

# Medicare Discharged Patients, July 1-December 31, 1966

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THE PROGRAM of health insurance for the aged (Medicare), established by the Social Security Amendments of 1965, started operations on July 1, 1966. Under the hospital insurance (HI) provisions of the program, Medicare began paying a large part of the costs of hospital inpatient services furnished to persons entitled to these benefits. Preliminary data are now available that provide information on men and women patients discharged from short-stay hospitals participating in the program from July 1, 1966, to December 31, 1966.<sup>1</sup> The data are classified by diagnosis, surgical intervention, and average length of stay, as well as by sex.

The summary findings of these preliminary figures reveal that in the first 6 months of the program

—there were slightly more than 2.3 million discharges from short-stay hospitals—an annual discharge rate of 242 per 1,000 enrollees

—the average length of stay was 12.9 days

—men had a higher discharge rate than women, but on the average they did not stay in the hospital as long as the women

—30 million days of care in short-stay hospitals were recorded for discharged Medicare patients, or 3.1 days of care per HI enrollee a year

—fifty-five percent of the discharged patients had more than one diagnosis reported, and the proportion with multiple diagnoses was roughly the same for men and for women

—for 33 in 100 of those discharged from short-stay hospitals, surgery was involved, and relatively more men than women required some surgical procedure

—for the men and women discharged from these short-stay hospitals, the three most frequent causes of hospitalization were arteriosclerotic heart disease, acute coronary occlusion, and cataract.

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<sup>1</sup> For the hospital insurance provisions of Medicare in effect during this period, see "Social Security Amendments of 1965: Summary and Legislative History," *Social Security Bulletin*, September 1965; for changes in the program (not affecting the data presented here), see also "Social Security Amendments of 1967: Summary and Legislative History," *Social Security Bulletin*, February 1968.

## SOURCE AND LIMITATIONS OF THE DATA

The hospital insurance program pays a large portion of the beneficiary's hospitalization charges, including the cost of inpatient hospital services for up to 90 days in a benefit period (starting with the first day of hospitalization and ending 60 days after discharge from the hospital). After the payment of a deductible (\$40 during the period covered by the data), Medicare pays for most of the costs of the first 60 days of hospitalization. For each of the remaining 30 days, the patient pays \$10 of the daily charge.

The administration of the hospital insurance program requires that two items of information be known about each enrollee at the time of his admission to the hospital—his eligibility under the program and the extent to which he has already used the benefits available to him for that benefit period. To determine this, copies of all inpatient hospital bills are sent to the Social Security Administration after payment has been made to the hospital. On the basis of these bills, a central record is maintained, and periodically updated, on the number of days of hospital care each enrollee has received. The record also includes information about hospitalization not covered or reimbursable under the program or in hospitals certified to provide only emergency care under the program.<sup>2</sup>

The findings reported here are based on preliminary data from a 20-percent sample of Medicare beneficiaries who were discharged from short-stay hospitals. The data cover all discharges, including patients who died during their hospitalization; readmissions are not distinguished from admissions.

Hospitals are instructed to report on the Medicare billing forms all diagnoses and surgical procedures that appear on the patient's medical record. The primary diagnosis (the illness or

<sup>2</sup> For a description of the statistical system established for the Medicare program, see Howard West, "Health Insurance for the Aged: The Statistical Program," *Social Security Bulletin*, July 1967; see also Aaron Krute, Newton Dikoff, and Jack Scharff, "Statistical Elements of Medicare," *Public Health Reports*, September 1968.

condition which necessitates the patient's hospitalization) is given first, followed by any secondary diagnoses. Also included is a list of all surgical procedures performed during the hospitalization.

Diagnostic and surgical information is coded centrally for the sample cases tabulated.<sup>3</sup> The primary diagnosis at discharge is coded, and the presence or absence of additional diagnoses is noted. Where a surgical procedure is also reported, it is coded. If more than one surgical procedure is recorded, only the one related to the primary diagnosis is coded.

Reports based on later tabulations of the records will show a somewhat larger number of discharges for the July-December 1966 period than is shown here. The difference probably reflects delays in the submission of bills by hospitals, lags involved in the payment of bills by intermediaries, and/or the time involved in updating Social Security Administration records.

The information on the duration of stay for the discharged patients during this 6-month period was obtained from the hospital billing form records. For those persons who were admitted to the hospital before July 1, 1966, hospitals were instructed to enter the actual date of admission on the billing form, and the length of stay was ascertained from this admission date. For some beneficiaries, however, a July 1 admission date was reported even though they had been admitted before that date. The actual number of July 1 admissions cannot be identified from the incorrect reports. To the extent that this error appears, the length of stay as reported here may be understated. The degree of understatement is probably very small, however, since the total number of July 1 admissions constitutes only about 0.5 percent of all discharges.

## FINDINGS

### Discharges and Days of Care

During the first 6 months of the Medicare program about 19 million persons were entitled

<sup>3</sup> Diagnoses were coded according to the *International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations*, Public Health Service Publication No. 719 (revised edition), 1962. Surgical procedures are coded according to the *Current Procedural Terminology*, American Medical Association, 1966.

to hospital insurance benefits. In the same period, these persons experienced slightly more than 2.3 million episodes in short-stay hospitals, with an annual discharge rate of 242 per 1,000 enrolled. The average stay for each hospitalization was 12.9 days, resulting in a total of almost 30 million days of care during this 6-month period. On an annual basis, this total represented 3,117 days of hospital care for every 1,000 enrollees, or an average of 3.1 days for every enrolled person.

The data indicate some difference in the utilization of short-stay hospital facilities by men and women as shown in the tabulation below. Aged men were hospitalized more frequently than aged women: There were 263 discharges per 1,000 men, compared with 226 per 1,000 women. Though the average length of stay was 13.2 days for women and only 12.5 days for men, the total number of days of care was more than 9 percent larger for men than it was for women.

Item	Men	Women
<b>Number:</b>		
Enrollees (in thousands) <sup>1</sup> .....	8,080	10,945
Discharges (in thousands) <sup>2</sup> .....	1,062	1,239
Days of care (in thousands) <sup>2</sup> .....	13,249	16,403
Average length of stay (in days).....	12.5	13.2
<b>Annual rate per 1,000 enrolled:</b>		
Discharges.....	263	226
Patient days of care.....	3,280	2,997

<sup>1</sup> Enrollment in the United States and Territories as of Oct. 1, 1966, based on data recorded as of Dec. 29, 1967.

<sup>2</sup> Data for July 1-Dec. 31, 1966.

Another measure of hospital utilization is the daily bed-usage rate, which shows the average number of persons per 1,000 HI enrollees occupying hospital beds on any given day (see Selected Definitions at end of article). The average episode of hospitalization during Medicare's first 6 months (12.9 days) resulted in a daily bed-usage rate of 8.5 per 1,000 enrollees. In other words, on any day between July 1 and December 31, 1966, on the average, 8 or 9 out of every 1,000 HI enrollees would be found in hospital beds, and each of these individuals would probably remain hospitalized for almost 13 days. The daily bed-usage rate was higher for men (9.0 per 1,000) than for women (8.2 per 1,000).

### Leading Causes of Hospitalization

When primary diagnoses of the HI inpatients are grouped into the 17 major classifications of

TABLE 1.—Number and percentage distribution of discharges from short-stay hospitals, and annual discharge rate per 1,000 enrollees in the hospital insurance program, by major diagnostic group and sex, July 1–December 31, 1966

[Provisional data based on a 20-percent sample of all discharges (including patients who died during hospitalization) recorded in the Social Security Administration central records as of September 1967]

Major diagnostic group	ICDA <sup>1</sup>	Discharges						Annual discharge rate per 1,000 enrollees		
		Number (in thousands)			Percentage distribution			All persons	Men	Women
		All persons	Men	Women	All persons	Men	Women			
Total, all diagnoses.....		2,301.7	1,062.4	1,239.2	100.0	100.0	100.0	242.0	263.0	226.4
Infective and parasitic diseases.....	002-138	18.0	8.7	9.3	.8	.8	.8	1.8	2.2	1.6
Neoplasms.....	140-239	243.1	124.1	119.0	10.6	11.7	9.6	25.6	30.8	21.8
Allergic, endocrine system, metabolic and nutritional diseases.....	240-289	91.6	32.6	59.0	4.0	3.1	4.8	9.6	8.0	10.8
Diseases of blood and blood-forming organs.....	290-299	27.9	11.5	16.4	1.2	1.1	1.3	3.0	2.8	3.0
Mental, psychoneurotic and personality disorders.....	300-329	32.0	12.3	19.7	1.4	1.2	1.6	3.4	3.0	3.6
Diseases of the nervous system and sense organs.....	330-398	269.6	116.5	153.1	11.7	11.0	12.4	28.4	28.8	28.0
Diseases of the circulatory system.....	400-468	511.3	237.6	273.7	22.2	22.4	22.1	53.8	58.8	50.0
Diseases of the respiratory system.....	470-527	158.0	91.5	66.5	6.9	8.6	5.4	16.6	22.6	12.2
Diseases of the digestive system.....	530-587	380.2	172.9	207.3	16.5	16.3	16.7	40.0	42.8	37.8
Diseases of the genitourinary system.....	590-637	202.1	125.3	76.8	8.8	11.8	6.2	21.2	31.0	14.0
Diseases of the skin and cellular tissue.....	680-716	29.1	12.2	16.9	1.3	1.1	1.4	3.0	3.0	3.0
Diseases of the bones and organs of movement.....	720-749	89.3	25.1	55.2	3.5	2.4	4.5	8.4	6.2	10.0
Congenital malformations.....	750-759	4.0	1.8	2.2	.2	.2	.2	.4	.4	.4
Symptoms, senility and ill-defined conditions.....	780-795	49.3	24.4	24.9	2.1	2.3	2.0	5.2	6.0	4.6
Injuries and adverse effects of chemical and other external causes.....	800-999	190.5	59.3	131.2	8.3	5.6	10.6	20.0	14.6	24.0
Code unknown.....		14.7	6.7	8.0	.6	.6	.6	1.6	1.6	1.4

<sup>1</sup> International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations, Public Health Service Publication No.

719 (revised edition), 1962.

the International Classification of Diseases (Adapted), more than half of all discharges fell in three groups: diseases of the circulatory system, which account for more than 1 in every 5 discharges; diseases of the digestive system, 1 in 6; and diseases of the nervous system and sense organs, 1 in 9 (table 1).

Of the many hundreds of specific diagnostic rubrics in the International Classification of Diseases (Adapted), 25 account for 47 percent of all the conditions for which HI patients were hospitalized and for 49 percent of the days of care (see tables 2 and 3).<sup>4</sup> The three leading causes of hospitalization for all patients were arteriosclerotic heart disease, acute coronary occlusion, and cataract. These diagnoses account for 4.5 percent, 3.5 percent, and 3.3 percent of all discharges, respectively, and for 4.6, 4.4, and 2.1 percent of all days of care.

Among the 25 leading causes of hospitalization for the total population, the leading discharge

diagnosis for men was hyperplasia of the prostate, with a discharge rate of 16.8 per 1,000 men enrolled under the HI program. The average stay for discharged men with this diagnosis was 14.1 days, resulting in 238 days of care per 1,000 enrollees. For women, arteriosclerotic heart disease was the leading diagnosis, with a discharge rate of 10.4 per 1,000 women enrolled. Their average stay was 13.5 days, representing 141 days of care per 1,000 women enrolled.

In the older age groups, women outnumber men. Part of the difference in hospital discharge rates for men and women may reflect this age variation. Data on discharge rates by age will be analyzed in the future to assess the effect of the varying age composition of men and women in the population on the differences reported here. The age distribution of HI enrollees as of October 1, 1966, is shown below.

Age	Number (in thousands)			Percentage distribution		
	Total	Men	Women	Total	Men	Women
All persons.....	19,025	8,090	10,945	100.0	109.0	100.0
65-69.....	6,450	2,901	3,549	33.9	35.9	32.4
70-74.....	5,457	2,354	3,103	28.7	29.1	28.4
75-79.....	3,763	1,551	2,212	19.8	19.2	20.2
80-84.....	2,152	847	1,305	11.3	10.5	11.9
85 and over.....	1,203	427	776	6.3	5.3	7.1

<sup>4</sup> Selection of the 25 leading diagnoses was based on frequency of discharges in a single 4-digit diagnostic category of the International Classification of Diseases (Adapted). Two exceptions were: (1) for the pneumonias, which includes all diagnoses assigned to codes 490-493, and (2) for fracture of the femur, which includes codes 820.0, 820.1, 821.2-821.5. Further study may lead to revised selections of the leading diagnoses.

TABLE 2.—Number and percentage distribution of discharges from short-stay hospitals, and annual discharge rate per 1,000 enrollees in the hospital insurance program, by sex, and ranked by leading primary diagnosis, July 1–December 31, 1966

[Provisional data based on a 20-percent sample of all discharges (including patients who died during hospitalization) recorded in the Social Security Administration central records as of September 1967]

Rank <sup>1</sup>	Primary discharge diagnosis	ICDA <sup>2</sup>	Discharges						Annual discharge rate per 1,000 enrollees			Average length of stay (in days)		
			Number (in thousands)			Percentage distribution			All persons	Men	Women	All persons	Men	Women
			All persons	Men	Women	All persons	Men	Women						
	Total, all diagnoses.....		2,301.7	1,062.4	1,239.2	100.0	100.0	100.0	242.0	263.0	226.4	12.9	12.5	13.2
	Leading diagnoses.....		1,074.6	524.5	550.3	46.7	49.4	44.4	113.0	129.8	100.5	13.5	13.0	14.1
1	Arteriosclerotic heart disease, so described..	420.0	103.6	46.2	57.4	4.5	4.4	4.6	10.8	11.4	10.4	13.0	12.5	13.5
2	Acute coronary occlusion..	420.1	79.9	44.6	35.4	3.5	4.2	2.9	8.4	11.0	6.4	16.3	15.9	16.8
3	Cataract, unspecified and senile.....	385.9	76.1	30.5	45.7	3.3	2.9	3.7	8.0	7.6	8.4	8.2	8.1	8.3
4	Hyperplasia of prostate...	610	68.0	68.0	68.0	3.0	6.4	6.4	7.2	16.8	8.4	14.1	14.1	14.1
5	Diabetes mellitus.....	260	62.6	20.9	41.7	2.7	2.0	3.4	6.6	5.2	7.6	14.0	13.9	14.1
6	Pneumonia, all forms.....	490-493	60.8	32.9	27.9	2.6	3.1	2.3	6.4	8.2	5.0	12.9	12.6	13.2
7	Cerebral hemorrhage, nontraumatic.....	331	59.6	27.4	32.2	2.6	2.6	2.6	6.2	6.8	5.8	16.5	15.9	17.0
8	Congestive heart failure.....	434.1	54.8	26.0	28.8	2.4	2.4	2.3	5.8	6.4	5.2	12.9	12.4	13.4
9	Fracture of femur, except late effects.....	820.0, 820.1, 821.2-821.5	53.0	10.9	42.1	2.3	1.0	3.4	5.6	2.6	7.7	26.6	25.0	26.9
10	Other heart disease specified as involving coronary arteries.....	420.3	46.1	22.3	23.9	2.0	2.1	1.9	4.8	5.5	4.4	11.8	10.9	12.6
11	Cholelithiasis.....	584	42.9	12.5	30.4	1.9	1.2	2.5	4.6	3.0	5.6	13.8	14.0	13.8
12	Inguinal hernia of abdominal cavity without mention of obstruction.....	560.0	39.3	35.3	4.0	1.7	3.3	.3	4.2	8.8	.8	9.6	9.6	9.8
13	Diverticulitis.....	572.1	38.4	11.6	26.8	1.7	1.1	2.2	4.0	2.8	4.8	9.6	9.1	9.8
14	Gastroenteritis and colitis, except ulcerative.....	571	32.1	10.5	21.5	1.4	1.0	1.7	3.4	2.6	4.0	7.7	7.1	8.0
15	Arteriosclerosis, not further specified...	450.0	29.7	13.1	16.6	1.3	1.2	1.3	3.2	3.2	3.0	14.2	13.6	14.7
16	Cerebral arteriosclerosis...	334.0	28.7	12.8	15.9	1.2	1.2	1.3	3.0	3.2	3.0	13.1	12.3	13.8
17	Cerebral thrombosis.....	332.1	26.0	12.7	13.4	1.1	1.2	1.1	2.8	3.2	2.4	18.6	17.6	19.5
18	Other hypertensive disease.....	447	24.0	7.3	16.7	1.0	.7	1.3	2.6	1.8	3.0	9.9	9.1	10.2
19	Cholecystitis and cholangitis without mention of calculi.....	585	24.0	7.8	16.2	1.0	.7	1.3	2.6	2.0	3.0	11.6	11.9	11.5
20	Emphysema without mention of bronchitis..	527.1	22.4	18.9	3.5	1.0	1.8	.3	2.4	4.6	.6	11.7	11.7	12.0
21	Malignant neoplasm of prostate.....	177	22.3	22.3	22.3	1.0	2.1	2.1	2.4	5.6	5.6	14.9	14.9	14.9
22	Other hypertensive heart disease.....	443	21.7	7.4	14.4	.9	.7	1.2	2.2	1.8	2.6	12.0	11.5	12.3
23	Other myocardial degeneration with arteriosclerosis.....	422.1	21.6	9.9	11.0	.9	.9	.9	2.2	2.4	2.2	14.0	13.6	14.3
24	Ulcer of duodenum without perforation and without hemorrhage.....	541.0	21.2	12.4	8.8	.9	1.2	.7	2.2	3.0	1.6	10.9	11.0	10.9
25	Malignant neoplasm of breast.....	170	15.7	.3	15.4	.7	( <sup>3</sup> )	1.2	1.6	.1	2.8	15.3	14.0	15.4
	All other diagnoses.....		1,227.1	537.9	688.9	53.3	50.6	55.6	129.0	133.2	125.9	12.3	12.0	12.5

<sup>1</sup> Ranked by number of discharges for each diagnosis.

<sup>2</sup> *International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations*, Public Health Service Publication No.

719 (revised edition), 1962.

<sup>3</sup> Less than 0.05 percent.

### Length of Stay

For discharged patients with the 25 leading causes of hospitalization, the length of stay averaged 13.5 days (table 2). The range was from almost 8 days for gastroenteritis and colitis to 27 days for fracture of the femur.

About one-third of the short-stay hospital episodes involved surgical procedures, and more than half were cases with multiple diagnoses. Those with both surgery and multiple diagnoses

represented 15 percent of all short-stay episodes. Little difference between men and women was noted in the proportions with single or multiple diagnoses. The proportion of surgical cases among men (35 percent) exceeded that among women (31 percent), however. For men as well as women, both surgical intervention and the presence of multiple diagnoses were associated with a greater average length of stay in short-stay hospitals (table 4).

TABLE 3.—Number and percentage distribution of days of care in short-stay hospitals, and annual rate per 1,000 enrollees in the hospital insurance program, by leading primary diagnosis and sex, July 1–December 31, 1966

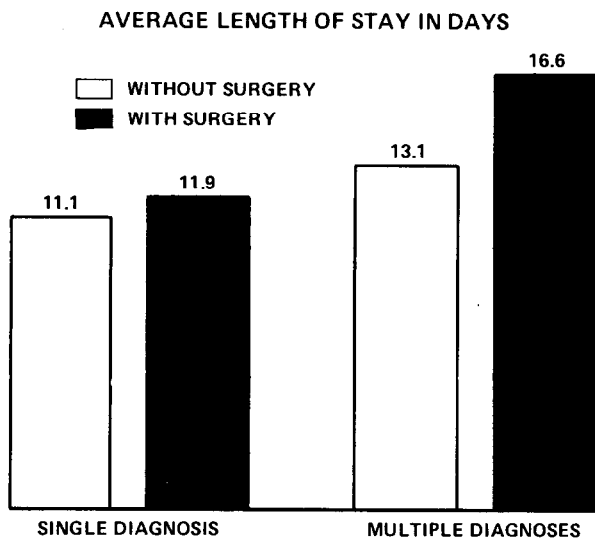
[Provisional data based on a 20-percent sample of all discharges (including patients who died during hospitalization) recorded in the Social Security Administration central records as of September 1967]

Primary discharge diagnosis	ICDA <sup>1</sup>	Days of care						Annual rate of days of care per 1,000 enrollees		
		Number (in thousands)			Percentage distribution			All persons	Men	Women
		All persons	Men	Women	All persons	Men	Women			
Total, all diagnoses.....		29,653.2	13,248.9	16,403.4	100.0	100.0	100.0	3,117.3	3,279.5	2,997.3
Leading diagnoses.....		14,554.7	6,796.3	7,757.9	49.1	51.3	47.3	1,530.0	1,682.3	1,417.6
Arteriosclerotic heart disease, so described.....	420.0	1,349.4	576.4	772.9	4.6	4.4	4.7	141.8	142.7	141.2
Acute coronary occlusion.....	420.1	1,302.7	707.6	595.1	4.4	5.3	3.6	136.9	175.1	108.7
Cataract, unspecified and senile.....	385.9	626.6	247.4	379.2	2.1	1.9	2.3	65.9	61.2	69.3
Hyperplasia of prostate.....	610	961.4	961.4	.....	3.2	7.3	.....	101.1	238.0	.....
Diabetes mellitus.....	260	877.8	290.2	587.6	3.0	2.2	3.6	92.3	71.8	107.4
Pneumonia, all forms.....	490-493	782.6	413.3	369.3	2.6	3.1	2.3	82.3	102.3	67.5
Cerebral hemorrhage, nontraumatic.....	331	981.5	435.6	545.7	3.3	3.3	3.3	103.2	107.8	99.7
Congestive heart failure.....	434.1	707.7	322.4	385.4	2.4	2.4	2.3	74.4	79.8	70.4
Fracture of femur, except late effects.....	820.0, 820.1 821.2-821.5	1,407.1	273.0	1,133.9	4.7	2.1	6.9	147.9	67.6	207.2
Other heart disease specified as involving coronary arteries.....	420.3	542.7	243.0	299.7	1.8	1.8	1.8	57.0	60.1	54.8
Cholelithiasis.....	584	594.0	174.8	419.1	2.0	1.3	2.6	62.4	43.3	76.6
Inguinal hernia of abdominal cavity without mention of obstruction.....	560.0	379.2	339.7	39.5	1.3	2.6	.2	39.9	84.1	7.2
Diverticulitis.....	572.1	369.2	106.2	263.0	1.2	.8	1.6	38.8	26.3	48.0
Gastroenteritis and colitis, except ulcerative.....	571	247.0	75.1	171.8	.8	.6	1.0	26.0	18.6	31.4
Arteriosclerosis, not further specified.....	450.0	422.3	179.0	243.3	1.4	1.4	1.5	44.4	44.3	44.4
Cerebral arteriosclerosis.....	334.0	376.4	158.0	218.4	1.3	1.2	1.3	39.6	39.1	39.9
Cerebral thrombosis.....	332.1	483.1	222.6	260.5	1.6	1.7	1.6	50.8	55.1	47.6
Other hypertensive disease.....	447	236.0	66.0	170.0	.8	.5	1.0	24.8	16.3	31.1
Cholecystitis and cholangitis without mention of calculi.....	585	277.9	91.9	186.0	.9	.7	1.1	29.2	22.7	34.0
Emphysema without mention of bronchitis.....	527.1	262.3	219.9	42.5	.9	1.7	.3	27.6	54.4	7.8
Malignant neoplasm of prostate.....	177	333.3	333.3	.....	1.1	2.5	.....	35.0	82.5	.....
Other hypertensive heart disease.....	443	260.9	84.6	176.3	.9	.6	1.1	27.4	20.9	32.2
Other myocardial degeneration with arteriosclerosis.....	422.1	301.2	135.0	166.2	1.0	1.0	1.0	31.7	33.4	30.4
Ulcer of duodenum without perforation and without hemorrhage.....	541.0	231.4	135.7	95.7	.8	1.0	.6	24.3	33.6	17.5
Malignant neoplasm of breast.....	170	241.0	4.2	236.8	.8	.3	1.4	25.3	1.0	43.3
All other diagnoses.....		15,098.5	6,452.6	8,645.5	50.9	48.7	52.7	1,587.2	1,597.2	1,579.7

<sup>1</sup> International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations, Public Health Service Publication No.

719 (revised edition), 1962.

Length of stay in hospital for HI discharged patients, with and without surgery, July 1–December 31, 1966



An interesting progression in the number of days that discharged HI patients stayed in the hospital can be seen in the accompanying chart, which shows the average length of stay, for those with a single diagnosis and those with multiple diagnoses, both with and without surgery. The average length of stay ranged from 11.1 days for patients with a single diagnosis and no surgery to 16.6 days for those with multiple diagnoses and with surgery.

Though single-diagnosis cases with surgery tend to remain hospitalized longer than those without surgery, the data in table 5 indicate that the pattern is reversed for some diagnoses (cataract, fracture of the femur, malignant neoplasm of the breast). Substantial proportions of the individuals with these three diagnoses required surgery during hospitalization (table 6). The fact that patients who did not have surgery had longer

TABLE 4.—Percentage distribution of discharges from and days of care in short-stay hospitals and average length of stay for persons enrolled in the HI program, with single and multiple diagnoses and with and without surgery, July 1–December 31, 1966

Type of discharge	Percentage distribution of discharges			Percentage distribution of patient days			Average length of stay in days		
	All persons	Men	Women	All persons	Men	Women	All persons	Men	Women
All discharges.....	100.0	100.0	100.0	100.0	100.0	100.0	12.9	12.5	13.2
With surgery.....	33.0	35.3	31.0	35.9	39.0	33.4	14.0	13.8	14.2
Without surgery.....	67.0	64.7	69.0	64.1	61.0	66.6	12.3	11.8	12.8
Single diagnosis.....	45.0	45.9	44.1	40.4	40.0	39.6	11.4	11.0	11.9
With surgery.....	18.1	19.4	16.9	16.8	17.9	15.9	11.9	11.5	12.4
Without surgery.....	26.9	26.5	27.2	23.2	22.5	23.7	11.1	10.6	11.5
Multiple diagnoses.....	55.0	54.1	55.8	60.0	59.6	60.4	14.1	13.7	14.3
With surgery.....	14.9	15.8	14.1	19.1	21.1	17.5	16.6	16.7	16.5
Without surgery.....	40.1	38.3	41.7	40.0	38.4	42.9	13.1	12.5	13.6

TABLE 5.—Average length of stay per discharge from short-stay hospitals for persons enrolled in the hospital insurance program, by leading primary diagnosis and with and without surgery, July 1–December 31, 1966

[Provisional data based on a 20-percent sample of all discharges (including patients who died during hospitalization) recorded in the Social Security Administration central records as of September 1967]

Primary discharge diagnosis	ICDA <sup>1</sup>	All discharges			With single diagnosis reported			With 2 or more diagnoses reported		
		Total	With surgery <sup>2</sup>	Without surgery	Total	With surgery <sup>2</sup>	Without surgery	Total	With surgery <sup>2</sup>	Without surgery
Total, all diagnoses.....		12.9	14.0	12.3	11.4	11.9	11.1	14.1	16.6	13.1
Leading diagnoses.....		13.5	14.9	12.9	12.2	12.8	11.9	14.5	17.9	13.5
Arteriosclerotic heart disease, so described.....	420.0	13.0	19.0	12.6	11.6	15.8	11.5	13.4	19.2	13.0
Acute coronary occlusion.....	420.1	16.3	22.4	16.1	15.3	18.2	15.3	17.3	23.3	17.0
Cataract, unspecified and senile.....	385.9	8.2	8.2	8.7	7.9	7.8	8.0	9.7	9.7	10.1
Hyperplasia of prostate.....	610	14.2	14.7	11.4	13.0	13.3	10.5	15.6	16.5	12.1
Diabetes mellitus.....	260	14.0	23.1	12.7	12.5	25.0	11.3	14.6	22.6	13.3
Pneumonia, all forms.....	490-493	12.9	20.0	12.4	10.4	17.2	10.1	14.3	20.8	13.8
Cerebral hemorrhage, nontraumatic.....	331	16.5	22.2	16.2	15.3	18.9	15.2	17.6	23.8	17.2
Congestive heart failure.....	434.1	12.9	23.0	12.5	11.8	23.1	11.6	13.6	23.0	13.1
Fracture of femur, except late effects.....	820.0, 820.1 821.2-821.5	26.6	26.0	27.9	24.9	24.7	25.8	29.4	28.7	30.8
Other heart disease specified as involving coronary arteries.....	420.3	11.8	19.0	11.5	10.3	15.8	10.3	12.6	19.5	12.2
Cholelithiasis.....	584	13.8	16.8	8.7	12.8	15.3	7.1	14.7	18.3	9.8
Inguinal hernia of abdominal cavity without mention of obstruction.....	560.0	9.6	9.6	9.7	8.6	8.6	9.1	11.7	11.9	10.2
Diverticulitis.....	572.1	9.6	15.0	8.0	7.9	13.2	6.7	10.9	16.1	9.1
Gastroenteritis and colitis, except ulcerative.....	571	7.7	12.3	7.4	6.1	9.5	6.0	9.3	13.7	9.0
Arteriosclerosis, not further specified.....	450.0	14.2	20.1	13.6	12.6	16.8	12.3	14.6	20.8	14.0
Cerebral arteriosclerosis.....	334.0	13.1	17.2	12.8	11.1	13.3	10.9	14.2	19.0	13.7
Cerebral thrombosis.....	332.1	18.6	25.9	18.2	16.9	15.7	16.9	19.6	28.8	19.0
Other hypertensive disease.....	447	9.9	13.6	9.6	7.9	7.9	7.9	10.7	14.7	10.3
Cholecystitis and cholangitis without mention of calculi.....	585	11.6	17.5	9.1	10.7	16.6	7.8	12.7	18.7	10.6
Emphysema without mention of bronchitis.....	527.1	11.7	15.9	11.3	10.8	13.5	10.6	12.1	16.8	11.6
Malignant neoplasm of prostate.....	177	15.0	15.3	14.5	13.2	13.2	13.3	16.5	18.0	15.0
Other hypertensive heart disease.....	443	12.0	16.8	11.7	10.5	10.7	10.5	12.4	17.4	12.0
Other myocardial degeneration with arteriosclerosis.....	422.1	14.0	20.7	13.5	13.1	16.2	13.0	14.2	21.1	13.6
Ulcer of duodenum without perforation and without hemorrhage.....	541.0	10.9	19.4	9.2	9.7	17.2	8.4	12.0	20.8	10.0
Malignant neoplasm of breast.....	170	15.3	14.4	17.3	13.5	13.1	15.4	17.2	16.6	18.0
All other diagnoses.....		12.3	13.3	11.7	10.7	11.1	10.4	13.7	15.7	12.5

<sup>1</sup> International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations, Public Health Service Publication No. 719 (revised edition), 1962.

<sup>2</sup> A surgical procedure was reported in this hospital stay, but the surgical procedure is not necessarily related to the primary diagnosis.

stays for these diagnoses might indicate that they were too ill to undergo surgery or that they had received some other treatment that required a longer stay in the hospital.

**SELECTED DEFINITIONS**

*Short-stay hospital.*—A hospital in which the average

length of stay is under 30 days. Included are both general and specialty hospitals.

*Discharge.*—The formal release of an inpatient from a hospital to an extended-care facility, another hospital, his home, etc. The data in this article refer to all discharges including those for patients who died during their hospitalization.

*Annual discharge rate per 1,000 enrollees.*—The ratio of

TABLE 6.—Percentage distribution of discharges with and without surgery from short-stay hospitals for persons enrolled in the hospital insurance program, by leading primary diagnosis, July 1–December 31, 1966

[Provisional data based on a 20-percent sample of all discharges (including patients who died during hospitalization) recorded in the Social Security Administration central records as of September 1967]

Primary discharge diagnosis	ICDA <sup>1</sup>	All discharges			With single diagnosis reported			With 2 or more diagnoses reported		
		Total	With surgery <sup>2</sup>	Without surgery	Total	With surgery <sup>2</sup>	Without surgery	Total	With surgery <sup>2</sup>	Without surgery
Total, all diagnoses.....		100.0	33.0	67.0	45.0	18.1	26.9	55.0	14.9	40.1
Leading diagnoses.....		100.0	29.5	70.5	43.6	17.2	26.3	56.4	12.2	44.2
Arteriosclerotic heart disease, so described.....	420.0	100.0	6.1	93.9	21.1	.5	20.6	78.9	5.6	73.3
Acute coronary occlusion.....	420.1	100.0	3.0	97.0	51.1	.5	50.6	48.9	2.5	46.5
Cataract, unspecified and senile.....	385.9	100.0	95.9	4.1	80.1	77.2	2.9	19.9	18.7	1.3
Hyperplasia of prostate.....	610	100.0	84.5	15.5	53.7	47.4	6.4	46.3	37.1	9.1
Diabetes mellitus.....	260	100.0	12.5	87.5	26.7	2.5	24.2	73.3	10.0	63.3
Pneumonia, all forms.....	490-493	100.0	5.9	94.1	37.0	1.4	35.6	63.0	4.5	58.4
Cerebral hemorrhage, nontraumatic.....	331	100.0	4.3	95.7	49.2	1.5	47.7	50.8	2.9	47.9
Congestive heart failure.....	434.1	100.0	4.1	95.9	38.5	.8	37.6	61.5	3.2	58.3
Fracture of femur, except late effects.....	820.0, 820.1 821.2-821.5	100.0	72.2	27.8	63.1	47.0	16.1	36.9	25.2	11.7
Other heart disease specified as involving coronary arteries.....	420.3	100.0	3.5	96.5	35.9	.5	35.5	64.1	3.0	61.1
Cholelithiasis.....	584	100.0	63.6	36.4	46.1	32.2	13.9	53.9	31.4	22.5
Inguinal hernia of abdominal cavity without mention of obstruction.....	560.0	100.0	93.0	7.0	67.1	63.6	3.5	32.9	29.4	3.5
Diverticulitis.....	572.1	100.0	22.5	77.5	43.1	8.2	34.9	56.9	14.3	42.6
Gastroenteritis and colitis, except ulcerative.....	571	100.0	5.7	94.3	50.5	1.9	48.6	49.5	3.8	45.7
Arteriosclerosis, not further specified.....	450.0	100.0	9.1	90.9	20.3	1.5	18.8	79.7	7.6	72.0
Cerebral arteriosclerosis.....	334.0	100.0	7.9	92.1	34.1	2.4	31.7	65.9	5.5	60.3
Cerebral thrombosis.....	332.1	100.0	4.7	95.3	37.0	1.0	36.0	63.0	3.7	59.3
Other hypertensive disease.....	447	100.0	6.9	93.1	30.0	1.1	28.9	70.0	5.8	64.2
Cholecystitis and cholangitis without mention of calculi.....	585	100.0	29.5	70.5	53.5	17.4	36.2	46.5	12.1	34.4
Emphysema without mention of bronchitis.....	527.1	100.0	9.3	90.7	29.7	2.4	27.3	70.3	6.9	63.4
Malignant neoplasm of prostate.....	177	100.0	60.3	39.7	46.9	33.8	13.1	53.1	26.5	26.6
Other hypertensive heart disease.....	443	100.0	5.9	94.1	21.1	.5	20.5	78.9	5.4	73.6
Other myocardial degeneration with arteriosclerosis.....	422.1	100.0	6.6	93.4	23.2	.6	22.6	76.8	6.0	70.8
Ulcer of duodenum without perforation and without hemorrhage.....	541.0	100.0	16.7	83.3	44.9	6.5	38.4	55.1	10.2	44.9
Malignant neoplasm of breast.....	170	100.0	68.1	31.9	50.4	41.7	8.6	49.6	26.4	23.2
All other diagnoses.....		100.0	36.0	64.0	46.2	18.8	27.4	53.8	17.2	36.6

<sup>1</sup> *International Classification of Diseases, Adapted for Indexing Hospital Records by Diseases and Operations*, Public Health Service Publication No. 719 (revised edition), 1962.

<sup>2</sup> A surgical procedure was reported in this hospital stay, but the surgical procedure is not necessarily related to the primary diagnosis.

the number of discharges multiplied by 1,000 to the number of persons entitled to HI benefits on October 1, 1966. Since the data relate to a 6-month period, the number of discharges was doubled to calculate the annual rate.

*Days of care or length of stay.*—The total number of days during which inpatient hospital services were utilized by discharged HI patients during the period July 1–December 31, 1966. The day of discharge is not counted as a day of care.

*Average length of stay.*—The total number of days of inpatient hospital care divided by the number of discharged patients. In computing the average length of stay, hospitalization of less than 1 day (a patient is admitted and discharged in the same day) is counted as 1 day.

*Patient days per 1,000 enrollees.*—The ratio of the total number of days of inpatient hospital care multiplied by 1,000 to the number of persons entitled to HI benefits on October 1, 1966. Since the data relate to a 6-month

period, the total number of patient days was doubled to calculate the annual rate.

*Daily bed-usage rate.*—The ratio of the total number of days of inpatient hospital care used by discharged patients during the period July 1–December 31, 1966, inclusive, to the product of the number of days in the period and the number of persons entitled to hospital insurance benefits during that period. This is a measure of hospital utilization that shows, on the average, the number of persons out of every 1,000 HI enrollees occupying hospital beds on any given day in the period.

*Discharge diagnosis.*—The primary diagnosis at the time of discharge as shown on the patient's hospital record and reported by the hospital on claims for payment submitted to Medicare.

*Surgical procedure.*—Any operative procedure recorded on the patient's hospital record, including those involving incision, excision, amputation, introduction, endoscopy, repair, destruction, suture, or manipulation.