	155	10.5	14.4	8.4	12.3
Color not stated								
	0 700	1 107	1 (70	1 270	100.0	700.0	100.0	100.0
ALL ages"	2,790	1,107	1,670	1,318	100.0	100.0	100.0	100.0
Under 15 years	445	246	197	197	16.0	22.2	11.8	14.9
15-44 years	1,222	333	884	532	43.8	30.1	52.9	40.4
45-64 years	623	283	337	336	22.3	25.6	20.2	25.5
65 years and over	493	240	249	249	17.7	21.7	14.9	18.9

 $^1 \rm Includes$ discharged patients for whom sex was not stated: $^2 \rm Includes$ discharged patients for whom age was not stated.

Table 3. Number and percent distribution of discharges by age, according to sex and geographic region: United States, 1967

Geographic	Both		Fema	ale	Both		Fema	lle
region and age	sexes ¹	Male	Including deliveries	Excluding deliveries	sexes ¹	Male	Including deliveries	Excluding deliveries
All regions	Num	ber of di in t	ischarged pat thousands	ients	Percent distribution			
All ages ²	28,417	11,202	17,140	13,575	100.0	100.0	100.0	100.0
Under 15 years	4,474	2,497	1,960	1,949	15.7	22.3	11.4	14.4
15-44 years	12,279	3,323	8,934	5,386	43.2	29.7	52.1	39.7
45-64 years	6,386	2,998	3,370	3,364	22.5	26.8	19.7	24.8
65 years and over	5,215	2,352	2,846	2,846	18.4	21.0	16.6	21.0
Northeast								
All ages ²	6,221	2,472	3,731	2,912	100.0	100.0	100.0	100.0
Under 15 years	1,017	5,818	430	429	16.3	23.5	11.5	14.7
15-44 years	2,564	6,634	1,896	1,079	41.2	26.8	50.8	37.1
45-64 years	1,452	688	759	758	23.3	27.8	20.3	26.0
65 years and over	1,175	532	640	640	18.9	21.5	17.1	22.0
North Central								
All ages ²	8,710	3,417	5,269	4,191	100.0	100.0	100.0	100.0
Under 15 years	1,440	799	635	632	16.5	23.4	12.0	15.1
15-44 years	3,654	976	2,672	1,598	42.0	28.6	50.7	38.1
45-64 years	1,910	881	1,024	1,022	21.9	25.8	19.4	24.4
65 years and over	1,687	752	930	930	19.4	22.0	17.6	22.2
South								
A11 ages ²	8,908	3,533	5,352	4,312	100.0	100.0	100.0	100.0
Under 15 years	1,342	736	602	596	15.1	20.8	11.2	13.8
15-44 years	3,979	1,137	2,835	1,803	44.7	32.2	53.0	41,8
45-64 years	1,979	937	1,036	1,034	22.2	26.5	19.4	24.0
65 years and over	1,587	712	869	869	17.8	20.2	16.2	20.2
West								
All ages ²	4,577	1,780	2,789	2,160	100.0	100.0	100.0	100.0
Under 15 years	676	380	294	293	14.8	21.4	10.5	13.ċ
15-44 years	2,082	547	1,532	905	45.5	30.7	54.9	41.9
45-64 years	1,045	492	551	550	22.8	27.7	19.8	25.5
65 years and over	766	357	408	408	.16.7	20.0	14.6	18.9

Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants

 $^1 \rm Includes$ discharged patients for whom sex was not stated. $^2 \rm Includes$ discharged patients for whom age was not stated.

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Table 4. Annual rate of discharges by age, sex, and geographic region: United States, 1967

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Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

Geographic region	Both	Male	Female		
and age	sexes ¹		Including deliveries	Excluding deliveries	
<u>All regions</u>	Num	ber of dis populati	charges per on per year	1,000	
A11 ages ²	146.9	120.1	171.0	135.5	
Under 15 years	74.8	82.1	66.7	66.4	
15-44 years	161.6	92.2	223.6	134.8	
45-64 years	161.1	158.1	163.0	162.7	
65 years and over	289.1	300.7	278.5	278.5	
Northeast					
All ages ²	131.8	109.5	151.7	118.3	
Under 15 years	74.6	83.9	64.3	64.1	
15-44 years	141.0	77.0	198.2	112.9	
45-64 years	136.6	137.1	135.3	135.2	
65 years and over	247.0	264.2	233.0	233.0	
North Central					
All ages ²	160.2	129.2	188.7	150.1	
Under 15 years	85.1	92.7	76.4	76.1	
15-44 years	174.3	96.7	245.6	146.9	
45-64 years	170.6	162.7	177.1	176.8	
65 years and over	319.6	324.1	314.1	314.1	
South	,				
All ages ²	148.7	123.2	171.3	138.0	
Under 15 years	70.3	75.9	64.0	63.4	
15-44 years	165.6	101.1	222.0	141.2	
45-64 years	172,1	172.6	170.7	170.4	
65 years and over	299.7	309.8	290.0	290.0	
West					
All ages ²	142.9	114.4	169.4	131.2	
Under 15 years	66.5	73.6	58.9	58,8	
15-44 years	162.2	89.8	227.3	134.2	
45-64 years	165.3	158.6	171.2	171.0	
65 years and over	282.7	299.0	268.7	268.7	
	1	16	1		

 $^1_2 {\rm Includes}$ discharged patients for whom sex was not stated. Includes discharged patients for whom age was not stated.

Table 5. Number and percent distribution of discharges by age, according to sex and size of hospital: United States, 1967

							-	
Circ of booring1	Deth		Fen	ale	D-41		Fen	ale
and age	sexes ¹	Male	Including deliveries	Excluding deliveries	sexes ¹	Male	Including deliveries	Excluding deliveries
All sizes	Nu	mber of di in t	scharged pat housands	ients		Percent	distribution	L
All ages ²	28,417	11,202	17,140	13,575	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	4,474 12,279 6,386 5,215	2,497 3,323 2,998 2,352	1,960 8,934 3,370 2,846	1,949 5,386 3,364 2,846	15.7 43.2 22.5 18.4	22.3 29.7 26.8 21.0	11.4 52.1 19.7 16.6	14.4 39.7 24.8 21.0
<u>6-99 beds</u>								
All ages ²	6,328	2,456	3,853	3,084	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	906 2,673 1,326 1,405	507 727 584 630	395 1,940 738 769	392 1,175 738 769	14.3 42.2 21.0 22.2	20.7 29.6 23.8 25.7	10.3 50.4 19.2 20.0	12.7 38.1 23.9 24.9
100-199 beds								
A11 ages ²	6,551	2,584	3,954	3,135	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	1,139 2,800 1,430 1,171	621 758 670 529	513 2,038 757 639	511 1,223 755 639	17.4 42.7 21.8 17.9	24.0 29.4 25.9 20.5	13.0 51.5 19.1 16.2	16.3 39.0 24.1 20.4
200-299 beds								
A11 ages ²	4,945	1,972	2,955	2,362	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	745 2,079 1,170 943	423 552 572 421	319 1,522 594 517	318 932 592 517	15.1 42.0 23.7 19.1	21.4 28.0 29.0 21.4	10.8 51.5 20.1 17.5	13.5 39.4 25.1 21.9
300-499 beds								
A11 ages ²	6,594	2,580	3,995	3,156	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65.years and over	1,026 2,879 1,587 1,088	580 775 738 479	441 2,098 843 607	439 1,262 842 607	15.6 43.7 24.1 16.5	22.5 30.0 28.6 18.6	11.0 52.5 21.1 15.2	13.9 40.0 26.7 19.2
500 beds or more							2	
A11 ages ²	3,999	1,611	2,384	1,838	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	659 1,848 873 608	366 511 435 294	292 1,335 438 314	289 794 437 314	16.5 46.2 21.8 15.2	22.7 31.7 27.0 18.2	12.3 56.0 18.4 13.2	15.7 43.2 23.8 17.1

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 $^{1}_{2}$ Includes discharged patients for whom sex was not stated. Includes discharged patients for whom age was not stated.

Table 6. Number and percent distribution of discharges by age, according to sex and ownership (control) of hospital: United States, 1967

	Deth		Fen	ale	D (1		Fen	ale
Type of ownership and age	sexes ¹	Male	Including deliveries	Excluding deliveries	sexes ¹	Male	Including deliveries	Excluding deliveries
All types	Nu	mber of d in	ischarged pa thousands	tients		Percen	t distributi	.on
All ages ²	28,417	11,202	17,140	13,575	100.0	100.0	100.0	100.0
Under 15 years	4,474	2,497	1,960	1,949	15.7	22.3	11.4	14.4
15-44 years	12,279	3,323	8,934	5,386	43.2	29.7	52.1	39.7
45-64 years	6,386	2,998	3,370	3,364	22.5	26.8	19.7	24.8
65 years and over	5,215	2,352	2,846	2,846	18.4	21.0	16.6	21.0
<u>Voluntary</u> nonprofit								
All ages ²	20,465	8,025	12,389	9,810	100.0	100.0	100.0	100.0
Under 15 years	3,222	1,810	1,399	1,394	15.7	22.6	11.3	14.2
15-44 years	8,678	2,293	6,371	3,802	42.4	28.6	51.4	38.8
45-64 years	4,700	2,173	2,515	2,511	23.0	27.1	20.3	25.6
65 years and over	3,823	1,728	2,084	2,084	18.7	21.5	16.8	21.2
Government	3							J
All ages ²	5,510	2,193	3,299	2,533	100.0	100.0	100.0	100.0
Under 15 years	846	461	381	377	15.4	21.0	11.6	14.8
15-44 years	2,507	695	1,807	1,046	45.5	31.7	54.8	41.3
45-64 years	1,142	570	567	566	20.7	26.0	17.2	22.4
65 years and over	1,001	459	537	537	18.2	20.9	16.3	21.2
Proprietary								
All ages ²	2,442	983	1,453	1,232	100.0	100.0	100.0	100.0
Under 15 years	406	226	180	178	16.6	23.0	12.4	14.5
15-44 years	1,094	335	757	538	44.8	34.1	52.1	43.6
45-64 years	544	255	288	288	22.3	25.9	19.8	23.3
65 years and over	392	165	226	226	16.0	16.7	15.5	18.3

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

¹Includes discharged patients for whom sex was not stated. ²Includes discharged patients for whom age was not stated.

Table 7. Number, percent distribution, and annual rate of days of care and average length of stay by age, according to sex: United States, 1967

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

		Days of care		Average		
Sex and age	Number in thousands	Percent distri- bution	Rate per 1,000 population	of stay in days		
Both sexes ¹						
All ages	239,688	100.0	1,238.9	8.4		
Under 15 years Under 1 year Newborn Other infants 1-4 years 5-14 years 15-44 years	24,570 8,341 4,631 3,710 5,939 10,291 76,004	10.3 3.5 1.9 1.5 2.5 4.3 31.7	410.9 2,361.6 380.2 253.2 1,000.1	5.5 8.2 10.2 6.6 5.0 4.5 6.2		
15-24 years 25-34 years 35-44 years	25,629 23,815 26,559	10.7 9.9 11.1	840.7 1,076.6 1,135.4	5.3 5.9 7.8		
45-64 years 45-54 years 55-64 years	64,797 31,685 33,112	27.0 13.2 13.8	1,634.6 1,420.6 1,909.8	10.1 9.5 10.8		
65 years and over 65-74 years 75 years and over	73,728 37,398 36,330	30.8 15.6 15.2	4,086.2 3,272.2 5,492.9	14.1 13.3 15.2		
Age not stated	589	0.2	•••	9.5		
<u>Male</u>						
All ages	100,594	100.0	1,078.6	9.0		
Under 15 years Under 1 year Newborn Other infants 1-4 years 5-14 years	13,617 4,341 2,168 2,173 3,327 5,949	13.5 4.3 2.2 2.2 3.3 5.9	447.6 2,408.9 417.2 288.1	5.5 7.6 8.8 6.7 5.0 4.7		
15-44 years 15-24 years 25-34 years 35-44 years	24,362 7,478 7,029 9,855	24.2 7.4 7.0 9.8	675.8 523.9 665.9 878.5	7.3 6.5 7.4 8.1		
45-64 years 45-54 years 55-64 years	30,683 14,060 16,623	30.5 14.0 16.5	1,617.9 1,309.8 2,019.5	10.2 9.7 10.8		
65 years and over 65-74 years 75 years and over	31,678 17,179 14,499	31.5 17.1 14.4	4,048.8 3,381.0 5,285.8	13.5 12.9 14.2		
Age not stated	254	0.3	•••	8.2		

¹Includes discharged patients for whom sex was not stated. 22

Table 7. Number, percent distribution, and annual rate of days of care and average length of stay by age, according to sex: United States, 1967-Con.

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

		Days of care	, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	Average length of stay in days	
Sex and age	Number in thousands	Percent distri- bution	Rate per 1,000 population		
<u>Female</u>					
All ages	138,391	100.0	1,380.9	8.1	
Under 15 years Under 1 year Newborn Other infants 1-4 years 5-14 years	10,841 3,961 2,437 1,525 2,586 4,293	7.8 2.9 1.8 1.1 1.9 3.1	369.2 2,289.6 338.2 214.8	5.5 9.0 11.9 6.5 5.1 4.3	
15-44 years 15-24 years 25-34 years 35-44 years	51,519 18,126 16,758 16,635	37.2 13.1 12.1 12.0	1,289.5 1,118.1 1,448.7 1,366.5	5.8 4.9 5.5 7.6	
45-64 years 45-54 years 55-64 years	33,932 17,555 16,377	24.5 12.7 11.8	1,641.0 1,517.1 1,798.3	10.1 9.4 10.9	
65 years and over 65-74 years 75 years and over	41,779 20,130 21,649	30.2 14.5 15.6	4,088.4 3,171.2 5,592.6	14.7 13.6 15.8	
Age not stated	320	0.2	•••	10.6	

Table 8. Number and percent distribution of discharges by length of stay, according to age and sex: United States, 1967

			Fem	ale			Fem	ale
Age and length of stay	Both sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries
All ages ²	Numi	ber of dis in th	charged pati ousands	ents		Percent d	listribution	
All stays	28,417	11,202	17,140	13,575	100.0	100.0	100.0	100.0
1 day or less	2,876	1,327	1,538	1,419	10.1	11.8	9.0	10.5
2 days	3,819	1,513	2,296	1,932	13.4	13.5	13.4	14.2
2 days	3 593	1 146	2,439	1,471	12.6	10.2	14.2	10.8
/ days	3 193	1 009	2,437	1,187	11.2	9.0	12.7	8.7
5 days	2 508	874	1 630	1,107	8.8	7.8	9.5	7.4
6 days	2,500	710	1,030	917	6.2	63	61	6.0
o days	1,755	638	270	771	5.4	5 7	5.1	5.7
2 14 dame	5 205	2 202	2 009	2 952	10 0	20 /	18 1	21 7
6-14 days	3,393	2,203	3,099	2,352	6.3	7.2	5.6	7 1
13-21 days	1,703	204	908 44.2	/38	20.5	3.4	2.6	3.2
22-20 uays	1 1/5	500	442	430	4.0	J.4 4.5	3.7	4.6
29 days or more	1,145	500	033	022	4.0	4.5	J./	4.0
Under 15 years						-		
All stays	4,474	2,497	1,960	1,949	100.0	100.0	100.0	100.0
1 day or less	955	534	418	418	21.4	21.4	21.3	21.4
2 days	1,068	585	479	477	23.9	23.4	24.4	24.5
3 days	547	306	240	237	12.2	12.3	12.2	12.2
4 days	429	230	197	194	9.6	9.2	10.0	10.0
5 days	336	190	145	144	7.5	7.6	7.4	7.4
6 days	223	130	92	91	5.0	5.2	4.7	4.7
7 days	184	104	80	79	4.1	4.2	4.1	4.1
8-14 days	463	269	192	191	10.3	10.8	9.8	9.8
15-21 days	121	68	53	53	2.7	2.7	2.7	2.7
22-28 days	55	30	25	25	1.2	1.2	1.3	1.3
29 days or more	93	52	40	40	2.1	2.1	2.0	2.0
15-44 years								
All stays	12,279	3,323	8,934	5,386	100.0	100.0	100.0	100.0
1 day or less	1,255	440	810	692	10.2	13.2	9.1	12.8
2 days	1,846	509	1,335	973	15.0	15.3	14.9	18.1
3 days	2,135	424	1,707	743	17.4	12.8	19.1	13.8
4 days	1.885	359	1,523	538	15.3	10.8	17.0	10.0
5 days	1.337	290	1.046	428	10.9	8.7	11.7	7.9
6 days	781	231	548	328	6.4	7.0	6.1	6.1
7 days	595	185	409	302	4.8	5.6	4.6	5.6
8-14 days	1.719	575	1.141	995	14.0	17.3	12.8	18.5
15-21 days	385	162	222	211	3.1	4.9	2.5	3.9
22-28 days	143	60	82	78	1.2	1.8	0.9	1.5
29 days or more	199	89	110	98	1.6	2.7	1.2	1.8

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

Table 8. Number and percent distribution of discharges by length of stay, according to age and sex: United States, 1967-Con.

- 	•		Fema		le		Female	
Age and length of stay	Both sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries
45-64 years	N	umber of d in	ischarged pa thousands	tients		Percen	t distributi	on
All stays	6,386	2,998	3,370	3,364	100.0	100.0	100.0	100.0
l day or less	396	214	182	182	6.2	7.1	5.4	5.4
2 days	633	279	351	350	9.9	9.3	10.4	10.4
3 days	596	268	327	326	9.3	8.9	9.7	9.7
4 days	538	260	276	275	8.4	8.7	8.2	8.2
5 days	508	243	264	262	8.0	8.1	7.8	7.8
6 days	430	203	226	225	6.7	6.8	6.7	6.7
7 days	421	203	217	217	6.6	6.8	6.4	6.4
8-14 days	1,705	763	938	938	26.7	25.4	27.8	27.9
15-21 days	582	281	300	300	9.1	9.4	8.9	8.9
22-28 days	259	131	126	126	4.1	4.4	3.7	3.7
29 days or more	317	153	163	163	5.0	5.1	4.8	4.8
65 years and over								
All stays	5,215	2,352	2,846	2,846	100.0	100.0	100.0	100.0
l day or less	259	134	124	124	5.0	5.7	4.3	4.3
2 days	264	135	128	128	5.1	5.8	4.5	4.5
3 days	307	143	162	162	5.9	6.1	5.7	5.7
4 days	338	157	179	179	6.5	6.7	6.3	6.3
5 days	324	151	172	172	6.2	6.4	6.0	6.0
6 days	315	145	170	170	6.0	6.2	6.0	6.0
7 days	319	146	172	172	6.1	6.2	6.0	6.0
8-14 days	1,495	671	820	820	28.7	28.5	28.8	28.8
15-21 days	690	297	391	391	13.2	12.6	13.7	13.7
22-28 days	373	163	209	209	7.1	6.9	7.3	7.3
29 days or more	533	210	320	320	10.2	8.9	11.2	11.2

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

¹Includes discharged patients for whom sex was not stated. ²Includes discharged patients for whom age was not stated.

Table 9. Number and percent distribution of days of care by age, according to sex and color: United States, 1967

			Fen	nale			Fen	Female	
Color and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries	
Total	Numbe	r of days	of care in t	housands		t distributi	: distribution		
All ages ²	239,688	100,594	138,391	121,929	100.0	100.0	100.0	100.0	
Under 15 years	24,570	13,617	10,841	10,797	10.3	13.5	7.8	8.9	
15-44 years	76.004	24,362	51.519	35,121	31.7	24.2	37.2	28.8	
45-64 vears	64.797	30,683	33,932	33,911	27.0	30.5	24.5	27.8	
65 years and over	73,728	31,678	41,779	41,779	30.8	31.5	30.2	34.3	
White									
All ages ²	192,784	81,187	111,137	98,563	100.0	100.0	100.0	100.0	
Under 15 years	18,435	10,251	8,113	8,095	9.6	12.6	7.3	8.2	
15-44 vears	58,483	19.086	39,309	26.768	30.3	23.5	35.4	27.2	
45-64 years	52,947	25.243	27,588	27,574	27.5	31.1	24.8	28.0	
65 years and over	62,474	26,441	35,861	35,861	32.4	32.6	32.3	36.4	
All other									
All ages ²	24,584	10,026	14,482	11,993	100.0	100.0	100.0	100.0	
Under 15 years	4,067	2,197	1,836	1,812	16.5	21.9	12.7	15.1	
15-44 years	10,272	3,010	7,257	4,798	41.8	30.0	50.1	40.0	
45-64 years	5,616	2,673	2,911	2,906	22.8	-26.7	20.1	24.2	
65 years and over	4,561	2,096	2,461	2,461	18.6	20.9	17.0	20.5	
Color not stated									
All ages ²	22,320	9,381	12,772	11,372	100.0	100.0	100.0	100.0	
Under 15 years	2,068	1,169	891	891	9.3	12.5	7.0	7.8	
15-44 years	7,249	2,266	4,953	3,556	32.5	24.2	38.8	31.3	
45-64 years	6,234	2,766	3,433	3,431	27.9	29.5	26.9	30.2	
65 years and over	6,693	3,141	3,458	3,458	30.0	33.5	27.1	30.4	

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

¹Includes days of care for discharged patients for whom sex was not stated. ²Includes days of care for discharged patients for whom age was not stated.

Table 10. Average length of stay by age, sex, and color: United States, 1967

			Fema le		
Color and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	
<u>Total</u>	Ave	rage leng	th of stay i	n days	
All ages ²	8.4	9.0 8.1 9			
Under 15 years	5.5	5.5	5.5	5,5	
15-44 years	6.2	7.3	5.8	6,5	
45-64 years	10.1	10.2	10.1	10.1	
65 years and over	14.1	13.5	14.7	14.7	
White		1			
All ages ²	8.5	8.9	8.1	9.0	
Under 15 years	5.2	5.2	5.3	5.3	
15-44 years	6.2	7.2	5.8	6.4	
45-64 years	10.0	10.1	9.8	9.8	
65 years and over	14.1	13.4	14.7	14.7	
All other					
All ages ²	8.7	10.1	7.9	9.6	
Under 15 years	8.0	7.8	8.3	8.5	
15-44 years	6.6	8.9	5.9	7.3	
45-64 years	12,4	12.1	12.7	12.8	
65 years and over	15.3	14.7	15.9	15.9	
Color not stated					
All ages ²	8.0	8.5	7.6	8.6	
Under 15 years	4.6	4.7	4.5	4.5	
15-44 years	5.9	6.8	5.6	6.7	
45-64 years	10.0	9.8	10.2	10.2	
65 years and over	13.6	13.1	13.9	13.9	
			L		

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 ${1\over 2} {\rm Includes}$ discharged patients for whom sex was not stated. Includes discharged patients for whom age was not stated.

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Table 11. Number and percent distribution of days of care by age, according to sex and geographic region: United States, 1967

			Fea	ale			Fema	1e	
Geographic region and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries	
All regions	Number	of days	of days of care in thousands			Percent	distributio	listribution	
All ages ²	239,688	100,594	138,391	121,929	100.0	100.0	100.0	100,0	
Under 15 vears	24, 570	13.617	10.841	10.797	10.3	13.5	7.8	8.9	
15-44 years	76.004	24.362	51,519	35,121	31.7	24.2	37.2	28.8	
45-64 years	64,797	30.683	33,932	33,911	27.0	30.5	24.5	27.8	
65 years and over	73,728	31,678	41,779	41,779	30.8	31.5	30.2	34.3	
Northeast									
 All ages ⁹	61,021	25,991	34,864	30,545	100.0	100.0	100.0	100.0	
Under 15 vears	6.339	3,654	2,669	2,662	10.4	14.1	7.7	8.7	
15-44 years	17,491	5,679	11,786	7,478	28.7	21.9	33.8	24.5	
45-64 years	17,550	8,371	9,108	9,105	28.8	32.2	26.1	29.8	
65 years and over	19,465	8,225	11,188	11,188	31.9	31.6	32.1	36.6	
North Central									
All ages ²	77,250	32,384	44,639	39,278	100.0	100.0	100.0	100.0	
Under 15 years	8,004	4,368	3,588	3,576	10.4	13.5	8.0	9.1	
15-44 years	23,594	7,499	16,055	10,714	30.5	23.2	36.0	27.3	
45-64 years	20,520	9,782	10,694	10,688	26.6	30.2	24.0	27.2	
65 years and over	24,947	10,659	14,199	14,199	32.3	32.9	31.8	36.2	
South									
All ages ²	69,560	29,238	40,061	35,817	100.0	100.0	100.0	100.0	
Under 15 years	7,352	4,021	3,291	3,269	10.6	13.8	8.2	9.1	
15-44 years	24,046	7,862	16,134	11,920	34.6	26.9	40.3	33.3	
45-64 years	17,905	8,530	9,322	9,315	25.7	29.2	23.3	26.0	
65 years and over	20,077	8,728	11,237	11,237	28.9	29.9	28.1	31.4	
West									
All ages ²	31,858	12,981	18,828	16,288	100.0	100.0	100.0	100.0	
Under 15 years	2,876	1,574	1,293	1,291	9.0	12.1	6.9	7.9	
15-44 years	10,872	3,321	7,544	5,009	34.1	25.6	40.1	30.8	
45-64 years	8,822	3,999	4,807	4,804	27.7	30.8	25.5	29.5	
65 years and over	9,239	4,067	5,155	5,155	29.0	31.3	27.4	31,6	
	L	u	L	L	L	U	L	<u> </u>	

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 $^1 \, {\rm Includes}$ days of care for discharged patients for whom sex was not stated. $^2 \, {\rm Includes}$ days of care for discharged patients for whom age was not stated.

Table 12. Annual rate of days of care by age, sex, and geographic region: United States, 1967

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			· Fema	1e
Geographic region and age	sexes ¹	Male	Including deliveries	Excluding deliveries
All regions	Number of days of care per population per year			1,000
All ages ²	1,238.9	1,078.6	1,380.9	1,216.7
Under 15 years	410.9	447.6	369.2	367.7
15-44 years	1,000.1	675.8	1,289.5	879.1
45-64 years	1,634.6	1,617.9	1,641.0	1,640.0
65 years and over	4,086.2	4,048.8	4,088.4	4,088.4
Northeast				
All ages ²	1,293.3	1,151.1	1,417.1	1,241.1
Under 15 years	465.5	526.9	399.4	398.0
15-44 years	962.3	659.3	1,232.4	781.5
45-64 years	1,651.5	1,668.5	1,623.6	1,625.8
65 years and over	4,091.1	4,083.7	4,075.9	4,075.9
North Central				
All ages ²	1,421.1	1,224.6	1,599.0	1,406.4
Under 15 years	473.1	506.6	432.5	430.6
15-44 years	1,125.3	743.3	1,475.9	984.3
45-64 years	1,832.8	1,806.9	1,849.7	1,852.0
65 years and over	4,726.5	4,596.2	4,798.6	4,798.6
South]		
A11 ages ²	1,161.1	1,019.9	1,282.4	1,146.0
Under 15 years	384.9	414.7	350.0	347.4
15-44 years	1,001.2	699.2	1,263.3	932.7
45-64 years	1,557.5	1,571.5	1,536.5	1,537.9
65 years and over	3,790.9	3,798.0	3,748.2	3,748.2
West				
All ages ²	994.8	833.9	1,143.8	989.6
Under 15 years	283.1	304.5	259.4	259.0
15-44 years	847.0	544.7	1,119.4	743.3
45-64 years	1,395.0	1,288.0	1,493.2	1,492.3
65 years and over	3,409.3	3,408.6	3,397.9	3,397.9
•				• •

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 $^1 {\rm Includes}$ discharged patients for whom sex was not stated. $^2 {\rm Includes}$ discharged patients for whom age was not stated.

Table 13. Average length of stay by age, sex, and geographic region: United States, 1967

			Female		
Geographic region and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	
All regions	Ave	rage lengt	th of stay in	ı d ays	
All ages ²	8.4	9.0	8.1	9.0	
Under 15 years 15-44 years 45-64 years 65 years and over	5.5 6.2 10.1 14.1	5.5 7.3 10.2 13.5	5.5 5.8 10.1 14.7	5.5 6.5 10.1 14.7	
<u>Northeast</u> All ages ² Under 15 years	9.8 6.2 6.8 12.1 16.6	10.5 6.3 8.6 12.2 15.5	9.3 6.2 6.2 12.0 17.5	10.5 6.2 6.9 12.0 17.5	
North Central					
All ages ²	8.9	9.5	8.5	9.4	
Under 15 years 15-44 years 45-64 years 65 years and over	5.6 6.5 10.7 14.8	5.5 7.7 11.1 14.2	5.7 6.0 10.4 16.1	5.7 6.7 10.5 15.3	
<u>South</u> All ages ²	7.8	8.3	7.5	8.3	
Under 15 years 15-44 years 45-64 years 65 years and over	5.5 6.0 9.0 12.7	5.5 6.9 9.1 12.3	5.5 5.7 9.0 12.9	5.5 6.6 9.0 12.9	
West All ages ²	7.0	7.3	6.8	7.5	
Under 15 years 15-44 years 45-64 years	4.3 5.2 8.4	4.1 6.1 8.1	4.4 4.9 8.7	4.4 5.5 8.7	
65 years and over	12.1	11.4	12.6	12.6	

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 1 Includes discharged patients for whom sex was not stated. 2 Includes discharged patients for whom age was not stated.

Table 14. Number and percent distribution of days of care by age, according to sex and size of hospital: United States, 1967

			Fem	ale			Fema	le
Size of hospital and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries
All sizes	Number	r of days	of care in t	housands		Percent distribution		
All ages ²	239,688	100,594	138,391	121,929	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	24,570 76,004 64,797 73,728	13,617 24,362 30,683 31,678	10,841 51,519 33,932 41,779	10,797 35,121 33,911 41,779	10.3 31.7 27.0 30.8	13.5 24.2 30.5 31.5	7.8 37.2 24.5 30.2	8.9 28.8 27.8 34.3
6-99 beds								
All ages ²	47,340	18,517	28,715	25,395	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	3,742 13,728 11,301 18,392	2,081 3,914 4,764 7,710	1,653 9,792 6,514 10,627	1,644 6,482 6,512 10,627	7.9 29.0 23.9 38.9	11.2 21.1 25.7 41.6	5.8 34.1 22.7 37.0	6.5 25.5 25.6 41.8
<u>100-199 beds</u>								
All ages ²	49,929	20,265	29,556	25,981	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	5,420 15,397 13,109 15,873	2,995 4,649 6,001 6,559	2,402 10,734 7,072 9,285	2,393 7,175 7,065 9,285	10.9 30.8 26.3 31.8	14.8 22.9 29.6 32.4	8.1 36.3 23.9 31.4	9.2 27.6 27.2 35.7
200-299 beds								
All ages ²	42,808	18,373	24,189	21,154	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	3,854 13,364 11,933 13,577	2,071 4,356 5,892 6,016	1,748 8,973 6,004 7,421	1,744 5,948 5,998 7,421	9.0 31.2 27.9 31.7	11.3 23.7 32.1 32.7	7.2 37.1 24.8 30.7	8.2 28.1 28.4 35.1
300-499 beds								
All ages ²	58,595	25,063	33,330	29,284	100.0	100.0	100.0	100,0
Under 15 years 15-44 years 45-64 years 65 years and over	6,049 19,224 17,037 16,181	3,457 6,414 8,329 6,822	2,557 12,765 8,635 9,317	2,548 8,731 8,631 9,317	10.3 32.8 29.1 27.6	13.8 25.6 33.2 27.2	7.7 38.3 25.9 28.0	8.7 29.8 29.5 31.8
500 beds or more								
All ages ²	41,016	18,376	22,601	20,115	100.0	100.0	100.0	100.0
Under 15 years 15-44 years 45-64 years 65 years and over	5,506 14,291 11,417 9,705	3,013 5,028 5,696 4,570	2,481 9,255 5,707 5,128	2,467 6,785 5,704 5,128	13.4 34.8 27.8 23.7	16.4 27.4 31.0 24.9	11.0 40.9 25.2 22.7	12.3 33.7 28.4 25.5

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 $^1_2 {\rm Includes}$ days of care for discharged patients for whom sex was not stated. Includes days of care for discharged patients for whom age was not stated.

			Fema	1e			
Size of hospital and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries			
<u>All sizes</u>	Ave	rage lengt	age length of stay in days				
All ages ²	8.4	9.0	8.1	9.0			
Under 15 years 15-44 years 45-64 years 65 years and over	5.5 6.2 10.1 14.1	5.5 7.3 10.2 13.5	5.5 5.8 10.1 14.7	5.5 6.5 10.1 14.7			
6-99 beds							
All ages ²	7.5	7.5	7.5	8.2			
Under 15 years 15-44 years 45-64 years	4.1 5.1 8.5 13.1	4.1 5.4 8.2 12.2	4.2 5.0 8.8 13.8	4.2 5.5 8.8 13.8			
100-199 beds							
All ages ²	7.6	7.8	7.5	8.3			
Under 15 years 15-44 years 45-64 years 65 years and over	4.8 5.5 9.2 13.6	4.8 6.1 9.0 12.4	4.7 5.3 9.3 14.5	4.7 5.9 9.4 14.5			
200-299 beds		1					
A11 ages ²	8.7	9.3	8.2	9.0			
Under 15 years 15-44 years 45-64 years 65 years and over	5.2 6.4 10.2 14.4	4.9 7.9 10.3 14.3	5.5 5.9 10.1 14.4	5.5 6.4 10.1 14.4			
300-499 beds							
All ages ²	8.9	9.7	8.3	9.3			
Under 15 years 15-44 years 45-64 years	5.9 6.7 10.7 14.9	6.0 8.3 11.3 14.2	5.8 6.1 10.2 15.4	5.8 6.9 10.2 15.4			
500 beds or more							
All ages ²	10.3	11.4	9.5	10.9			
Under 15 years 15-44 years 45-64 years 65 years and over	8.4 7.7 13.1 16.0	8.2 9.8 13.1 15.6	8.5 6.9 13.0 16.3	8.6 8.5 13.0 16.3			

Table 15. Average length of stay by age, sex, and size of hospital: United States, 1967

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals, Excludes well newborn infants]

 $^1 {\rm Includes}$ discharged patients for whom sex was not stated. $^2 {\rm Includes}$ discharged patients for whom age was not stated.

Table 16. Number and percent distribution of days of care by age, according to sex and ownership (control) of hospital: United States, 1967

Type of	Deth		Fen	ale			Fema	1e
ownership and age	sexes ¹	Male	Including deliveries	Excluding deliveries	Both sexes ¹	Male	Including deliveries	Excluding deliveries
All types	Numbe	r of days	of care in t	housands	Percent distribution			
All ages ²	239,688	100,594	138,391	121,929	100.0	100.0	100.0	100.0
Under 15 years	24,570	13,617	10,841	10,797	10.3	13.5	7.8	8.9
15-44 years	76,004	24,362	51,519	35,121	31.7	24.2	37.2	28.8
45-64 years	64,797	30,683	33,932	33,911	27.0	30.5	24.5	27.8
65 years and over	73,728	31,678	41,779	41,779	30.8	31.5	30.2	34.3
<u>Voluntary</u> nonprofit							i i	
All ages ²	176,282	73,379	102,382	90,115	100.0	100.0	100.0	100.0
Under 15 years	17,683	9,816	7,780	7,756	10.0	13.4	7.6	8.6
15-44 years	54,212	16,996	37,117	24,892	30.8	23.2	36.3	27.6
45-64 years	48,696	22,730	25,839	25,821	27.6	31.0	25.2	28.7
65 years and over	55,277	23,670	31,413	31,413	31.4	32.3	30.7	34.9
Government								
All ages ²	46,879	20,520	26,217	22,911	100,0	100.0	100.0	100.0
Under 15 years	5,296	2,916	2,356	2,339	11.3	14.3	9.0	10.2
15-44 years	15,838	5,332	10,488	7,202	33.8	26.0	40.0	31.4
45-64 years	11,765	5,989	5,730	5,728	25.1	29.2	21.9	25.0
65 years and over	13,834	6,207	7,573	7,573	29.5	30.2	28.9	33.1
Proprietary								
All ages ²	16,527	6,695	9,793	8,902	100.0	100.0	100.0	100.0
Under 15 years	1,591	885	705	702	9.6	13.2	7.2	7.9
15-44 years	5,954	2,034	3,913	3,027	36.0	30.4	40.0	34.0
45-64 years	4,336	1,963	2,363	2,362	26.2	29.3	24.1	26.5
65 years and over	4,617	1,801	2,794	2,794	27.9	26.9	28.5	31.4

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 1 Includes days of care for discharged patients for whom sex was not stated. 2 Includes days of care for discharged patients for whom age was not stated.

Table 17. Average length of stay by age, sex, and ownership (control) of hospital: United States, 1967

			Female		
Type of ownership and age	Both sexes ¹	Male	Including deliveries	Excluding deliveries	
All types	Ave	rage lengt	h of stay in	days	
All ages ²	8.4	9.0	8.1	9.0	
Under 15 years	5.5	5.5	5.5	5.5	
15-44 years	6.2	7.3	5.8	6.5	
45-64 years	10.1	10.2	10.1	10.1	
65 years and over	14.1	13.5	14.7	14.7	
Voluntary nonprofit					
All ages ²	8.6	9.1	8.3	9.2	
Under 15 years	5.5	5.4	5.6	5.6	
15-44 years	6.2	7.4	5,8	6.5	
45-64 years	10,4	10.5	12.5	12.5	
65 years and over	14.5	13.7	15.1	15.1	
Government					
All ages ²	8.5	9.4	7.9	9.0	
Under 15 years	6.3	6.3	6.2	6.2	
15-44 years	6.3	7.7	5.8	6.9	
45-64 years	10.3	10.5	10.1	10.1	
65 years and over	13,8	13.5	14.1	14.1	
Proprietary					
All ages ²	6.8	6.8	6.7	7.2	
Under 15 years	3.9	3.9	3.9	3.9	
15-44 years	5.4	6.1	5.2	5.6	
45-64 years	8.0	7.7	8.2	8.2	
65 years and over	11.8	10.9	12.4	12.4	

[Discharges from noninstitutional short-stay hospitals exclusive of Federal hospitals. Excludes well newborn infants]

 $^1 {\rm Includes}$ discharged patients for whom sex was not stated. $^2 {\rm Includes}$ discharged patients for whom age was not stated.

APPENDIX I

TECHNICAL NOTES ON METHODS

Statistical Design of the Hospital Discharge Survey

Scope of the survey.—The scope of the Hospital Discharge Survey (HDS) encompasses patients discharged from noninstitutional hospitals which have six beds or more for inpatient use, are located in the 50 States and the District of Columbia, and in which the average length of stay for all patients is less than 30 days.

Sampling frame and size of sample.— The sampling frame (universe) for the hospitals in the HDS is the Master Facility Inventory of Hospitals and Institutions (MFI). A detailed description of how the MFI was developed, its content, plans for maintaining it, and procedures for assessing the completeness of its coverage has been published.⁹

The universe of the survey consisted of 6,965 short-stay hospitals—excluding military and Veterans Administration hospitals—contained in the MFI in 1963. The distributions of short-stay hospitals by size and region in the MFI and the HDS sample for 1967 are shown in table I.

The sample of hospitals for 1967 consisted of 315 hospitals. Of these hospitals, 16 refused to participate and 10 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, 289 hospitals participated in the survey during 1967. Approximately 145,000 abstracts of medical records were received from the 289 hospitals.

Sample design.—All hospitals with 1,000 beds or more in the universe (excluding Veterans Administration and military hospitals) were selected with certainty in the sample. All hospitals with fewer than 1,000 beds were stratified, with the primary strata being the 24 size-by-region classes, as shown in table I. Within each of these 24 primary strata, the allocation of the hospitals was made through a controlled selection technique so that hospitals in the sample would be properly distributed 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 discharges varied inversely with the probability of selection of the hospital. The smallest sampling fraction of discharged patients was taken in the largest hospitals, and the largest fraction was taken in the smallest hospitals. This was done to compensate for the fact that hospitals were selected with probabilities proportionate to size class and to assure that the overall probability of selecting a discharge would be approximately the same in all hospitals.

In nearly all hospitals the daily listing sheet of discharges was the frame from which the subsamples of discharges were selected within the sample hospitals. 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—a number 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 kth discharge thereafter.

Estimation.—Statistics produced by the HDS are derived by a complex estimating procedure. The basic unit of estimation is the sample patient abstract. The estimating procedure used to produce essentially unbiased national estimates has three principal components: (1) inflation of reciprocals of the probabilities of sample selection, (2) adjustment for nonresponse, and (3) ratio adjustments to fixed totals. These components are described in appendix I of two earlier publications.^{2,3}

Data Collection and Processing

Data collection.—Depending on the study procedure agreed on with the hospital administrator, the sample selection and the transcription of information from the hospital records to the abstract forms were performed either by the hospital staff or by representatives of the National Center for Health Statistics (NCHS), or by both. In more than three-fourths of the hospitals that participated in the HDS during 1967, this work was performed by the medical records department of the hospital. In nearly all of the remaining hospitals, the

NOTE: The list of references follows the text.

Table I. Distribution of short-stay hospitals in the universe (MFI) and in the Hospital Discharge Survey sample, and number of hospitals that participated in the survey, by size of hospital and geographic region: United States, 1967

	······································	Geograp	hic region								
Size of hospital	All regions	Northeast	North Central	South	West						
<u>All sizes</u>	Number of hospitals										
Universe Total sample Number participating	6,965 315 289	1,107 85 76	1,979 93 89	2,620 91 82	1,259 46 42						
6-49 beds											
Universe Total sample Number participating	3,113 39 32	199 5 3	830 11 10	1,438 15 12	646 8 7						
50-99 beds											
Universe Total sample Number participating	1,623 44 40	288 8 7	442 12 12	587 16 15	306 8 6						
100-199 beds											
Universe Total sample Number participating	1;144 63 57	277 16 14	378 20 19	332 19 16	157 8 8						
200-299 beds											
Universe Total sample Number participating	552 55 52	182 19 18	151 16 15	134 12 12	85 8 7						
300-499 beds											
Universe Total sample Number participating	386 59 55	110 16 14	129 19 18	96 16 15	51 8 8						
500-999 beds											
Universe Total sample Number participating	129 37 35	42 12 11	46 12 12	28 8 7	13 5 5						
1,000 beds or more											
Universe Total sample Number participating	18 18 18	9 9 9	3 3 3	5 5 5	1 1 1						

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Figure 1. Nonmedical section of optical mark page reader form.

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work was performed by personnel of the U.S. Bureau of the Census, acting for NCHS.

During 1967, survey hospitals used an optical mark page reader form (abstract form) to transcribe data from the hospital records. A copy of the front side of this form, which covers the nonmedical patient data presented in this report, is shown in figure I. The reverse side of the form is used to record discharge diagnoses and surgical operations or procedures.

Data processing and editing of data.—Shipments of completed abstract forms for each sample hospital were transmitted, along with sample selection control sheets, to the NCHS for processing. Every shipment of abstracts was reviewed; each abstract form was checked for completeness; and when necessary, problems were referred to the hospitals for clarification and correction.

The nonmedical data on the front side of the sample patient abstracts were converted directly to computer tape by an optical mark page reader machine. The abstract forms were then transmitted to the medical coding section for coding of diagnoses and operations or procedures. These data were also converted to computer tape and subsequently collated with the nonmedical sample data.

Final editing was done by computer inspection of the medical data compared with the age and sex information. If sex and/or age of patient were incompatible with the recorded medical information, priority was given to the latter in the editing decision.

The majority of rejects were corrected by reviewing and editing the information on the abstract forms. However, where it was impossible to correct the code of a rejected item, that item was coded and tabulated as "not stated." This procedure was applied to all items except "date of admission" and "date of discharge," which were not permitted to be coded as "not stated." In instances where these data could not be obtained from the abstract form, the monthly sample listing sheet—transmitted by the sample hospital—was used as an additional source of information.

Population Estimates

The base populations used in computing rates are unpublished estimates for the U.S. civilian, noninstitutional population as of July 1, 1967, provided by the U.S. Bureau of the Census.

The population estimates for the United States by age and sex (table II) and by age and geographic region (table III) are consistent with the estimates of the civilian population published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25. However, they are not official population estimates of the U.S. Bureau of the Census. Estimates of the regional populations by age and sex were provided by the U.S. Bureau of the Census specifically for use in the HDS for computing rates.

Table II. Civilian, noninstitutional population used to compute rates shown in this publication, by age and sex: United States, July 1, 1967

Age	Both sexes	Male.	Female		
	Populati	on in the	ous and s ¹		
All ages	193,475	93,260	100,216		
Under 15 years	59,792	30,424	29,367		
Under 1 year	3,532	1,802	1,730		
1-4 years	15,622	7,975	7,647		
5-14 years	40,638	20,647	19,991		
15-44 years	75,999	36,047	39,952		
15-24 years	30,486	14,275	16,211		
25-34 years	22,121	10,555	11,567		
35-44 years	23,391	11,217	12,174		
45-64 years	39,642	18,965	20,677		
45-54 years	22,304	10,734	11,571		
55-64 years	17,338	8,231	9,107		
65 years and over	18,043	7,824	10,219		
65-74 years	11,429	5,081	6,348		
75 years and over-	6,614	2,743	3,871		

¹These estimates of the U.S. civilian, noninstitutional population are consistent with the population estimates published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, No. 385.

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General Qualifications

Rounding of numbers.—Estimates of the number of discharges and number of days of care have been rounded to the nearest thousand for tabular presentation. For this reason, detailed figures within tables do not always add to totals. Percents and rates presented were calculated on the basis of unrounded figures and will not necessarily agree with rates and percents which may be tabulated from rounded data.

Patient characteristics "not stated."—Age and/or sex of patients was not stated for less than 1 percent of all discharges. However, color was not stated for about 10 percent of the patients discharged. The proportion of sample hospital records with color not stated varied considerably among the sample hospitals. For this reason, rates by color were not computed and no comparisons by color have been made with data for previous years.

Reliability of Estimates

Estimates from sample surveys such as the HDS are subject to two types of errors—measurement or nonsampling errors and sampling errors. Measurement

Table III. Civilian, noninstitutional population used to compute rates shown in this publication, by age and geographic region: United States, July 1, 1967

	Geographic region								
Age	All regions	Northeast	North Central	South	West				
Population in thousands ¹									
A11 ages	193,475	47,181	54,361	59,908	32,026				
Under 65 years Under 15 years 15-44 years 45-64 years	175,433 59,792 75,999 39,642	42,423 13,619 18,177 10,627	49,083 16,919 20,968 11,196	54,612 19,099 24,017 11,496	29,316 10,156 12,836 6,324				
65 years and over	18,043	4,758	5,278	5,296	2,710				

¹These estimates of the U.S. civilian, noninstitutional population are consistent with the estimates of the population by age for States, July 1, 1967, published by the U.S. Bureau of the Census in *Current Population Reports*, Series P-25, No. 420.

errors, which can occur in a complete count or census as well as in a sample survey, are due to nonresponse, reporting errors, processing errors, and other sources of errors that occur in a survey. Sampling errors occur because a sample instead of a complete count or census is taken.

Measurement errors.—As in any survey, the results are subject to nonsampling or measurement errors, which include errors due to hospital nonresponse, missing abstracts, information incompletely or inaccurately recorded on abstract forms, and processing errors. Some of these were discussed in earlier sections.

Sampling errors.—The standard error in this survey is primarily a measure of the sampling variability that occurs by chance because the estimates are based on a sample of discharges from a sample of short-stay hospitals rather than all discharges from all short-stay hospitals. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.

The chances are about 68 out of 100 that the value obtained in a complete enumeration is contained in the interval represented by the estimate plus and minus one standard error of the estimate; 95 out of 100 for two standard errors; and 99 out of 100 for 2½ standard errors. Applying the illustration at the bottom of figure II, the chances are about 68 out of 100 that the value that would be obtained in a complete enumeration is contained in the interval $2,564,000\pm4.3$ percent of 2,564,000 (between 2,454,000 and 2,674,000); 95 out of 100 for the interval $2,564,000\pm4.3$ percent of 2,564,000multiplied by 2; 99 out of 100 for the interval $2,564,000\pm4.3$ percent of $2,564,000\pm4.3$ percent of 2,564,000 multiplied by 2.5.

The standard error of one statistic is generally different from that of another, even when the two come from the same survey. In order to derive standard errors that would be applicable to a wide variety of statistics and that could be prepared at a moderate cost, a number of approximations are required. As a result, figures II and III and tables IV and V shown in this section provide general standard errors for a wide variety of estimates rather than the specific error for a particular statistic.

The relative standard errors and approximate standard errors of percentages that have been prepared for this report are applicable to estimates of discharges and days of care for patient characteristics (age, sex, and color and cross-classifications, e.g., age by sex) cross-classified by one of four hospital groupings as follows: (1) by region (e.g., Northeast), (2) by size (e.g., 6-99 heds), (3) by type of ownership (e.g., voluntary nonprofit), or (4) by hospitals summed over all regions and all size and ownership groups. The particular figure or table to which one refers to obtain a sampling error is contingent upon both the type of estimate (e.g., discharges) and the hospital grouping





<u>Illustration of use of figure II</u>: As shown in table 3, an estimated 2,564,000 patients aged 15-44 years were discharged within the Northeast Region. The relative standard error of this estimate as read from the line "Region groups" is approximately 4.3 percent: the standard error of 2,564,000 is 110,252 (4.3 percent of 2,564,000).

Figure III. Approximate relative standard errors of estimated number of days of care for patient characteristics, by geographic region, size of hospital, and type of ownership, and for all hospitals.

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SIZE OF ESTIMATE IN THOUSANDS

<u>Illustration of use of figure III</u>: As shown in table 16, an estimated 5,954,000 days of care were provided to patients aged 15-44 years in proprietary hospitals. The relative standard error of this estimate as read from the line "Ownership groups" is approximately 15.2 percent: the standard error is 905,008 (15.2 percent of 5,954,000).

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Table IV. Approximate standard errors of percentages shown in this report for discharges: patient characteristics classified by geographic region and size of hospital, and for all hospitals

(Standard errors for patient characteristics classified by type of ownership are $3\frac{1}{2}$ times the standard errors shown in this table)

Number of dis- charges (base of percent)	Estimated percent							
	2 or 98	4 or 96	10 or 90	20 or 80	30 or 70	50		
	Standard error expressed in percentage points							
200,000 500,000 1,000,000 2,000,000 6,000,000 10,000,000 20,000,000 30,000,000	1.2 0.8 0.5 0.4 0.2 0.2 0.1 0.1	1.7 1.1 0.8 0.5 0.3 0.2 0.2 0.1	2.6 1.7 1.2 0.8 0.5 0.4 0.3 0.2	3.5 2.2 1.6 1.1 0.6 0.5 0.3 0.3	4.0 2.5 1.8 1.3 0.7 0.6 0.4 0.3	4.4 2.8 2.0 1.4 0.8 0.6 0.4 0.4		

<u>Illustration of use of table IV</u>: Table 2 shows that 27.4 percent of the 9,105,000 white male patients discharged from all hospitals were aged 45-64 years. Linear interpolation between the values shown in table IV will yield an approximate standard error of 0.6 percent for an estimate of 27.4 percent with a base of 9,105,000.

- Table V. Approximate standard errors of percentages shown in this report for days of care: patient characteristics classified by geographic region and size of hospital, and for all hospitals
- (Standard errors for patient characteristics classified by type of ownership are 2 times the standard errors shown in this table)

Number of days of care (base of percent)	Estimated percent					
	2 or 98	4 or 96	10 or 90	20 or 80	30 or 70	50
	Standard error expressed in percentage points					
2,000,000 6,000,000 20,000,000 60,000,000 100,000,000 200,000,000 240,000,000	1.4 0.8 0.6 0.4 0.3 0.2 0.1 0.1	2.0 1.1 0.9 0.6 0.4 0.3 0.2 0.2	3.0 1.8 1.4 1.0 0.6 0.4 0.3 0.3	4.0 2.3 1.8 1.3 0.7 0.6 0.4 0.4	4.6 2.7 2.1 1.5 0.8 0.7 0.5 0.4	5.1 2.9 2.3 1.6 0.9 0.7 0.5 0.5

<u>Illustration of use of table V:</u> Table 14 shows that of the 29,556,000 days of care provided to females (including deliveries) discharged from hospitals with 100-199 beds, 36.3 percent of the days were utilized by patients aged 15-44 years. Linear interpolation between the values shown in table V will yield an approximate standard error of 1.3 percent for an estimate of 36.3 percent with a base of 29,556,000. with which the patient characteristic(s) is crossclassified. The procedures that apply are as follows:

- 1. Estimated numbers of discharges: Approximate relative standard errors of estimated numbers of discharges are obtained from the curves shown in figure II.
- 2. Estimated numbers of days of care: Approximate relative standard errors of estimated numbers of days of care are obtained from the curves in figure III.
- 3. Estimated percentages of discharges in a percent distribution: Approximate standard errors of estimated percentages of discharges when the characteristic(s) used to form the numerator of the percentage is a subclass of the denominator are shown in table IV.
- 4. Estimated percentages of days of care in a percent distribution: Approximate standard errors of estimated percentages of days of care when the characteristic(s) used to form the numerator is a subclass of the denominator are shown in table V.

Approximate standard errors of average lengths of stay can be calculated as in the following example: Suppose the standard error $(\sigma_{R'})$ of the average length of stay for males aged 35-44 years for all hospitals is desired. The estimated number of discharges for this statistic is 1,213,000 (table 1) and the estimated number of days of care is 9,855,000 (table 7). Let

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R = Number of days of care Number of discharges

$$=\frac{X'}{Y'}=\frac{9,855,000}{1,213,000}=8.1$$
 days.

The relative standard error $(V_{x'})$ of 9,855,000 (from all hospitals curve in figure III) is 4.6 percent, or .046; $V_{x'}^2 = (.046)^2$. The relative standard error $(V_{y'})$ of 1,213,000 (from all hospitals curve in figure II) is 4.3 percent, or .043; $V_{y'}^2 = (.043)^2$. The sample correlation coefficient (r) which measures the closeness of the relation between the estimated number of days of care and the estimated number of discharges has been computed to be 0.75.

$$V_{R'}^{2} = V_{x'}^{2} + V_{y'}^{2} - 2r V_{x'} V_{y'}$$

= (.046)² + (.043)² - 1.5(.046 x .043)
= .002116 + .001849 - .002967 = .000998
 $V_{R'} = \sqrt{.000998} = .032$

$$\sigma_{n'} = R' \times V_{R'} = 8.1 \times .032 = 0.3$$
 days.

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Terms Relating to Hospitalization

Patient.—A person who is formally admitted to the inpatient service of a short-stay hospital for observation, care, diagnosis, or treatment. In this report the number of patients refers to the number of discharges during 1967, including multiple discharges of the same individual (if any) from one short-stay hospital or more. Newborn infants admitted by birth to the hospital from which discharged are included in this report only when there is mention of a disease, disorder, or immaturity (nonwell newborn infant). Well newborn infants are excluded. "Patient" and "inpatient" are used synonymously.

Well newborn infants.— 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.

Other infants.—Infants under I year of age at time of admission to the hospital inpatient service other than infants admitted by birth to the hospital from which discharged. In this report the number of discharges of "other infants" includes 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.

Discharge.— 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. In this report the number of discharges from short-stay hospitals (alive or dead) is exclusive of well newborn infants. "Discharges" and "patients (or inpatients) discharged" are used synonymously.

Discharge rate.-- The ratio of the number of hospital discharges (inpatients) during 1967 to the number of persons in the civilian, noninstitutional population as of July 1, 1967.

Days of care.—The total number of inpatient days accumulated at time of discharge by patients discharged from short-stay hospitals during 1967. 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. 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 ratio of the number of inpatient days accumulated at time of discharge by patients discharged from short-stay hospitals during 1967 to the number of persons in the civilian, noninstitutional population as of July 1, 1967.

Average length of stay. — The total number of inpatient days accumulated at time of discharge by patients discharged during 1967 divided by the number of patients discharged. "Average length of stay," "average duration," and "duration of stay" are used interchangeably.

Hospitals and Hospital Characteristics

Short-stay hospitals.—General and short-term special hospitals having six beds or more for inpatient use and an average (mean) length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included. "Hospitals" and "short-stay hospitals" are used synonymously.

Size of hospital.—Measured by the number of beds, cribs, and pediatric bassinets regularly maintained (set up and staffed for use) for inpatients, as reported by the hospitals at or near midyear. Bassinets for newborn infants are not included.

Location of hospitals.—See "Geographic region." Type of ownership (control) of hospital.—Refers to the type of organization that controls and operates the hospital. In this report the classification of hospitals by type of ownership is based on responses provided by

sample hospitals. The hospitals are grouped as follows:

Voluntary nonprofit hospitals.-Hospitals operated by a church or another nonprofit organization.

Government hospitals.—Hospitals operated by State and local governments. (Federal government hospitals are excluded.)

Proprietary hospitals.—Hospitals controlled by individuals, partnerships, or corporations for profit.

Demographic Terms

Age.—Refers to age at last birthday prior to admission to the hospital inpatient service (newborn infants excepted).

The aged .- Persons 65 years of age or older.

Color.—In this report patients are classified into two groups, "white" and "all other," based on information available on the hospital records (face sheet of the inpatient's medical record) of sample hospitals. "White" includes Mexican and Puerto Rican unless patient is specifically identified with "all other."

Geographic region. - In this report hospitals are classified by location according to the four geographic

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regions of the United States which correspond to those used by the U.S. Bureau of the Census.

Region	States Included
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island,
	Connecticut, New York, New Jersey, and Pennsylvania
North Central	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,
	and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

* U. S. GOVERNMENT PRINTING OFFICE : 1972 482-006/30

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