From Vital and Health Statistics of the National Center for Health Statistics

Number 95

● December 27, 1983

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1982 Summary: National Hospital Discharge Survey

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Introduction

During 1982 an estimated 38.6 million inpatients, excluding newborn infants, were discharged from short-stay non-Federal hospitals in the United States. These patients were hospitalized an average of 7.1 days and used 272.6 million ys of inpatient hospital care. Patients hospitalized during 182 accounted for 168 discharges and 1,186 days of care per 1,000 civilian population.

These and other statistics presented in this report are based on data collected by means of the National Hospital Discharge Survey, a continuous survey that has been conducted by the National Center for Health Statistics since 1965. In 1982, data were abstracted from the face sheets of medical records of approximately 214,000 patients discharged from 426 short-stay non-Federal hospitals. A brief description of the sample design, data collection procedures, and estimation process, and definitions of terms used in this report can be found in the section entitled "Technical notes." A detailed discussion of these items, as well as the survey form used to collect the data, have been published. 1,2

Coding of medical data for patients hospitalized is done according to the International Classification of Diseases, 9th Revision, Clinical Modification³ (ICD-9-CM). Up to seven diagnoses and four procedures are coded for each discharge. Although diagnoses included in the ICD-9-CM section entitled "Supplementary classification of external causes of injury and poisoning" (codes E800-E999) are used by the National Hospital Discharge Survey, these diagnoses are excluded from this report. The conditions diagnosed and procedures performed are presented here by chapter of ICD-9-CM. Within these shapters, a few diagnoses and procedures or groups thereof so are shown. These specific categories were selected primarily because of large numbers of occurrences or because they are of special interest. Residual categories of the diagnostic and procedure classes, however, are not included in the tables. More

detailed analyses of these data will be presented in later reports in Series 13 of *Vital and Health Statistics*.

Data highlights

Utilization by patient and hospital characteristics

The number, rate, and average length of stay of patients discharged from short-stay non-Federal hospitals are shown by selected patient and hospital characteristics in tables 1–3. The 38.6 million patients discharged from short-stay hospitals during 1982 included an estimated 15.5 million males and 23.1 million females. The rates per 1,000 population were 139 for males and 194 for females, making the rate for females about 40 percent higher than the rate for males. The number and rate of discharges are always higher for females than for males because of the large number of women in their childbearing years (15–44 years of age) who are hospitalized for deliveries and other obstetrical conditions. Excluding deliveries, the rate for females discharged was 161, or only about 16 percent higher than the rate for males.

The average length of stay was 7.5 days for males and 6.8 days for females during 1982. The length of stay for females was shorter than that for males primarily because the average length of stay of the 3.9 million women who were hospitalized for deliveries was only 3.6 days. The average length of stay for females who were not hospitalized for deliveries during 1982 was 7.4 days.

The number of discharges from short-stay hospitals by geographic region during 1982 ranged from 13.4 million in the South Region to 6.4 million in the West Region, and the rates per 1,000 population ranged from 186 in the North Central Region to 143 in the West Region. Regional differences in the number of discharges are accounted for mainly by variations in population sizes and to a lesser extent by variations in the dis-

charge rates. This is apparent when number of discharges and rate of discharges are compared among the regions. Although the rate of discharges per 1,000 population was highest in the North Central Region, the South Region had the highest number of discharges because the population in the South was about 30 percent larger than that in the North Central Region.

Average lengths of stay by geographic region were 5.9 days in the West, 6.6 days in the South, 7.4 days in the North Central, and 8.2 days in the Northeast.

Discharges from short-stay hospitals were about 40 percent male and 60 percent female in every hospital bed-size group; females with deliveries accounted for about 10.2 percent of all discharges regardless of hospital size. The average length of stay increased steadily from 5.7 days in the smallest hospitals (6–99 beds) to 8.0 days in the largest hospitals (500 beds or more) for all patients.

During 1982, voluntary nonprofit hospitals provided medical care to an estimated 27.2 million patients, or 70 percent of all patients hospitalized. Hospitals operated by State and local governments cared for 8.3 million patients, or 21 percent of all discharges, and proprietary hospitals operated for profit cared for 3.1 million patients or 8 percent of all discharges. Average lengths of stay were 7.2 days in voluntary nonprofit hospitals, 6.4 days in State and local government hospitals, and 7.1 days in proprietary hospitals.

Utilization by diagnosis

Diseases of the circulatory system ranked first in 1982 among the ICD-9-CM diagnostic chapters as a principal or first-listed diagnosis among patients discharged from non-Federal short-stay hospitals. These conditions accounted for an estimated 5.5 million discharges. Other leading ICD-9-CM diagnostic chapters were diseases of the digestive system (4.6 million discharges) and supplementary classifications (including females with deliveries) (4.6 million discharges). Almost 40 percent of the patients discharged from non-Federal short-stay hospitals were included in these three ICD-9-CM diagnostic chapters.

The diagnostic categories presented in this report were selected either because they appear as principal or first-listed diagnoses with great frequency or because the conditions are of special interest. Although many of these categories (such as malignant neoplasms; psychoses; and fractures, all sites) are groupings of more detailed diagnoses, they are presented as single categories without showing all of the specific diagnostic inclusions.

The number and rate of discharges and average length of stay for each ICD-9-CM diagnostic chapter and selected categories are shown by sex and age in tables 4-6. The most common diagnostic category for all patients was females with deliveries. This was followed by the diagnostic categories heart disease and malignant neoplasms. Excluding females with deliveries, these last two non-sex-specific diagnostic categories were also the most common first-listed diagnoses for each sex.

The most frequent first-listed diagnoses for 1982 varied for the different age groups. For patients under 15 years of age, the most frequent diagnosis was chronic disease of tonsils and adenoids. Excluding females with deliveries, the two most fre-

quent diagnoses for patients 15-44 years of age were abortions and ectopic and molar pregnancies, and fractures, all site Patients 45-64 years of age were hospitalized most frequently for heart disease. The most common diagnoses for patients 65 years of age and over were heart disease and malignant neoplasms.

The average length of stay for all patients ranged from a low of 1.9 days for the diagnostic category chronic disease of tonsils and adenoids to a high of 18.6 days for fracture of neck of femur. Although the overall average length of stay for females was shorter than that for males, females stayed in the hospital longer than males for many of the specific diagnostic categories examined in this report. Some categories for which women had substantially longer stays included alcohol dependence syndrome; arthroplasties and related disorders; intervetebral disc disorders; and fractures, all sites.

The average length of stay increased with increasing age for most categories of diagnoses shown. Overall, the average length of stay ranged from 4.6 days for patients under 15 years of age to 10.1 days for patients 65 and over. By diagnosis, stays were highest (when compared with the average length of stay) for patients with fracture of neck of femur (18.6 days), psychoses (15.5 days), and cerebrovascular disease (12.2 days).

Utilization by procedures

One or more surgical or nonsurgical procedures were performed for an estimated 20.8 million of the 38.6 million in patients discharged from short-stay hospitals during 1982. I total of 34.6 million procedures, or an average of 1.7 per patient who underwent at least one procedure, were recorded in 1982.

Procedures are grouped in the tables of this report by the ICD-9-CM procedure chapters. Selected procedures within these chapters also are presented by specific categories. Some of these categories (such as extraction of lens, open heart surgery, and hysterectomy) are presented as single categories although they may be divided into more precise subgroups.

Operations on the digestive system ranked first among the surgical and nonsurgical procedures (5.8 million) performed during 1982. These were followed by miscellaneous diagnostic and therapeutic procedures (5.5 million), operations on the female genital organs (4.0 million), and obstetrical procedures (3.9 million). Over one half (56 percent) of the procedures performed in 1982 were included in these four ICD-9-CM procedure chapters.

The number and rate of all-listed procedures in 1982 for each ICD-9-CM procedure chapter and selected procedure categories are shown by sex and age in tables 7 and 8. Of the 34.6 million procedures performed during 1982, 13.3 million were for males and 21.3 million were for females. The corresponding rates per 1,000 population were 151 for both sexes, 120 for males, and 179 for females. Of the procedures shown in table 8, the most common ones for males were endoscopies on the urinary system (natural orifice) and repair of inguin hernia; the most frequently performed procedures for females were episiotomy and diagnostic dilation and curettage of uterus.

The rate of procedures per 1,000 population increased with advancing age from 43 for patients under 15 years to 326 for patients 65 years of age and over. The most frequently per-

primed procedures for patients under 15 years of age were tonlectomy with or without adenoidectomy; for patients 15–44 years of age, episiotomy and cesarean section; for patients 45–64 years of age, arteriography and angiocardiography, and cardiac catheterization; and for patients 65 years of age and over, extraction of lens and endoscopies on the urinary system (natural orifice).

TABLE 1. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1982 (DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
		R OF PATIE	
TOTAL	38,593	15,470	23,123
AGE			
JNDER 15 YEARS	3,654	2,098	1,556
15-44 YEARS	15,554	4,615	10,939
45-64 YEARS	8,688	4,143	4,545
55 YEARS AND OVER	10,697	4,614	6,083
REGION			
NORTHEAST	7,847	3:238	4,610
NORTH CENTRAL	10,938	4,398	6,540
SOUTH	13,435	5,268	8.167
WEST	6,373	2,566	3,807
BED SIZE			
-99 BEDS	6,836	2,732	4,104
100-199 BEDS	6,738	2,648	4,089
200-299 BEDS	6,366	2,587	3,780
300-499 BEDS	9,547	3,874	5,673
500 BEDS OR MORE	9,106	3,629	5,478
OWNERSHIP			
NONPROFIT	27,207	10,820	16,387
STATE AND LOCAL GOVERNMENT	8,254	3,365	4,889
ROPRIETARY	3,133	1,285	1.848

TABLE 2. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, GEOGRAPHIC REGION, AND SEX: UNITED STATES, 1982

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

AGE AND REGION	BOTH Sexes	MALE	FEMALE
		ATIENTS D	
TOTAL	167.9	139.4	194.5
AGE			
UNDER 15 YEARS	71.2 145.0 195.5 398.8	79.9 87.4 196.3 428.1	62.0 201.0 194.8 379.1
REGION			
NORTHEASTNORTH CENTRALOUTH	159.0 186.1 173.9 143.3	137.6 154.3 141.8 117.7	178.6 216.0 203.5 167.8

TABLE 3. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1982

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
	AVERAGE LENGTH	OF STAY	IN DAYS
TOTAL	7.1	7.5	6.8
AGE			
UNDER 15 YEARS	4.6 5.1	4.6 6.3	4.6 4.6
45-64 YEARS	7.9 10.1	7.8 9.8	8.0 10.3
REGION			
NORTHEASTNORTH CENTRALSOUTHWEST	8.2 7.4 6.6 5.9	8.7 7.8 7.1 6.4	7.9 7.1 6.4 5.6
BED SIZE			
6-99 BEDS	5.7 6.5 7.1 7.5 8.0	5.8 7.0 7.4 7.9 8.8	5.6 6.3 6.9 7.3 7.5
OWNERSHIP			
NONPROFITSTATE AND LOCAL GOVERNMENT PROPRIETARY	7•2 6•4 7•1	7•7 6•9 7•4	7.0 6.1 7.0

TABLE 4. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1982

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

•		SE	EX.	AGE			
CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
	,	NUMBER	OF PATIEN	TS DISCHARG	ED IN THO	USANDS	
ALL CONDITIONS	38,593	15,470	23,123	3,654	15,554	8,688	10,697.
INFECTIOUS AND PARASITIC DISEASES	695	326	369	224	234	102	135
WEOPLASMS	2,594 1,972	1,096 941	1,498 1,031	73 46	492 215	912 716	1,117 995
BRONCHUS, AND LUNG	319 227	198 *	121 226	*	15 31	147 103	155 93
ENCOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS	1,161 661	43 2 265	729 396	62 22	302 158	372 241	426 240
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS280-289	367	159	208	66	94	55	151
MENTAL DISORDERS290-319	1,746	899	847	57	972	448	269
PSYCHOSES	574 285 417	260 95 321	313 190 95	*5 *9 *	305 170 238	151 72 143	113 33 33
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389	1,828	806	1,022	309	368	413	739
DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349 CATARACT366 DISEASES OF THE EAR AND MASTOID PROCESS380-389	429 555 345	202 210 174	226 345 170	61 * 177	146 18 62	98 107 60	123 428 46
DISEASES OF THE CIRCULATORY SYSTEM	5,488	2,785	2,703	45	535	1,780	3,128
ESSENTIAL HYPERTENSION401 HEART DISEASE391-392.0,393-398,402,404,410-416,420-429	333 3,477	138 1,849	195 1,62 7	* 29	65 250	139 1,171	2,026
ACUTE MYOCARDIAL INFARCTION	681 500	414 272	266 227	*	42 17	257 165	38 31
OTHER ISCHEMIC HEART DISEASE411-413,414-1-414.9 CONGESTIVE HEART FAILURE428.0	822 439	474 195	348 243	*	65 *8	386	36
CEREBROV ASCULAR DISEASE430-438	834	388	446	*	33	72 180	356 618
DISEASES OF THE RESPIRATORY SYSTEM	3,459	1,715	1,744	1,029	770	656	1,003
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA460-466 CHRONIC DISEASE OF TONSILS AND ADENOIDS474	459 436	224 176	235 259	229 280	88 149	63 *	79 *
PNEUMONIA, ALL FORMS	824 434	416 190	408 245	270 151	128 104	127 98	300 81
ISEASES OF THE DIGESTIVE SYSTEM520-579	4,628	2,162	2,466	486	1,496	1,292	1,354
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534 GASTRITIS AND DUODENITIS535	351 261	176 113	174 148	* 12	87 107	123 79	139 63
APPENDIC IT IS540-543	254	145	110	62	151	28	13
INGUINAL HERNIA	512 611	455 259	56 352	85 204	135 206	. 160 83	132 118
CHOLEL ITHIASIS574	496	129	367	*	174	167	153
ISEASES OF THE GENITOURINARY SYSTEM580-629 CALCULUS OF KIDNEY AND URETER592 DISORDERS OF MENSTRUATION AND OTHER	3,411 297	1,079 196	2,332 101	159 *	1,689 153	816 99	748 42
ABNORMAL VAGINAL BLEEDING626	360	-	360	*	276	82	*
OMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	1,018 484	•••	1.018 484	*5 *	1,009 477	*5 *	•••
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	566	277	289	69	229	133	135
ISEASES OF THE MUSCULOSKELETAL SYSTEM							
AND CONNECTIVE TISSUE	2,377 568	1,016 233	1,361 336	78 18	943 188	778 170	578 193
INTERVERTEBRAL DISC DISORDERS722	436	238	198	*	225	158	52
ONGENITAL ANOMALIES	335	171	163	174	93	43	25
ERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD760-779	166	95	71	164	*	_	_
YMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS780-799	624	289	334	121	267	148	88
NJURY AND POISONING800-999	3,568	1,985	1,583	464	1,714	643	747
FRACTURES, ALL SITES	1,132 228	565 57	56 7 17 1	153 *	404 *7	189 26	387 192
SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847 INTRACRANIAL INJURIES (EXCUDING THOSE WITH	305	136	170	*	191	78	3
SKULL FRACTURE)850-854	285	178	106	72	152	29	32
LACERATIONS AND OPEN WOUNDS870-904	328	245	83	48	. 204	48	28
UPPLEMENTARY CLASSIFICATIONS	4+563 200	177 *	4,385 197	69	4,346 197	92 *	· 55 *
FEMALES WITH DELIVERIES	3,945	•••	3,945	13	3 • 928	*	•••

^{1/} FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 5. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1982

DISCHARGES FROM NUNFEDERAL HUSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

		S	EX	AGE			
CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS
		RATE OF IN	PATIENTS D	ISCHARGED P	ER 10,000	POPULATIO	N
ALL CONDITIONS	1,679.0	1,394.0	1,944.9	711.6	1,450.2	1,955.2	3,987.9
INFECTIOUS AND PARASITIC DISEASES	30.2	29.4	31.0	43.6	21.8	22.9	50.3
NEOPLASMS140-239	112.8	98.7	126.0	14.1	45.9	205.3	416.3
MALIGNANT NEOPLASMS	85.8	84.8	86.7	8.9	20.1	161.0	370.9
BRONCHUS, AND LUNG	13.9 9.9	17.8 *	10.2 19.0	*	1.4 2.9	33.2 23.2	58.0 34.6
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS240-279	50.5	38.9	61.3	12.0	28•2	83.7	158.6
DIABETES MELLITUS	28.8	23.9	33.3	4.3	14.7	54.3	89.5
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS280-289	16.0	14.3	17.5	12.9	8.8	12.4	56.5
MENTAL DISCRDERS290-319	76.0	81.0	71.2	11.1	90.7	100.8	100.1
PSYCHOSES	25.0 12.4	23.5 8.6	26.4 16.0	*1.0 *1.8	28.5 15.9	33.9 16.3	42.0
ALCOHOL DEPENDENCE SYNDROME	18.1	29.0	8.0	*1.0	22.2	32.2	12.4 12.5
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389	79.5	72.6	86.0	60.1	34.3	93.0	275.4
DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349 CATARACT366	18.6 24.2	18.2 19.0	19.0	12.0 *	13.6	22.0	45.9
DISEASES OF THE EAR AND MASTOID PROCESS380-389	15.0	15.7	29.0 14.3	34.4	1.6 5.8	24.1 13.4	159.7 17.0
DISEASES OF THE CIRCULATORY SYSTEM390-459	238.8	251.0	227.3	8.8	49.9	400.6	1,166.3
ESSENTIAL HYPERTENSION	14.5	12.4	16.4	*	6.1	31.4	46.8
HEART DISEASE391-392.0,393-398,402,404,410-416,420-429 ACUTE MYOCARDIAL INFARCTION	151.2 29.6	166.6 37.3	136.9 22.4	5.7 *	23.3 4.0	263.5 57.9	755.2 141.5
ATHEROSCLEROTIC HEART DISEASE414.0	21.7	24.5	19.1	*	1.6	37.1	118.0
OTHER ISCHEMIC HEART DISEASE411-413,414.1-414.9 CONGESTIVE HEART FAILURE428.0	35.8 19.1	42.7	29.2	*	6.0	86.9	137.6
CEREBROVASCULAR DISEASE	36.3	17.6 35.0	20.5 37.5	*	*0.8 3.1	16.2 40.4	132.6 230.3
DISEASES OF THE RESPIRATORY SYSTEM	150.5	154.5	146.7	200.5	71.8	147.7	374.0
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA460-466 CHRONIC DISEASE OF TONSILS AND ADENDIDS	20.0	20.2	19.7	44.5	8-2	14.2	29.6
PNEUMONIA, ALL FORMS480—486	19.0 35.9	15.9 37.5	21.8 34.3	54.5 52.5	13.9 11.9	* 28.5	* 111.8
ASTHMA493	18.9	17-1	20.6	29.3	9.7	22.1	30.4
ISEASES OF THE DIGESTIVE SYSTEM520-579	201.3	194.8	207.4	94.6	139.5	290.7	504.7
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534 GASTRITIS AND DUODENITIS535	15.3 11.4	15.9 10.1	14.7 12.5	* 2.4	8.1 10.0	27.7 17.8	51.7 23.4
APPENDICITIS540-543	11-1	12.1	9-2	12.2	14.1	6.2	4.9
INGUINAL HERNIA550 NONINFECTIOUS ENTERITIS AND COLITIS555-556,558	22.3 26.6	41.0 23.3	4.7 29.6	16.5 39.7	12.6 19.2	36.0	49.1
CHOLEL IT HIAS IS	21.6	11.6	30.9	*	16.2	18.7 37.5	44.1 57.2
ISEASES OF THE GENITOURINARY SYSTEM580-629	148.4	97.2	196.2	30.9	157.5	183.6	278.9
CALCULUS OF KIDNEY AND URETER592 DISORDERS OF MENSTRUATION AND OTHER	12.9	17.6	8. 5	*	14.3	22.2	15.8
ABNORMAL VAGINAL BLEEDING626	15.7	-	30.3	*	25.7	18.5	*
OMPLICATIONS OF PREGNANCY, CHILDBIRTH,							
AND THE PUERPERIUM	44.3 21.1	•••	85.6 40.7	*1.0 *	94 • 0 44 • 5	*1.0 *	•••
ISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	24.6	24.9	24.3	13.5	21.3	30.0	50.3
ISEASES OF THE MUSCULOSKELETAL SYSTEM							
AND CONNECTIVE TISSUE	103.4	91.5	114.5	15.2	87.9	175.1	215.4
ARTHROPATHIES AND RELATED DISORDERS710-719 INTERVERTEBRAL DISC DISORDERS722	24.7 19.0	21.0 21.4	28.2 16.7	3 . 5 *	17.5 20.9	38.3 35.6	71.8 19.5
ONGENITAL ANOMALIES740-759	14.6	15.4	13.7	33.9	8.7	9.6	9.3
ERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	3 0	2 (
	7.2	8.6	5.9	32.0	*	<u>-</u>	-
YMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS780-799	27.1	26.1	28.1	23.6	24.9	33.4	32.6
NJURY AND POISONING800-999 FRACTURES, ALL SITES800-829	155.2 49.3	178.9 5 0. 9	133.1 47.7	90.4	159.8	144.7	278.6
FRACTURE OF NECK OF FEMUR820	9.9	5.1	14.4	29•7 *	37.7 *0.7	42.4 5.8	144.2 71.4
SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847 INTRACRANIAL INJURIES (EXCUDING THOSE WITH	13.3	12.2	14.3	*	17.8	17.6	12.4
SKULL FRACTURE)850-854	12.4	16.1	8.9	14.0	14.2	6.5	11.8
LACERATIONS AND OPEN WOUNDS	14.3	22.1	7.0	9.3	19.0	10.8	10.4
UPPLEMENTARY CLASSIFICATIONS	198.5	16.0	368.9	13.5	405.2	20.7	20.5
PERSONS MUNITIED FOR STERILIZATION	8.7	*	16.6	-	18.4	*	*

^{1/} FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27, SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 6. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1982

(DISCHARGES FROM NUMFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. DIAGNOSTIC GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

		S1	EX		AG	SE	
CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEAR:
			AVERAGE LE	NGTH OF STA	Y IN DAYS		
LL COND IT IONS	7.1	7.5	6.8	4.6	5.1	7.9	10.1
NFECTIOUS AND PARASITIC DISEASES	6.7	6.3	7.0	4.2	5.6	8.6	11.0
EDPLASMS140-239	9.9	10.4	9.6	5.9	6.6	9.8	11.8
MALIGNANT NEOPLASMS	11.1	11.2	11.1	7.5	8.1	10.7	12.2
MALIGNANT NEUPLASM OF TRACTICA, BRONCHUS, AND LUNG	10.9 10.0	11.2	10.5 10.0	*	7.8 7.4	10.5 10.1	11.6 10.8
NDOCRINE, NUTRITIONAL AND METABOLIC DISEASES,	8.8	8.5	9.0	5.8	6.6	8.8	10.9
AND IMMUNITY DISORDERS	9.5	9.1	9.7	6.2	6.9	9.7	11.3
ISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS280-289	7.0	6.7	7.2	4.9	4.9	8.1	8.8
ENTAL DISORDERS290-319	12.1	11.6	12.6	13.7	11.8	12.0	13.0
PSYCHOSES290-299	15.5 10.1	14.7 9.8	16.2 10.3	*28.3 *11.4	14.7 10.6	16.4 9.3	15.7 9.0
NEUROTIC AND PERSONALITY DISORDERS300-301 ALCOHOL DEPENDENCE SYNDROME303	11.2	10.6	13.0	*11.4	11.2	10.9	12.2
	5.4	5.7	5.1	3.5	6.1	5.8	5.5
ISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389 DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349	11.0	11.6	10.4	7.7	9.3	11.4	14.3
CATARACT366	2.9 3.2	2•8 2•9	3.0 3.5	* 2•4	2.6 3.2	2.8 4.0	3.0 5.2
DISEASES OF THE EAR AND MASTOID PROCESS	5.2						
ISEASES OF THE CIRCULATORY SYSTEM	9.4	9•0 5•9	9.8 6.8	7.1 *	6.6 4.6	8.2 6.1	10.5 7.8
ESSENTIAL HYPERTENSION401 HEART DISEASE391-392.0,393-398,402,404,410-416,420-429	6.4 8.9	8.5	9.4	6.9	6.7	7.9	9.8
ACUTE MYDCARDIAL INFARCTION410	11.2	11.0	11.6	*	9.1	10.7	11.9
ATHEROSCLEROTIC HEART DISEASE414-0 OTHER ISCHEMIC HEART DISEASE411-413,414-1-414-9	8.8 7.1	7.9 6.8	9•9 7•5	*	5.0 5.6	7.1 6.6	9.9 7.9
CONGESTIVE HEART FAILURE428.0	10.1	9.3	10.7	*	*10.2	8.7	10.4
CEREBROVASCULAR DISEASE430-438	12.2	11.5	12.9	*	11.2	11.2	12.6
SEASES OF THE RESPIRATORY SYSTEM	6.2	6.2	6.3	3.5	4-1	7.5	9.7
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA460-466 CHRONIC DISEASE OF TONSILS AND ADENOIDS474	4.8 1.9	4.5 1.8	5•2 2•0	3.7 1.7	3.9 2.1	6.1 *	8.0
PNEUMONI A. ALL FORMS480-486	8.0	7.9	8.1	5.0	6.3	8.8	11.1
ASTHMA493	5.5	4.9	5.9	3.6	5.2	6.4	8.1
ISEASES OF THE DIGESTIVE SYSTEM520-579	6.8	6.4	7.2	4.0	5.4	7.1	9.0
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534 GASTRITIS AND DUODENITIS535	7.9 5.3	7.3 4.8	8.6 5.7	* 3•0	5.8 4.2	7.2 5.5	10.0 7.6
APPENDICITIS540-543	5.3	5.0	5.7	4.5	4.8	7.5	11.1
INGUINAL HERNIA	4.5	4.5	4.7	2•5 4•0	3.8 5.5	4•7 5•9	6.3 6.8
NONINFECTIOUS ENTERITIS AND COLITIS555-556,558 CHOLELITHIASIS574	5.3 8.9	5•3 9•6	5.3 8.7	*	7.2	8.4	11.4
			5.2	3.5	4.6	5.5	8.5
ISEASES OF THE GENITOURINARY SYSTEM580-629 CALCULUS OF KIDNEY AND URETER592	5.6 4.8	6.4 4.4	5.6	*	3.9	5.2	7.6
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING	3.5	_	3.5	*	3.5	3.5	, *
OMPLICATIONS OF PREGNANCY, CHILDBIRTH,							
AND THE PUERPERIUM	2.5	•••	2.5	*2.3	2.5 2.0	*3.0 *	•••
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES630-639	2.0	•••	2.0				12.0
ISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	8.3	8.2	8.5	4.3	6.0	8.8	13.8
ISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE710-739	7.7	7.0	8.2	5.1	6.2	7.7	10.7
ARTHROPATHIES AND RELATED DISORDERS710-719	8.5	6.9	9.6	5.5	5.0	8.8	11.8
INTERVERTEBRAL DISC DISORDERS722	9.5	8.7	10.6	*	8. 7	9.7	12.4
ONGENITAL ANCMALIES740-759	6.1	5.9	6.3	5.5	5.7	7.7	8.5
ERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD760-779	12.7	12.6	12.8	12.7	*	_	-
YMPTOMS, SIGNS: AND ILL-DEFINED CONDITIONS780-799	4-1	3.9	4.2	3.1	3.5	4.4	6.5
NJURY AND POISONING800-999	7.4	6.6	8.4	4.3	5.8	8.0	12.6
FRACTURES, ALL SITES800-829	10.1	8.3	11.8	5.2	7.2	9.7	15.2
FRACTURE OF NECK OF FEMUR820 SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847	18.6 7.4	18•2 7•2	18.7 7.6	*	*20.4 7. 0	16.5 7.9	18.7 9.1
INTRACRANIAL INJURIES (EXCUDING THOSE WITH							
SKULL FRACTURE 1850-854 LACERATIONS AND OPEN WOUNDS870-904	5.6 5.3	5.5 5.4	5.8 5.2	3.1 4.0	5.7 5.1	8.4 5.9	8.7 8.0
UPPLEMENTARY CLASSIFICATIONS	3.6 2.0	4.1 *	3.5 2.0	3.7	3.5 2.0	4.8 *	6.8 *
PERSUNS AUMITICU FUR STERALIZATIUN	3.6	_	3.6	4.3	3.6	*	•••

^{1/} FIRST-LISTED DIAGNOSIS FOR FEMALES WITH DELIVERIES IS CODED V27. SHOWN UNDER "SUPPLEMENTARY CLASSIFICATIONS."

TABLE 7. NUMBER OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE:

SCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. PROCEDURE GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE TERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

		SEX		AGE			
PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
		NUMBER (OF ALL-LIS	TED PROCEDU	RES IN TH	DUSANDS	
ALL PROCEDURES	34,632	13,331	21,302	2,219	15,296	8,368	8,750
OPERATIONS ON THE NERVOUS SYSTEM01-05	859	436	424	139	286	254	180
OPERATIONS ON THE ENDOCRINE SYSTEM06-07	109	31	79	*	46	37	22
OPERATIONS ON THE EYE	1,402 599 418	565 230 1 58	837 369 261	64 *6 *	128 21 *5	289 114 75	922 458 337
OPERATIONS ON THE EAR	332 163	178 95	153 68	184 144	73 *11	47 *5	27 *
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX21-29 RHINUPLASTY AND REPAIR OF NOSE	1,492 250 438	709 117 179	783 133 259	424 *10 269	732 191 163	215 39 *5	120 *10 *
OPERATIONS ON THE RESPIRATORY SYSTEM30-34 BRONCHOSCOPY	921 207	554 127	36 7 81	51 *11	177 30	340 80	354 87
OPERATIONS ON THE CARDIOVASCULAR SYSTEM35-39	1,749	1,051	697	106	229	723	691
OPEN HEART SURGERY	243	168	75	15	23	130	74
DIRECT HEART REVASCULARIZATION	170 471	125 309	45 161	* 33	14 61	105 262	50 114
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR37.7-37.8	202	102	100	*	*6	34	161
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM40-41	362	182	179	27	81	104	149
PPERATIONS ON THE DIGESTIVE SYSTEM	5,790 249	2,544 115	3,246 134	294 *9	2•078 58	1,630 87	1,789 95
OF INTESTINE47.0	240 277	113 146	127 131	* 65	34 170	76 28	127 14
HEMORRHO IDECTOMY	165 493	82 132	83 361	-	80 186	63 166	22 138
REPAIR OF INGUINAL HERNIA53.0-53.1 DIVISION OF PERITONEAL ADHESIONS54.5	549 286	489 40	60 246	93 *	139 177	167 59	150 48
CPERATIONS ON THE URINARY SYSTEM	1,901 841 184	1,098 552 90	802 289 94	113 42 18	448 155 51	548 243 46	792 401 69
OPERATIONS ON THE MALE GENITAL ORGANS	850	850	•••	117	128	209	396
PROSTATECTOMY	358 90	358 90	•••	46	* 22	96 14	261 *7
OPERATIONS ON THE FEMALE GENITAL ORGANS	4.023 500	•••	4,023 500	13	3,006 301	736 153	268 45
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES	602	•••	602	_	595	*6	_
HYSTERECTOMY	650 106	•••	650 106	*	410 105	181	58 •••
AFTER DELIVERY OR ABORTION69.02 DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS69.09	275 741	•••	275 741	*	272 493	* 200	• • • • • • • • • • • • • • • • • • •
REPAIR OF CYSTOCELE AND RECTOCELE70.5	154	•••	154	-	54	55	45
OBSTETRICAL PROCEDURES72-75 EPISIOTOMY WITH OR WITHOUT FORCEPS	3,945	•••	3,945	16	3,925	*	•••
OR VACUUM EXTRACTION72.1,72.21,72.31,72.71,73.6	2•032 730	•••	2,032	*7 *	2.024	*	•••
CESAREAN SECTION	449	•••	730 449	*	727 447	-	•••
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM	3,583	1,814	1,769	253	1,664	928	738
76.74,76.76-76.77,76.79,79.2-79.3,79.5-79.6 OTHER REDUCTION OF	434	240	195	30	195	79	130
FRACTURE76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4 EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC	256	145	112	64	99	45	48
AND SPINAL FUSION	227 151 137	126 106 74	101 45 63	*5 * *	120 97 69	85 38 25	16 13 39
ARTHROPLASTY AND REPLACEMENT OF HIP81.5-81.6	148	46	101	*	*8	38	102
REPERATIONS ON THE INTEGUMENTARY SYSTEM	1,862 111 156	722 *6 98	1,140 105 58	126 * 17	810 16 65	555 52 41	370 42 34
HISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES87-99 COMPUTERIZED AXIAL TOMOGRAPHY87.03,87.41,87.71,88.01,88.38	5,454 600	2,597 289	2,857 311	288 44	1,485 150	1.750 158	1,931 248
PYELOGRAH87.73-87.75 ARTERIOGRAPHY AND ANGICCARDIOGRAPHY	464	235	229	18	153	136	156
USING CONTRAST MATERIAL	740 561 641	456 204 284	284 357 357	17 22 12	101 198 123	368 149 208	254 192 29 7

TABLE 8. RATE OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE: UNITED STATES, 1982

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS. PROCEDURE GROUPINGS AND CODE NUMBER INCLUSIONS ARE BASED ON THE INTERNATIONAL CLASSIFICATION OF DISEASES, 9TH REVISION, CLINICAL MODIFICATION)

		SE	×		AG	E	
PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
	R	ATE OF ALL-	LISTED PRO	CEDURES PE	R 100,000	POPULATION	ı
ALL PROCEDURES	15,066.4	12,012.4	17:916.9	4,320.1	14,261.4	18,831.9	32,620.3
OPERATIONS ON THE NERVOUS SYSTEM	373.8	392.6	356.3	270.1	267.1	572.5	670.0
OPERATIONS ON THE ENDOCRINE SYSTEM	47.5	27.5	66.2	*	42.5	83.7	82.0
OPERATIONS ON THE EYE	609.8 260.6 182.0	509 • 1 207 • 1 142 • 0	703.9 310.5 219.3	124.0 *11.4 *	119.1 19.4 *	649.7 256.9 169.3	3,435.9 1,707.7 1,257.2
OPERATIONS ON THE EAR	144.4 70.7	160.8 85.4	129.1 57.0	358.3 2 7 9.9	68.2 *10.5	106.6 *10.2	101.9 *
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX21-29 RHINOPLASTY AND REPAIR OF NOSE21.8 TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY28.2-28.3	649.0 108.9 190.7	638.6 105.3 161.5	658.8 112.2 217.9	826.3 *18.8 523.3	682.4 178.1 151.6	484.6 88.8 *11.2	449.1 *37.7 *
OPERATIONS ON THE RESPIRATORY SYSTEM	400.7 90.2	498.9 114.0	309.1 68.0	98•5 *20•8	165.0 27.7	764.1 180.3	1,320.2 324.1
OPERATIONS ON THE CARDIOVASCULAR SYSTEM	760.8	947.5	586.5	205.4	213.8	1,626.3	2,577.3
OPEN HEART SURGERY	105.6	151.4	62.9	29.6	21.2	293.4	277.5
DIRECT HEART REVASCULARIZATION	74.0 204.7	112.9 278.7	37.7 135.7	* 64.9	13.1 57.0	237.3 590.1	186.6 424.5
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR37.7-37.8	87.7	91.6	84.1	*	* 5.1	75.8	600.0
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM40-41	157.3	164.2	150.9	52.5	75.3	235.0	557.1
OPERATIONS ON THE DIGESTIVE SYSTEM	2,519.0 108.4	2,292.7 103.4	2.730.2 113.0	572.1 *18.3	1,937.5 54.4	3,667.4 195.5	6,669 35.
OF INTESTINE43.5-43.8,45.6-45.8 APPENDECTOMY, EXCLUDING INCIDENTAL47.0	104.3 120.3	101.7 131.4	106.7 110.0	* 126.8	31.3 158.1	170.4 62.7	472.5 52.5
HEMORRHOIDECTOMY		74.0 118.8	69.7 303.4	- *	74.6 173.8	141.7 374.0	81.6 514.2
REPAIR OF INGUINAL HERNIA53.0-53.1	238.9	440.9	50.4	181.9	129.8	375.1	559.0
DIVISION OF PERITONEAL ADHESIONS	124.6	36.1	207.3	•	165.1	133.6	177.5
OPERATIONS ON THE URINARY SYSTEM55-59 ENDOSCOPIES (NATURAL ORIFICE)55.21-55.22,56.31,57.32,58.22 DILATION OF URETHRA58.6	366.0	989.7 497.5 81.5	675.0 243.3 78.9	220.0 81.8 34.2	417.9 144.7 47.8	1,233.1 547.8 103.9	2,951.6 1,493.8 257.9
OPERATIONS ON THE MALE GENITAL ORGANS		766.0	• • •	228.4	119.5	469.7	1,475.7
PROSTATECTOMY	155.9 39.3	322.9 81.4	•••	90.2	* 20•7		974.8 *2 7. 6
OPERATIONS ON THE FEMALE GENITAL ORGANS65-71 COPHORECTOMY AND SALPINGO-OOPHORECTOMY65.3-65.6 BILATERAL DESTRUCTION OR OCCLUSION		•••	3,383.4 420.7	25.4 *	2,802.5 280.2	1,655.7 343.8	999•1 169•0
OF FALLOPIAN TUBES66.2-66.3		***	506.1	_	555.0	*14.1	
HYSTERECTOMY68.3-68.7 CURETTAGE OF UTERUS TO TERMINATE PREGNANCY69.01,69.51 DILATION AND CURETTAGE OF UTERUS	46.3	•••	546.7 89.5	*	382.5 97.8		216.6
AFTER DELIVERY OR ABORTION	119.5 322.3	•••	231.1 623.2	*	253.5 459.7	* 450.2	176.2
REPAIR OF CYSTOCELE AND RECTOCELE70.5		•••	129.7	-	50.4	124.2	167.4
OBSTETRICAL PROCEDURES72-75 EPISIOTOMY WITH OR WITHOUT FORCEPS	1,716.2	•••	3,318.0	32.0	3,659.2	*	•••
OR VACUUM EXTRACTION72.1,72.21,72.31,72.71,73.6		•••	1,708.8	13.0	1,886.7	*	
CESAREAN SECTION74.0-74.2,74.4,74.99 REPAIR OF CURRENT OBSTETRIC LACERATION75.5-75.6	317.7 195.4	•••	614.3 377.8	*	677.4 416.7	*	•••
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM	•	1.634.2	1,488.1	492.3	1,551.2	2,088.8	2,751.4
76.74,76.76-76.77,76.79,79.2-79.3,79.5-79.6 OTHER REDUCTION OF	189.0	216.2	163.6	58.6	182.0	178.5	484.1
FRACTURE76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4 EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC	111.5	130.4	93.8	125.2	92.3	102.1	177.2
AND SPINAL FUSION	65.5 59.6	113.3 95.3 66.6 41.8	84.8 37.7 53.1 85.3	*9.7 * *	112.2 90.5 64.5 *7.1	190.8 86.6 55.2	61.5 46.9 145.7
GPERATIONS ON THE INTEGUMENTARY SYSTEM	810.0 48.3	650.7 *5.3	958 . 7 88 . 4	246•2 *	755.7 14.7	84.7 1,248.4 116.7	380.3 1,380
		88.7	48.7	32.9	60.2	92.1	126
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES87-99 COMPUTERIZED AXIAL TOMOGRAPHY87.03,87.41,87.71,88.01,88.38 PYELOGRAM	260.9	2,340.0 260.4 212.1	2,402.8 261.4 192.3	559.9 84.8 36.0	1,384.4 139.8 142.6	3,938.0 355.6 306.5	7,199.9 925.3 583.0
USING CONTRAST MATERIAL	244.1	410.9 184.2 255.6	238.7 300.0 300.2	33•4 42•2 23•7	94.0 184.4 114.9	828.4 335.8 468.3	945.7 717.1 1,107.3

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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 than500 where numbers are rounded to thousands
- Figure does not meet standards of reliability or precision
- # Figure suppressed to comply with confidentiality requirements

Technical notes

Source of data

The National Hospital Discharge Survey (NHDS) encompasses patients discharged from short-stay hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals with six or more beds and an average length of stay of 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 in the survey in 1972, 1975, 1977, 1979, and 1981. In all, 550 hospitals were sampled in 1982. Of these hospitals, 71 refused to participate, and 53 were out of scope. The 426 participating hospitals provided approximately 214,000 abstracts of medical records.

Sample design

All hospitals with 1,000 or more beds 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 hopsitals 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.

Data collection and estimation

The sample selection and the transcription of information from the hospital records for abstract forms were performed by the hospital staff or by representatives of the National Center for Health Statistics or by both. The data were abstracted from the face sheets of the medical records. All discharge diagnoses and procedures were listed on the abstract in the order of the principal one, or the first-listed one if the principal one was not identified, followed by the order in which all other diagnoses or procedures were entered on the face sheet of the medical record.

Statistics produced by the NHDS are derived by a complex estimating procedure. The basic unit of estimation is the sample inpatient discharge abstract. The estimating procedure used to produce essentially unbiased national estimates in the NHDS has three principal components: inflation by reciprocals of the probabilities of sample selection, adjustment for nonresponse,



and ratio adjustment to fixed totals. These components of estimation are described in appendix I of two earlier publications.^{4,5}

Sampling errors and rounding of numbers

The standard error is a measure of the sampling variability that occurs by chance because only a sample, rather than an entire universe, is surveyed. The relative standard error of the estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. Relative standard errors for discharges and first-listed diagnoses are shown in table II, relative standard errors for days of care are shown in table III.

Table I. Approximate relative standard errors of estimated numbers of discharges, first-listed diagnosis, and all-listed diagnoses, by selected patient and hospital characteristics: United States, 1982

	Ownership o	of hospital		
Size of estimate	Proprietary or State and local government	Nonprofit	Bed size less than 100	All other character- istics
		Relative star	ndard error	
5,000	40.4	22.7	25.8	20.5
10,000	35.7	19.9	20.7	16.3
50,000	27.9	15.2	13.1	10.2
100,000	25.5	13.7	11.0	8.5
300,000	22.4	11.9	8.6	6.6
500,000	21.2	11.2	7.8	5.9
1,000,000	19.9	10.4	6.8	5.1
3,000,000	18.1	9.4	5.7	4.2
5,000,000	17.4	9.0	5.2	3.9
10,000,000	16.5	8.5	4.7	3.5
15,000,000	16.1	8.3	4.5	3.3
20,000,000	15.8	8.1	4.3	3.2
30,000,000	15.4	7.9	4.1	3.0
40,000,000	15.2	7.8	4.0	2.9

Table II. Approximate relative standard errors of estimated numbers of days of care by selected patient and hospital characteristics: United States, 1982

Size of estimate	Proprietary hospitals	All other characteristics
10,000	46.3	29.2
30,000	37.1	22.2
50,000	33.7	19.6
100,000	29.6	16.6
300,000	24.5	13.0
500,000	22.6	11.6
1,000,000	20.3	10.0
3,000,000	17.3	8.0
5,000,000	16.1	7.2
10,000,000	14.8	6.4
50,000,000	12.3	4.9
00,000,000	11.5	4.4
200,000,000	10.7	4.0
300,000,000	10.4	3.8

NOTE: A list of references follows the text.

. Approximate relative standard errors of estimated numbers ted procedures: United States, 1982

Size of estimate	Relative standard error
5,000	21.9
10,000	18.3
25,000	14.6
50,000	12.6
100,000	10.9
500,000	8.2
1,000,000	7.4
3,000,000	6.4
5,000,000	6.0
10,000,000	5.5
15,000,000	5.3
20,000,000	5.1
25,000,000	5.0
35,000,000	4.9

Estimates have been rounded to the nearest thousand. For this reason detailed figures within tables do not always add to the totals. Rates and average lengths of stay were calculated from original, unrounded figures and will not necessarily agree precisely with rates or average lengths of stay calculated from rounded data.

ests of significance

In this report, the determination of statistical inference is based on the two-tailed Bonferroni test for multiple comparisons. Terms relating to differences such as "higher" and "less" indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistically significant difference exists between the estimates being compared. A lack of comment on the difference between any two estimates does not mean that the difference was tested and found to be not significant.

Definition of terms

Hospitals and hospital characteristics

Hospitals—Short-stay special and general hospitals have six or more beds for inpatient use and an average length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included.

Bed size of hospital—Measured by the number of beds, cribs, and pediatric bassinets regularly maintained (set up and staffed for use) for patients; bassinets for newborn infants are not included. In this report the classification of hospitals by bed size reported by the hospitals is based on the number of beds at or near midvear.

Type of ownership of hospital—Determined by the organtion that controls and operates the hospital. Hospitals are ouped as follows:

- Voluntary nonprofit—Hospitals operated by a church or another nonprofit organization.
- Government—Hospitals operated by a State or local government.

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

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 the year including any multiple discharges of the same individual from one or more short-stay hospitals. Infants admitted on the day of birth, directly or by transfer from another medical facility, with or without mention of disease, disorder, or immaturity, are included. All newborn infants, defined as those admitted by birth to the hospital, are excluded from this report. The terms "patient" and "inpatient" are used synonymously.

Discharge—The formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death or by disposition to place of residence, nursing home, or another hospital. The terms "discharges" and "patients discharged" are used synonymously.

Discharge rate—The ratio of the number of hospital discharges during a year to the number of persons in the civilian population on July 1 of that year.

Days of care—The total number of patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year. A stay of less than 1 day (patient 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 patient days accumulated at time of discharge by patients discharged from short-stay hospitals during a year to the number of persons in the civilian population on July 1 of that year.

Average length of stay—The total number of patient days accumulated at time of discharge by patients discharged during the year, divided by the number of patients discharged.

Terms relating to diagnoses

Discharge diagnoses—One or more diseases or injuries (or some factor that influences health status and contact with health services which is not itself a current illness or injury) listed by the attending physician or the medical record of a patient. In the NHDS all discharge (or final) diagnoses listed on the face sheet (summary sheet) of the medical record for patients discharged from the inpatient service of short-stay hospitals are transcribed in the order listed. Each sample discharge is assigned a maximum of seven five-digit codes according to ICD-9-CM.³ The number of principal or first-listed diagnoses is equivalent to the number of discharges.

Principal diagnosis—The condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.

First-listed diagnosis—The coded diagnosis identified as the principal diagnosis or listed first on the face sheet of the

medical record if the principal diagnosis cannot be identified. The number of first-listed diagnoses is equivalent to the number of discharges.

Procedure—One or more surgical or nonsurgical operations, procedures, or special treatments assigned by the physician to patients discharged from the inpatient service of short-stay hospitals. In the NHDS all terms listed on the face sheet (summary sheet) of the medical record under the captions "operation," "operative procedures," "operations and/or special treatment," and the like are transcribed in the order listed. A maximum of four procedures are coded.

Rate of procedures—The ratio of the number of all-listed procedures during a year to the number of persons in the civilian population on July 1 of that year.

Demographic terms

Age—Refers to the age of the patient on the birthday prior to admission to the hospital inpatient service.

Geographic regions—One of the four geographic of the United States corresponding to those used by U. Bureau of the Census:

Region	States included
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New
North Central	York, New Jersey, and Pennsylvania Michigan, Ohio, Illinois, Indiana, Wis- consin, 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, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

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Suggested Citation

National Center for Health Statistics, B. Haupt: 1982 Summary: National Hospital Discharge Survey. Advance Data From Vital and Health Statistics, No. 95. DHHS pub. No. (PHS) 84–1250. Public Health Service, Hyattsville, Md. Dec. 27, 1983.

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