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## Expected Principal Source of Payment for Hospital Discharges: United States, 1979

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### Introduction

This report presents statistics on data collected through the National Hospital Discharge Survey. The National Center for Health Statistics has continuously conducted this survey since 1965. In 1979 data were abstracted from the face sheets of medical records of approximately 215,000 patients discharged from 416 non-Federal short-stay hospitals. These data were used to produce estimates of hospital utilization by an estimated 36.7 million inpatients (excluding newborn infants) in the United States.

From 1968 through 1970 information on hospital charges and sources of payment from a subsample of the National Hospital Discharge Survey sample was collected.<sup>1</sup> No information on charges or sources of payment was collected from 1971 through 1976. However, during 1977-79 data on a patient's expected principal source of payment and other expected sources of payment were collected from the face sheets of all medical records in the National Hospital Discharge Survey sample. A report on the 1977 data has been published.<sup>2</sup> Statistics in that report as well as those in this one reflect only the patient's principal source of payment. The 1977 report presents estimates of source of payment by age and sex of patients as well as estimates for leading diagnostic and surgical categories. This report updates the basic estimates by age and sex of patients and provides new analysis by discharge status and surgical status of patients as well as by hospital location and ownership. The survey form used to collect these data is reproduced in another publication of the National Center for Health Statistics.<sup>3</sup>

Within NCHS, there are two other sources of information on health care costs: the National Medical Care Expenditures Survey (NMCES) and the National Health Interview Survey (NHIS). These surveys provide data on the number of persons in the general population covered under the different private or

public health plans,<sup>4-6</sup> and the National Hospital Discharge Survey (NHDS) provides data on the hospital population only. According to the NHDS, approximately 6 percent of all patients discharged from short-stay hospitals had no health insurance. On the other hand, data from NHIS and NMCES indicate that 11.0 and 12.6 percent, respectively, of the noninstitutionalized population had no health insurance coverage. This would seem to indicate that a proportionately smaller number of the uninsured rather than of the insured are hospitalized. This may be true. Moreover, many individuals who claim they have no health insurance coverage may find on being hospitalized that they are covered under such public health programs as Medicaid, Welfare, Veterans Administration health benefits, and the like.

According to the National Hospital Discharge Survey, the percent of hospitalized individuals covered by private insurance was 52.5 percent. This is much lower than the estimated 77.7 percent of individuals covered by private insurance found in the 1978 National Health Interview Survey.<sup>6</sup> This difference is not unexpected since public health programs are often billed first for hospital charges, and individuals citing private insurance coverage may be using it as a secondary insurance source.

It should be noted that the expected source of payment recorded on the face sheet of the medical record may not have been the actual source of payment. For example, a patient admitted to a hospital following an automobile accident may have cited Blue Cross as the expected source of payment when, in fact, an automobile insurance company ultimately made restitution. Also, because of the manner in which this variable was collected, there is no way to determine the charge for the hospital stay or what proportions of the hospital stay and medical services were covered by the principal source of payment indicated.

## Data highlights

Of the 36.7 million patients discharged from non-Federal short-stay hospitals in the United States during 1979, 52.5 percent expected to pay for their hospital stay through private insurance, 27.0 percent expected Medicare to pay for the hospitalization, 8.8 percent expected Medicaid to pay for the hospitalization, 5.9 percent expected to pay their own hospital bills, and the remaining 5.9 percent expected to have their hospital bills paid through other sources or not to be charged.

A typical person who was hospitalized in non-Federal short-stay hospitals in the United States during 1979 was female, white, about 44 years of age, was hospitalized in the South, was a patient in a nonprofit hospital, and expected to pay for the hospitalization through private insurance.

## Discussion

### Private Insurance

Private health insurance is the major type of health insurance in the United States. In studies done in 1976 and 1978 it was estimated that over 70 percent of all persons in the United States were covered by private insurance.<sup>4,6</sup> In the National Hospital Discharge Survey of 1979 it was the expected source of payment for about 50 percent of all hospital patients. The use of private insurance to pay hospital costs is a rather unusual method of payment since a study of 10 of the more developed countries pointed out that only the United States and Australia utilized private health insurance plans to a large extent.<sup>7</sup> Another interesting finding of that study was that the United States and Australia also had the shortest average lengths of stay of the 10 countries.

Private health insurance consists of Blue Cross and other private or commercial insurance. It was the expected source of payment for approximately 19.3 million discharges from non-Federal short-stay hospitals in 1979, about half of all discharges (table 1). Of these 19.3 million discharges, 19.0 million (98.7 percent) were under 65 years of age. The remaining 0.3 million (1.3 percent) were 65 years and over.

The numbers of males and females discharged were relatively similar for all age groups except 15-44 years (table 1). Of the discharges in this age group, females outnumbered males by about 5 to 2. This was due to the large number of females admitted for delivery and female-specific surgery.<sup>2</sup> However, the percent of males using private insurance and the percent of females using private insurance was about the same in each age group.

The average length of stay for patients with private insurance as an expected source of payment was 5.9 days (table 2). This was 1.3 days less than the average of 7.2 days for all patients discharged from short-stay hospitals. This difference is partially a function of age since average length of stay increases with age, and the average age of patients using private insurance was 34.4 years compared with an average age of 43.7 years for all patients (table 3). The shorter average length of stay means that a proportionately smaller number of days of care were used by the patients. Whereas approximately 52 percent of all discharges were expected to be covered by private insurance, only about 43 percent of the total days of care in non-Federal short-stay hospitals were used by these patients.

Table 4 provides data on the number and percent of patients discharged from non-Federal short-stay hospitals who had one or more surgical or non-surgical procedures performed during 1979. A total of 18.9 million or 51.4 percent of all patients discharged during 1979 had one or more procedures performed.

Of the 19.3 million patients who expected to pay for their hospitalization through private insurance, 58.5 percent had one or more procedures performed (table 5). Women 15-44 years of age had three times more surgical procedures than men of the same age had because of the large number of obstetrical procedures.<sup>2</sup> Approximately 69.4 percent of all women 15-44 years expecting to pay for their hospitalization through private insurance had one or more procedures performed, whereas only 53.1 percent of the men 15-44 years with the same characteristic had one or more procedures performed.

Table 5 provides data on the discharge status for all patients under 65 years and 65 years and over. Of the 19.3 million patients covered by private insurance programs, 18.0 million (93.5 percent) were discharged alive and 184,000 (1.0 percent) were discharged dead; the discharge status of 1.1 million (5.6 percent) were unknown. A total of 17.8 million (98.8 percent) of the 18.0 million patients discharged alive were under 65 years. The remaining 223,000 patients (1.2 percent) were 65 years and over.

Table 6 shows the number and percent distribution of patients discharged from non-Federal short-stay hospitals by source of payment, race, region, and hospital ownership. Approximately 14.8 million (76.8 percent) of the 19.3 million patients discharged from short-stay hospitals who expected to pay for their hospitalization through private insurance were white. Of the remaining 4.5 million, 1.9 million (9.8 percent) were of other races and 2.6 million (13.3 percent) did not have race stated on the medical record.

Estimates of the number of discharges by region showed that the South Region, with 6.4 million

Table 1. Number and percent distribution of patients discharged from non-Federal short-stay hospitals by principal expected source of payment, according to age and sex: United States, 1979

Age and sex	All expected sources of payment	Private insurance	Workmen's Compensation	Medicare	Medicaid	Other government payments	Self-pay	No charge	Other payments
Number in thousands									
Both sexes									
All ages . . . . .	36,747	19,289	643	9,925	3,227	918	2,168	30	546
Under 15 years . . . . .	3,641	2,437	...	43	675	163	235	5	83
15-44 years . . . . .	15,488	10,574	447	288	1,820	507	1,500	15	337
45-64 years . . . . .	8,532	6,017	182	1,019	592	228	372	7	116
65 years and over . . . . .	9,086	260	14	8,576	139	21	61	4	11
Male									
All ages . . . . .	14,705	7,399	528	4,437	974	353	773	11	230
Under 15 years . . . . .	2,053	1,381	...	19	381	87	136	2	46
15-44 years . . . . .	4,680	3,122	375	148	329	152	431	3	120
45-64 years . . . . .	4,017	2,765	143	554	210	105	179	3	58
65 years and over . . . . .	3,955	131	10	3,716	54	10	27	2	5
Female									
All ages . . . . .	22,042	11,889	115	5,488	2,253	565	1,395	20	316
Under 15 years . . . . .	1,588	1,056	...	23	294	76	99	2	37
15-44 years . . . . .	10,808	7,452	72	140	1,491	355	1,069	12	216
45-64 years . . . . .	4,515	3,252	39	465	382	123	193	3	58
65 years and over . . . . .	5,131	129	4	4,860	85	11	34	2	6
Percent distribution									
Both sexes									
All ages . . . . .	100.0	52.5	1.8	27.0	8.8	2.5	5.9	0.1	1.5
Under 15 years . . . . .	100.0	66.9	...	1.2	18.5	4.5	6.5	0.1	2.3
15-44 years . . . . .	100.0	68.3	2.9	1.9	11.8	3.3	9.7	0.1	2.2
45-64 years . . . . .	100.0	70.5	2.1	11.9	6.9	2.7	4.4	0.1	1.4
65 years and over . . . . .	100.0	2.9	0.2	94.4	1.5	0.2	0.7	0.0	0.1
Male									
All ages . . . . .	100.0	50.3	3.6	30.2	6.6	2.4	5.3	0.1	1.6
Under 15 years . . . . .	100.0	67.3	...	0.9	18.6	4.2	6.6	0.1	2.3
15-44 years . . . . .	100.0	66.7	8.0	3.2	7.0	3.2	9.2	0.1	2.6
45-64 years . . . . .	100.0	68.8	3.6	13.8	5.2	2.6	4.5	0.1	1.4
65 years and over . . . . .	100.0	3.3	0.2	94.0	1.4	0.2	0.7	0.0	0.1
Female									
All ages . . . . .	100.0	53.9	0.5	24.9	10.2	2.6	6.3	0.1	1.4
Under 15 years . . . . .	100.0	66.5	...	1.5	18.5	4.8	6.2	0.1	2.3
15-44 years . . . . .	100.0	68.9	0.7	1.3	13.8	3.3	9.9	0.1	2.0
45-64 years . . . . .	100.0	72.0	0.9	10.3	8.5	2.7	4.3	0.1	1.3
65 years and over . . . . .	100.0	2.5	0.1	94.7	1.7	0.2	0.7	0.0	0.1

(33.2 percent), and the North Central, with 6.0 million (31.3 percent), had the largest numbers of discharged patients covered by private insurance. The West, with 2.7 million (14.1 percent) had the smallest number of discharges.

Patients discharged from nonprofit hospitals accounted for 14.2 million (73.6 percent) of the 19.3 million patients covered by private insurance discharged from non-Federal short-stay hospitals. Of the remaining 5.1 million patients, 3.5 million (18.0 percent) were discharged from State and local government hospitals and 1.6 million (8.4 percent) were discharged from profitmaking (proprietary) hospitals.

### Public health programs

Public health programs include Medicare, Medicaid, Workmen's Compensation, and other government programs. Together these programs were the principal expected source of payment for 14.7 million or 40.0 percent of all discharges (table 1). Of these 14.7 million, 9.9 million (67.5 percent) were Medicare patients, 3.2 million (21.9 percent) were Medicaid patients, 0.6 million (4.4 percent) were covered under Workmen's Compensation, and the remaining 0.9 million (6.2 percent) were covered

Table 2. Number and percent distribution of days of care and average length of stay for patients discharged from non-Federal short-stay hospitals by principal expected source of payment, according to age: United States, 1979

Age	All expected sources of payment	Private insurance	Workmen's Compensation	Medicare	Medicaid	Other government payments	Self-pay	No charge	Other payments
Days of care in thousands									
All ages . . . . .	264,173	113,329	4,300	105,319	20,433	5,401	11,595	242	3,555
Under 15 years . . . . .	15,765	9,808	...	346	3,230	724	1,175	55	426
15-44 years . . . . .	80,913	54,205	2,760	2,719	9,806	2,663	6,797	67	1,895
45-64 years . . . . .	69,755	46,738	1,391	9,904	5,800	1,846	2,951	57	1,067
65 years and over . . . . .	97,740	2,578	149	92,350	1,596	167	671	63	166
Percent distribution of days of care									
All ages . . . . .	100.0	42.9	1.6	39.9	7.7	2.0	4.4	0.1	1.3
Under 15 years . . . . .	100.0	62.2	...	2.2	20.5	4.6	7.5	0.3	2.7
15-44 years . . . . .	100.0	67.0	3.4	3.4	12.1	3.3	8.4	0.1	2.3
45-64 years . . . . .	100.0	67.0	2.0	14.2	8.3	2.6	4.2	0.1	1.5
65 years and over . . . . .	100.0	2.6	0.2	94.5	1.6	0.2	0.7	0.1	0.2
Average length of stay in days									
All ages . . . . .	7.2	5.9	6.7	10.6	6.3	5.9	5.3	7.9	6.5
Under 15 years . . . . .	4.3	4.0	...	8.1	4.8	4.5	5.0	11.6	5.1
15-44 years . . . . .	5.2	5.1	6.2	9.4	5.4	5.3	4.5	4.4	5.6
45-64 years . . . . .	8.2	7.8	7.6	9.7	9.8	8.1	7.9	8.7	9.2
65 years and over . . . . .	10.8	9.9	10.9	10.8	11.5	8.0	11.0	15.7	15.7

Table 3. Number of discharges, days of care, average length of stay, and average age of patients discharged from non-Federal short-stay hospitals, by principal expected source of payment: United States, 1979

Item	All expected sources of payment	Expected sources of payment		
		Private	Public	Self-pay, no charge, and other
Total number of discharges in millions . . . . .	36.7	19.3	14.7	2.7
Total days of care in millions . . . . .	264.2	113.3	135.5	15.4
Average length of stay in days . . . . .	7.2	5.9	9.2	5.7
Average age of patients in years . . . . .	43.7	34.4	58.5	29.9

by other forms of government health payment programs.

Forty percent of all discharges expected to pay for their hospitalization through public health programs, and they accounted for 51.3 percent of the total days of care. As stated earlier, 52.5 percent of the discharges in the NHDS were covered by private insurance, but they accounted for only 42.9 percent of the total days of care (table 2). This resulted in longer average length of stay for patients covered by public health programs than for those covered by private insurance—9.2 days compared with 5.9 days.

In addition, 86.4 percent of the Medicare patients were 65 years and over, and the average length of stay for patients of this age group was 10.8 days.

The average age of patients expecting to pay for their hospitalization through public programs was 58.5 years (table 3). This was 70 percent higher than the average of 34.4 years for patients expecting to pay hospital bills through private insurance. The higher average age for patients covered by public health insurance was because of the high proportion of Medicare patients.

In the age-by-sex distributions of table 1, the most prominent sex difference in the number of discharges was in the age group 15-44 years. For Medicaid and other government payments there were more than twice as many female as male discharges in this age group. For Medicare the number of females and males 15-44 years of age were quite similar (140,000 and 148,000, respectively), but for Workmen's Compensation the number of males outnumbered the number of females discharged by more than 5 to 1 (375,000 and 72,000, respectively).

Medicare is a government-sponsored program primarily designed to help older people defray the costs of hospitalization. Medicare patients accounted for 9.9 million patients (27.0 percent) discharged from short-stay hospitals (table 1). Of these 9.9 million, 8.6 million (86.4 percent) were 65 years and over. Table 4 shows that a total of 3.9 million (38.4 percent) of the Medicare patients had one or more procedures performed. This was considerably lower than the 56.1 percent of patients with one or more procedures performed who were covered under all

Table 4. Number and percent of patients with procedures discharged from non-Federal short-stay hospitals by sex, age, and principal expected source of payment: United States, 1979

<i>Sex and age of patients with procedures</i>	<i>All expected sources of payment</i>	<i>Private insurance</i>	<i>Workmen's Compensation</i>	<i>Medicare</i>	<i>Medicaid</i>	<i>Other government payments</i>	<i>Self-pay</i>	<i>No charge</i>	<i>Other payments</i>
Number in thousands									
Both sexes									
All ages. . . . .	18,896	11,284	380	3,862	1,491	460	1,117	17	285
Under 15 years . . . . .	1,575	1,142	...	14	225	75	82	2	36
15-44 years . . . . .	9,514	6,825	263	109	993	277	849	10	188
45-64 years . . . . .	4,207	3,194	109	365	219	98	163	4	55
65 years and over . . . . .	3,601	124	9	3,374	53	11	23	2	5
Male									
All ages. . . . .	6,839	3,786	320	1,824	344	147	307	5	105
Under 15 years . . . . .	899	661	...	7	123	38	48	1	20
15-44 years . . . . .	2,357	1,656	226	50	126	62	180	1	54
45-64 years . . . . .	1,894	1,404	87	191	71	43	68	1	28
65 years and over . . . . .	1,690	64	7	1,575	25	4	11	1	2
Female									
All ages. . . . .	12,057	7,498	60	2,039	1,146	313	809	12	179
Under 15 years . . . . .	676	480	...	7	102	36	33	1	16
15-44 years . . . . .	7,157	5,168	36	58	867	216	669	8	134
45-64 years . . . . .	2,313	1,790	22	174	149	55	95	2	27
65 years and over . . . . .	1,911	60	2	1,799	28	6	12	1	3
Percent									
Both sexes									
All ages. . . . .	51.4	58.5	59.1	38.9	46.2	50.1	51.5	55.9	52.1
Under 15 years . . . . .	43.2	46.8	...	33.8	33.3	45.8	34.7	39.2	43.0
15-44 years . . . . .	61.4	64.5	58.7	37.8	54.6	54.7	56.6	64.0	56.0
45-64 years . . . . .	49.3	53.1	59.9	35.8	37.1	43.0	43.9	57.4	47.5
65 years and over . . . . .	39.6	47.7	63.1	39.3	38.0	51.3	37.5	42.4	51.9
Male									
All ages. . . . .	46.5	51.2	60.6	41.1	35.4	41.8	39.8	44.3	45.7
Under 15 years . . . . .	43.8	47.9	...	36.4	32.2	44.0	35.5	53.2	42.9
15-44 years . . . . .	50.4	53.1	60.3	34.0	38.5	40.6	41.8	41.0	45.2
45-64 years . . . . .	47.1	50.8	60.7	34.5	33.7	41.3	38.0	42.5	48.8
65 years and over . . . . .	42.7	49.1	70.3	42.4	45.6	45.4	40.2	41.0	50.7
Female									
All ages. . . . .	54.7	63.1	52.4	37.1	50.9	55.4	58.0	62.0	56.8
Under 15 years . . . . .	42.6	45.5	...	31.7	34.8	47.9	33.5	24.9	43.0
15-44 years . . . . .	66.2	69.4	50.4	41.8	58.1	60.7	62.5	69.6	62.0
45-64 years . . . . .	51.2	55.0	56.8	37.4	38.9	44.5	49.4	72.0	46.2
65 years and over . . . . .	37.3	46.3	45.5	37.0	33.3	56.5	35.3	43.6	53.0

other sources of payment. One reason for this difference may be that Medicare patients, who are primarily elderly people, may be more likely to be hospitalized for chronic nonoperable conditions.

As shown in table 5 patients covered under the Medicare program were also more likely to have a higher mortality rate than patients covered under other sources of payment. Medicare patients constituted 70.7 percent of all patients discharged dead even though they constituted only 27.0 percent of all patients discharged from short-stay hospitals. Again, this is because of the substantially older average age of Medicare patients.

Approximately 10.6 million (72.3 percent) of the 14.7 million patients expecting to pay for their hospitalization through public insurance were white

(table 6). Of the remaining 4.1 million, 2.2 million (15.0 percent) were of other races, and race was not stated for 1.9 million (12.6 percent).

An estimated 24.8 percent of other than white patients discharged from short-stay hospitals had Medicaid entitlement whereas only 6.2 percent of white patients discharged from short-stay hospitals had Medicaid entitlement. An explanation of this may be that Medicaid is primarily a program to provide medical benefits to certain low income people in need of medical care and that people of other races have proportionately more low income families than white people. Specifically, in 1979 the actual poverty level was determined to be \$7,412 for a family of four. In that year 13.3 percent of all families were below an income level of \$7,500. For

Table 5. Number and percent distribution of patients discharged from non-Federal short-stay hospitals by age and discharge status, according to principal expected source of payment: United States, 1979

<i>Age and discharge status</i>	<i>All expected sources of payment</i>	<i>Private insurance</i>	<i>Workmen's Compensation</i>	<i>Medicare</i>	<i>Medicaid</i>	<i>Other government payments</i>	<i>Self-pay</i>	<i>No charge</i>	<i>Other payments</i>
Number in thousands									
All ages . . . . .	36,747	19,289	643	9,925	3,227	918	2,168	30	546
Alive . . . . .	33,812	18,034	610	8,743	3,024	837	2,031	29	504
Dead . . . . .	924	184	2	653	40	12	23	1	8
Not stated . . . . .	2,011	1,071	31	529	162	69	114	1	34
Under 65 years . . . . .	27,661	19,028	630	1,349	3,087	897	2,107	26	535
Alive . . . . .	25,845	17,811	598	1,223	2,896	821	1,977	25	495
Dead . . . . .	287	165	2	51	33	10	20	2	7
Not stated . . . . .	1,528	1,053	30	75	158	67	111	1	34
65 years and over . . . . .	9,086	260	14	8,576	139	21	61	4	11
Alive . . . . .	7,967	223	12	7,520	128	16	54	3	10
Dead . . . . .	636	19	1	603	7	2	4	1	1
Not stated . . . . .	483	18	1	454	4	2	3	-	2
Percent distribution									
All ages . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alive . . . . .	92.0	93.5	94.9	88.1	93.7	91.2	93.7	94.2	92.4
Dead . . . . .	2.5	1.0	0.4	6.6	1.2	1.3	1.1	3.8	1.4
Not stated . . . . .	5.5	5.6	4.8	5.3	5.0	7.5	5.3	2.0	6.2
Under 65 years . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alive . . . . .	93.4	93.6	94.9	90.7	93.8	91.5	93.8	96.3	92.4
Dead . . . . .	1.0	0.9	0.3	3.8	1.1	1.1	0.9	1.4	1.3
Not stated . . . . .	5.5	5.5	4.8	5.6	5.1	7.5	5.3	2.3	6.3
65 years and over . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alive . . . . .	87.7	85.8	90.7	87.7	92.1	79.1	88.5	80.3	90.5
Dead . . . . .	7.0	7.3	4.8	7.0	4.8	10.0	6.2	19.7	5.9
Not stated . . . . .	5.3	6.9	4.5	5.3	3.1	10.9	5.3	-	3.6

white families this figure was 11.0 percent while for all others it was 30.0 percent.<sup>8</sup>

Estimates of the number of discharges by region showed that the South Region, with about 5.0 million discharges, had the largest number of patients expecting to pay for their hospitalization through public insurance programs. This was followed by the North Central Region with 4.1 million, the Northeast with 3.2 million, and the West with 2.5 million discharges. Even though the number of discharges varied by region, patients with public insurance represented approximately 40 percent of all discharges in each region.

Nonprofit hospitals accounted for 10.2 million (69.4 percent) of the 14.7 million patients discharged from non-Federal short-stay hospitals covered under public programs. Of the remaining 4.5 million patients, 3.3 million (22.4 percent) were discharged from government operated hospitals, and 1.2 million (8.2 percent) were discharged from profitmaking hospitals. The percent of patients with public health coverage discharged from nonprofit hospitals (69.4 percent) was lower than the percent of patients covered by private insurance discharged from the

same hospitals (73.6 percent). This is not unexpected since patients covered by public health programs may be referred to State or local government-owned hospitals. This is especially true of Medicaid patients of whom 29.7 percent were discharged from State or local government-owned hospitals compared with only 18.0 percent for patients covered by private insurance.

### Self-pay

Approximately 2.2 million patients (5.9 percent) expected to pay for their hospitalization principally by themselves (table 1). Of these, 1.1 million (49.3 percent) were females 15-44 years of age. This was 1.4 times greater than the total number of males expecting to pay for their hospitalization by themselves.

The length of stay for self-pay patients was . . . days (table 2). This was almost 4 days less than . . . length of stay for patients covered by public health programs and almost 2 days less than the 7.2 days for all patients (table 3). Lack of financial resources coupled with the age and reason for hospitalization

Table 6. Number and percent distribution of patients discharged from non-Federal short-stay hospitals by race and region and type of ownership of hospital, according to principal expected source of payment: United States, 1979

<i>Race, region, and type of ownership</i>	<i>All expected sources of payment</i>	<i>Private insurance</i>	<i>Workmen's Compensation</i>	<i>Medicare</i>	<i>Medicaid</i>	<i>Other government payments</i>	<i>Self-pay</i>	<i>No charge</i>	<i>Other payments</i>
Number in thousands									
Total . . . . .	36,747	19,289	643	9,925	3,227	918	2,168	30	546
Race									
White . . . . .	27,451	14,819	453	7,881	1,689	617	1,592	24	375
All other . . . . .	4,572	1,900	79	800	1,136	198	331	5	123
Not stated . . . . .	4,724	2,570	111	1,244	401	103	245	1	48
Hospital region									
Northeast . . . . .	7,786	4,125	91	2,154	819	151	334	1	110
North Central . . . . .	10,647	6,041	163	2,761	902	229	441	2	108
South . . . . .	12,425	6,402	252	3,464	989	268	865	3	180
West . . . . .	5,889	2,720	137	1,546	517	269	528	24	147
Hospital ownership									
Nonprofit . . . . .	26,105	14,188	444	7,085	2,065	623	1,334	4	362
Profit . . . . .	2,956	1,621	87	878	202	39	106	2	23
State or local government . . . . .	7,686	3,480	113	1,962	960	256	728	26	161
Percent distribution									
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Race									
White . . . . .	74.7	76.8	70.5	79.4	52.3	67.2	73.4	80.0	68.7
All other . . . . .	12.4	9.8	12.3	8.1	35.2	21.6	15.3	16.7	22.5
Not stated . . . . .	12.9	13.3	17.3	12.5	12.4	11.2	11.3	3.3	8.8
Hospital region									
Northeast . . . . .	21.2	21.4	14.2	21.7	25.4	16.4	15.4	3.3	20.1
North Central . . . . .	29.0	31.3	25.3	27.8	28.0	24.9	20.3	6.7	19.8
South . . . . .	33.8	33.2	39.2	34.9	30.6	29.2	39.9	10.0	33.0
West . . . . .	16.0	14.1	21.3	15.6	16.0	29.3	24.4	80.0	26.9
Hospital ownership									
Nonprofit . . . . .	71.0	73.6	69.1	71.4	64.0	67.9	61.5	13.3	66.3
Profit . . . . .	8.0	8.4	13.5	8.8	6.3	4.2	4.9	0.0	4.2
State or local government . . . . .	20.9	18.0	17.6	19.8	29.7	27.9	33.6	86.7	29.5

associated with these patients are some of the principal reasons for the shorter length of stay. According to the National Health Interview Survey data, 54.2 percent of all reasons given for no health insurance were that insurance costs were too high.<sup>6</sup>

In NHDS data, approximately one-half of all self-insurers are females aged 15-44 years, a period of life when cost of insurance may be a critical factor. A type of hospital utilization related both to self-pay status and short average length of stay are obstetrical conditions,<sup>2</sup> conditions which are very common for the age and sex of half of the self-pay patients.

An estimated 1.1 million (51.5 percent) self-insurers had at least one surgical or nonsurgical procedure performed (table 4). The majority of these (59.9 percent) were for females 15-44 years of age. Females composed about 70 percent of all self-insurers who had one or more procedures performed.

Approximately 1.6 million (73.4 percent) of the 2.2 million self-insurers discharged from non-Federal short-stay hospitals were white. Of the remaining 0.6 million, 0.3 million (15.3 percent) were of other races, and 0.2 million (11.3 percent) did not have their race stated in the medical record.

The South Region, with 0.9 million (39.9 percent), had the largest number and percent of self-insurers discharged from non-Federal short-stay hospitals. The number and percent of self-insurers discharged from these hospitals in the other three regions were 0.5 million (24.4 percent) for the West, 0.4 million (20.3 percent) for the North Central, and 0.3 million (15.4 percent) for the Northeast.

About 1.3 million (61.5 percent) of the self-insurers were hospitalized in nonprofit hospitals. Of the remaining 0.9 million self-insurers, 0.7 million (33.6 percent) were hospitalized in a State or local

hospital, and 0.1 million (4.9 percent) were hospitalized in a proprietary hospital.

#### No charge

In 1979 an estimated 30,000 patients (table 1) were not charged for approximately 242,000 days of care (table 2). This was only about 0.1 percent of all

discharges and days of care in short-stay hospitals. Females in the 15-44 years of age group composed 40.0 percent of all no-charge discharges (table 1) and 49.7 percent of all no-charge discharges for which one or more procedures were performed. In addition, 80.0 percent of the discharges were from the West, and 86.7 percent were discharged from State or local government hospitals.

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## References

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<sup>2</sup>National Center for Health Statistics: Expected principal source of payment for hospital discharges, United States, 1977, by R. Pokras and G. Gardocki. *Advance Data From Vital and Health Statistics*, No. 62. DHHS Pub. No. (PHS) 81-1250. Public Health Service. Hyattsville, Md. Oct. 31, 1980.

<sup>3</sup>National Center for Health Statistics: Utilization of short-stay hospitals, Annual summary for the United States, 1979, by B. J. Haupt.. *Vital and Health Care Statistics*. Series, 13-No. 60. DHHS Pub. No. (PHS) 82-1721. Public Health Service. Washington. U.S. Government Printing Office. In press.

<sup>4</sup>National Center for Health Statistics: Health care coverage: United States, 1976, by L. S. Corder, Ph.D. *Advance Data From Vital and Health Statistics*, No. 44. DHEW Pub. No. (PHS) 79-1250. Public Health Service. Hyattsville, Md. Sept. 20 1979

<sup>5</sup>National Center for Health Services Research: *National Health Care Expenditures Study, Who are the Uninsured*, Data Preview 1, by J. A. Kasper, D. C. Walden, and G. R. Wilensky. Office of Health Research, Statistics, and Technology. Public Health Service. Hyattsville, Md. 1980.

<sup>6</sup>National Center for Health Statistics: Health care coverage under private health insurance, Medicare, Medicaid, and military or veterans administration health benefits, United States, 1978. *Advance Data From Vital and Health Statistics*, No. 71. DHHS Pub. No. (PHS) 81-1250. Public Health Service. Hyattsville, Md. June 29, 1981.

<sup>7</sup>National Center for Health Statistics: *Health, United States, 1980*. DHHS Pub. No. (PHS) 81-1232. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1980.

<sup>8</sup>U.S. Bureau of the Census: *Statistical Abstract of the United States, 1980*. Washington. U.S. Government Printing Office, 1980.



## Technical notes

### Source of data

The National Hospital Discharge Survey encompasses patients discharged from short-stay non-institutionalized hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals with six beds or more and an average length of stay less than 30 days for all patients are included in the survey. Discharges of newborn infants are excluded from this report.

The universe of the survey consisted of 6,965 short-stay hospitals contained in the 1963 Master Facility Inventory of Hospitals and Institutions. New hospitals were sampled for inclusion into the survey in 1972, 1975, and 1977. In all, 544 hospitals were sampled in 1979. Of these hospitals, 80 refused to participate, and 48 were out of scope. The 416 participating hospitals provided approximately 215,000 medical records.

### Sample design

All hospitals with 1,000 beds or more in the universe of short-stay hospitals were selected with certainty in the sample. All hospitals with fewer than 1,000 beds were stratified, the primary strata being 24 size-by-region classes. 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 type of 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.

Sample discharges were selected within the hospitals using the daily listing sheet of discharges as the sampling frame. These discharges were selected by a random technique, usually on the basis of the terminal digit or digits of the patient's medical record number, a number assigned when the patient was admitted to the hospital. The within-hospital sampling ratio for selecting sample discharges varied inversely with the probability of selection of the hospital.

### Sampling errors, nonresponse, and data edits

Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The relative standard errors presented in table I are obtained by dividing the standard error of the estimate by the

estimate itself and are expressed as a percent of the estimate.

About 7.7 percent of the discharges sampled for the 1977 NHDS did not have information concerning source of payment on the face sheet of the medical record. An expected source of payment was imputed for these discharges based on the sex and age of the patient.

There were several edits performed on the raw data. When a principal expected source of payment was not indicated, but a single expected source of payment was listed as a secondary source of payment, the indicated secondary source of payment was assumed to be the principal expected source of payment. When Workmen's Compensation was listed in conjunction with other insurance sources, Workmen's Compensation was taken as the principal expected source of payment; and when Medicare was listed in conjunction with other insurance sources (except Workmen's Compensation), Medicare was taken as the principal expected source of payment.

Table I. Relative standard errors of estimates, by all principal expected sources of payment

Size of estimates	Number of discharges	Days of care
10,000 . . . . .	27.0	...
100,000 . . . . .	12.1	15.5
1,000,000 . . . . .	9.4	9.4
10,000,000 . . . . .	9.1	6.0
100,000,000 . . . . .	...	4.2

### Definitions

*Private insurance.*—Health insurance provided by nongovernment sources including consumers, insurance companies, private industry, and philanthropic organizations.

*Workmen's Compensation.*—A program in all states under which employees injured on the job receive financial compensation without regard to fault.

*Medicare (Title XVIII).*—A nationwide health insurance program providing health insurance protection to people 65 years of age and over, people eligible for social security disability payments for more than 2 years, and people with end-stage renal disease, regardless of income.

*Medicaid.*—A joint federal-state welfare program available in virtually all states that provide medicaid benefits for low income persons, including the aged. In order to qualify for this program, a person must meet each State's definition of "low income."

*Other government payments.*—Government payments in which the expected source of payment

cannot be classified in one of the other three government categories. These include payments made under the Title V Program, Champus (a program designed to provide medical coverage for dependants of military personnel), no fault (casualty coverage, vocational rehabilitation, Federal or State research grant (medical research), or legal hold (prisoner in medical detention).

*Self-pay.*—The major share of the total costs for this hospitalization is expected to be paid by the patient, spouse, family, or next of kin.

*No charge.*—There is no charge for hospital costs for patients admitted with the understanding that

payment would not be expected because the medical services are provided free of charge by the hospital. This category includes hospital sponsored welfare, staff services donated, and hospital-sponsored special research or “teaching” patients.

*Other payments.*—This includes all other non-profit sources of payment such as church welfare, United Way (United Appeal), or Shriner’s Crippled Children Services.

Definitions of other terms are available in Appendix II of another report.<sup>3</sup>

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### Symbols

- Data not available
  - ... Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standards of reliability or precision
  - # Figure suppressed to comply with confidentiality requirements
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