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

September 25, 1986 ● Number 127

1985 Summary: National Hospital Discharge Survey

Hospital Care Statistics Branch, Division of Health Care Statistics

Introduction

With a rate of 148 per 1,000 discharges, 1985 marked the first year since 1971 that the discharge rate has fallen below 150 per 1,000. This is primarily the result of an 11-percent

drop in discharge rates from 1983 to 1985 (figure 1). In addition, the average length of stay for hospitalized patients is continuing to drop. The average stay in 1985 was 6.5 days compared with 7.7 days a decade ago (figure 2).

During 1985 an estimated 35.1 million inpatients, exclud-

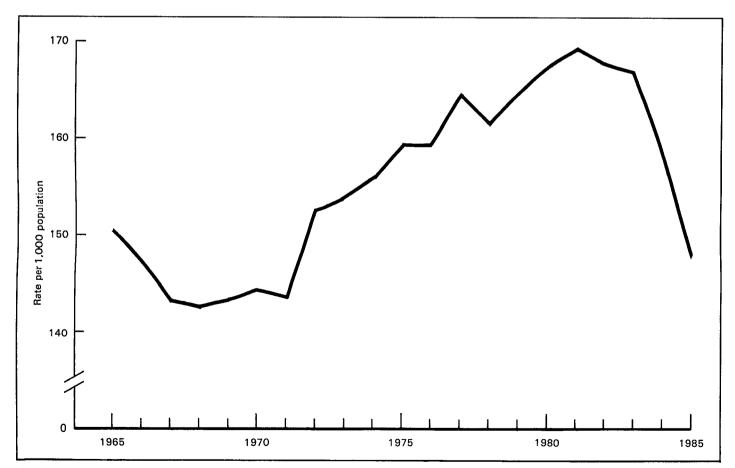


Figure 1. Discharge rate in non-Federal short-stay hospitals: United States, 1965-85

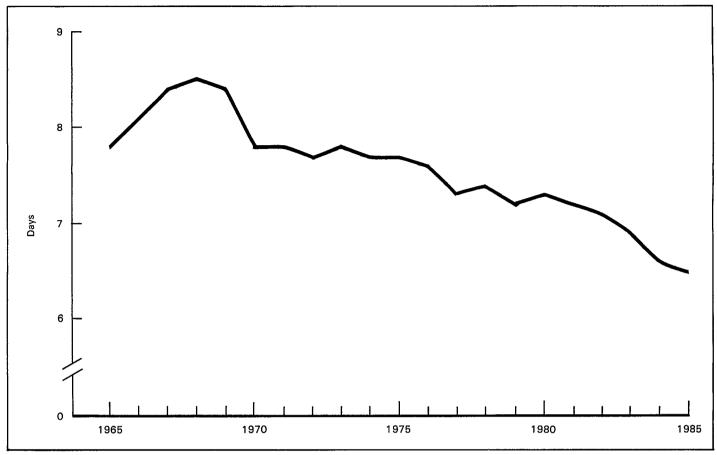


Figure 2. Average length of stay in non-Federal short-stay hospitals: United States, 1965-85

ing newborn infants, were discharged from short-stay non-Federal hospitals in the United States. These patients were hospitalized an average of 6.5 days and used 226.2 million days of inpatient hospital care. Patients hospitalized during 1985 accounted for 148 discharges 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 1985, data were abstracted from the medical records of approximately 194,800 patients discharged from 414 short-stay non-Federal hospitals. A brief description of the sample design, data collection procedures, and estimation process, and definition 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

chapters, a few diagnoses and procedures or groups thereof also 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*.

In 1985, approximately 17 percent of the hospitals submitted machine-readable data tapes through commercial abstracting services. Preliminary analysis indicates that a greater number of nonsurgical procedures per patient are obtained from these hospitals than from hospitals submitting data in the traditional manual mode (see Technical notes). This has resulted in increases from 1984 to 1985 in the estimates for miscellaneous diagnostic and therapeutic procedures and, therefore, for total procedures.

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 35.1 million patients discharged from short-stay hospitals during 1985 included an estimated 14.2 million males and 20.9 million females. The rates per 1,000 population were 124 for

males and 171 for females, making the rate for females about 38 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 139, or only about 12 percent higher than the rate for males.

The average length of stay was 6.9 days for males and 6.2 days for females during 1985. 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 3.3 days. The average length of stay for females who were not hospitalized for deliveries during 1985 was 6.8 days.

The number of discharges from short-stay hospitals by geographic region during 1985 ranged from 12.3 million in the South Region to 6.5 million in the West Region, and the rates per 1,000 population ranged from 154 in the Midwest Region to 138 in the West Region. Regional differences in the number of discharges are accounted for mainly by variations in population sizes.

Average lengths of stay by geographic region were 5.4 days in the West, 6.0 days in the South, 6.8 days in the Midwest, and 7.7 days in the Northeast.

Discharges from short-stay hospitals were about 40 percent male and 60 percent female in every hospital bed-size group. The average length of stay increased steadily from 5.2 days in the smallest hospitals (6–99 beds) to 7.4 days in the largest hospitals (500 beds or more) for all patients.

During 1985, voluntary nonprofit hospitals provided medical care to an estimated 24.0 million patients, or 68 percent of all patients hospitalized. Hospitals operated by State and local governments cared for 7.8 million patients, or 22 percent of all discharges, and proprietary hospitals operated for profit cared for 3.3 million patients or 9 percent of all discharges. Average lengths of stay were 6.7 days in voluntary nonprofit hospitals, 5.9 days in State and local government hospitals, and 6.3 days in proprietary hospitals.

Utilization by diagnosis

Diseases of the circulatory system ranked first in 1985 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 supplementary classifications (including females with deliveries) (4.3 million discharges) and diseases of the digestive system (3.9 million discharges). Over 38 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 1985 varied for the different age groups. For patients under 15 years of age, the most frequent diagnoses were acute respiratory infections, except influenza; pneumonia, all forms; and chronic disease of tonsils and adenoids. Excluding females with deliveries, the most frequent diagnoses for patients 15–44 years of age were fractures, all sites; psychoses; and abortions and ectopic and molar pregnancies. 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 1.5 days for the diagnostic category chronic disease of tonsils and adenoids, 1.6 days for patients admitted for sterilization, 2.0 days for the diagnostic category of cataract, and 2.1 days for abortions and ectopic and molar pregnancies to a high of 14.9 days for psychoses, and 14.7 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 shown in this report.

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 8.7 days for patients 65 years and over.

Utilization by procedures

One or more surgical or nonsurgical procedures were performed for an estimated 20.7 million of the 35.1 million inpatients discharged from short-stay hospitals during 1985. A total of 36.8 million procedures, or an average of 1.8 per patient who underwent at least one procedure, were recorded in 1985.

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.

When grouped by chapters, miscellaneous diagnostic and therapeutic procedures with 8.8 million procedures ranked first among the surgical and nonsurgical procedures performed during 1985. These were followed by operations on the digestive system with 5.7 million procedures performed. Other leading procedures were obstetrical procedures with 4.3 million procedures, operations on the musculoskeletal system with 3.5 million procedures and operations on female genital organs

with 3.3 million procedures. Approximately two-thirds of all procedures performed in 1985 were included in these five ICD-9-CM procedure chapters.

The number and rate of all-listed procedures in 1985 for each ICD-9-CM procedure chapter and selected procedure categories are shown by sex and age in tables 7 and 8. Of the 36.8 million procedures performed during 1985, 14.7 million were for males and 22.1 million were for females. The corresponding rates per 1,000 population were 155 for both sexes, 128 for males, and 180 for females. Of the procedures shown in table 7, some common ones for males were arteriography and angiocardiography and computerized axial tomography;

the most frequently performed procedures for females were episiotomy and cesarean section.

The rate of procedures per 1,000 population increased with advancing age from 37 for patients under 15 years to 387 for patients 65 years of age and over. The most frequently performed procedures for patients under 15 years of age were tonsillectomy 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 computerized axial tomography; and for patients 65 years of age and over, computerized axial tomography and diagnostic ultrasound.

TABLE 1. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1985

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH Sexes	MALE	FEMALE		
	NUMBER OF PATIENTS DISCHARGED IN THOUSANDS				
TOTAL	35,056	14,160	20,896		
AGE					
INDER 15 YEARS	2,972 13,966	1,698 4,153	1,274 9,813		
55-64 YEARS	7,610 10,508	3,776 4,533	3,834 5,975		
REGION					
NORTHEAST	7,168 9,111 12,274 6,502	2,998 3,734 4,850 2,579	4,170 5,378 7,425 3,923		
BED SIZE					
0-99 BEDS	5,331 6,443 6,953 8,625 7,703	2,118 2,565 2,905 3,459 3,113	3,213 3,878 4,048 5,167 4,590		
OWNERSHIP					
NONPROFITSTATE AND LOCAL GOVERNMENTPROPRIETARY	23,984 7,776 3,296	9,645 3,153 1,362	14,339 4,623 1,933		

TABLE 2. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, GEOGRAPHIC REGION, AND SEX: UNITED STATES, 1985

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

AGE AND REGION	BOTH Sexes	MALE	FEMALE
		ATIENTS D	
TOTAL	147.9	123.5	170.7
AGE			
UNDER 15 YEARS	57.2 125.1	63.8 75.4	50.2 173.4
45-64 YEARS	169.5 368.3	176.2 393.2	163.4 351.4
REGION			
NORTHE AST	144.1		
MIDWEST	154.3 151.6		
WEST	137.6		

TABLE 3. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1985

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH Sexes	MALE	FEMALE
	AVERAGE LENGTI	OF STAY	IN DAYS
FOTAL	6.5	6.9	6.2
AGE			
JNDER 15 YEARS	4.6	4.5	4.6
15-44 YEARS	4.8	6.1	4.3
45-64 YEARS	7.0	6.9 8.4	7.1
55 YEARS AND OVER	8.7	8.4	9.0
REGION			
NORTHEAST	7.7	8.0	7.6
4IDWEST	6.8	7.2	6.4
SOUTH	6.0	6.4	5.8
HEST	5.4	5.9	5.1
BED SIZE			
5-99 BEDS	5.2	5.4	5.1
LOO-199 BEDS	5.8	6.2	5.5
200-299 BEDS	6.5	6.8	6.3
300-499 BEDS	6.8	7-3	6.5
500 BEDS OR MORE	7.4	8.0	7•0
OWNERSHIP			
NONPROFIT	6.7	7.1	6.4
STATE AND LOCAL GOVERNMENT	5.9	6.3	5.6
PROPRIETARY	6.3	6.7	6.0

TABLE 4. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1985

(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)

		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	
		NUMBER	OF PATIENT	S DISCHARG	ED IN THO	USANDS		
ALL CONDITIONS	35,056	14,160	20,896	2,972	13,966	7,610	10,508	
NFECTIOUS AND PARASITIC DISEASES	669	308	361	193	210	95	172	
NEOPLASMS140-239	2,411	1,008	1,403	69	454	794	1,094	
MALIGNANT NEOPLASMS	1,911	892 206	1,019	43 *	229 13	648 132	991 169	
MALIGNANT NEOPLASM OF BREAST174-175,198.81	208	*	207	*	35	91	81	
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS240-279 DIABETES MELLITUS250	1,068 480	409 194	659 286	70 21	271 128	279 160	448 171	
DISEASES OF THE BLOCK AND BLOOD-FORMING ORGANS280-289	342	149	193	58	90	56	138	
MENTAL DISORDERS290-319	1,700	918	782	49	1,014	396	240	
PSYCHOSES	701 195	325 68	376 126	*6 *5	396 120	164 44	135 26	
ALCOHOL DEPENDENCE SYNDROME	388	312	76	*	239	121	26	
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389	1,211	537	674	229	305	267	409	
DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349 CATARACT366	425 182	196 67	229 114	64 *	143 *6	93 38	126 138	
DISEASES OF THE EAR AND MASTOID PROCESS380-389	259	117	142	118	55	47	39	
DISEASES OF THE CIRCULATORY SYSTEM390-459	5,470	2,783	2,686	35	481	1,728	3, 224	
ESSENTIAL HYPERTENSION401 HEART DISEASE391-392.0,393-398,402,404,410-416,420-429	214 3,584	89 1,910	124 1,674	* 20	45 250	84 1,204	82 2,111	
ACUTE MYOCARDIAL INFARCTION410	755	466	289	*	50	267	436	
ATHEROSCLEROTIC HEART DISEASE414-0 OTHER ISCHEMIC HEART DISEASE411-413,414-1-414-9	304 992	190 549	114 443	*	13 67	134 423	157 501	
CONGESTIVE HEART FAILURE428.0	557	247	310	*	11	96	446	
CEREBROVASCULAR DISEASE430-438	916	416	500	*	34	192	686	
DISEASES OF THE RESPIRATORY SYSTEM	3,238	1,591	1,647	848	656	612	1,121	
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA460-466 CHRONIC DISEASE OF TONSILS AND ADENOIDS474	464 288	236 124	229 164	229 186	78 98	59 *	98	
PNEUMONIA, ALL FORMS480-486	854 462	433 195	421 266	206 144	100 124	147 97	400 97	
ISEASES OF THE DIGESTIVE SYSTEM520-579	3,873	1,839	2.034	346	1,222	1,038	1,267	
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534	292	156	137	2	73	86	131	
GASTRITIS AND DUODENITIS535	203	87	116	15	79	57	51	
APPENDICITIS540-543 INGUINAL HERNIA550	250 384	143 343	107 42	65 47	148 100	23 118	14 120	
NONINFECTIOUS ENTERITIS AND COLITIS555-556,558	457	191	266	133	165	66	94	
CHOLELITHIASIS574	474	140	333	*	162	154	157	
DISEASES OF THE GENITOURINARY SYSTEM580-629 CALCULUS OF KIDNEY AND URETER592 DISORDERS OF MENSTRUATION AND OTHER	2,805 325	958 215	1,848 110	101	1,324 165	646 119	735 39	
ABNORMAL VAGINAL BLEEDING626	193	-	193	*	148	43	*	
COMPLICATIONS OF PREGNANCY, CHILOBIRTH,								
AND THE PUERPERIUM	968 382	•••	968 382	*5 *	961 378	*	***	
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	542	268	273	58	203	134	147	
DISEASES OF THE MUSCULOSKELETAL SYSTEM								
AND CONNECTIVE TISSUE	2:170 465	939 188	1,231	70	860	699	542	
INTERVERTEBRAL DISC DISORDERS722	508	281	276 227	18 *	133 265	130 191	183 51	
CONGENITAL ANOMALIES740-759	269	156	113	150	72	30	17	
CERTAIN CONDITIONS CRIGINATING IN THE PERINATAL PERIOD	159	82	77	158	*	*	_	
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS780-799	534	260	275	85	235	135	79	
INJURY AND POISONING800-999	3,303	1,800	1,503	398	1,510	603	793	
FRACTURES, ALL SITES800-829	1,129	550	579	132	398	181	419	
FRACTURE OF NECK OF FEMUR820 SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847	258 237	62	196	*	11	24	219	
INTRACRANIAL INJURIES (EXCUDING THOSE WITH	231	117	120	•	146	63	25	
SKULL FRACTURE)850-854 LACERATIONS AND OPEN WOUNDS870-904	268 277	162 203	107 74	64 38	140 181	31 35	34 23	
·								
SUPPLEMENTARY CLASSIFICATIONS	4+324 82	156 *	4,168 80	52 *	4,098 81	92 *	82	
FEMALES WITH DELIVERIESV27	3,854	•••	3,854	11	3,838	* 5	•••	

^{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, 1985

(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)

		S	EX		A	GE	·
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
		RATE OF IN	PATIENTS D	ISCHARGED P	ER 10,000	POPULATIO	N
ALL CONDITIONS	1,478.9	1,235.5	1,706.9	571.9	1,250.8	1,695.2	3,683.2
INFECTIOUS AND PARASITIC DISEASES001-139	28.2	26.9	29.5	37.2	18.8	21.1	60.2
NEOPLASMS140-239	101.7	87.9	114.6	13.3	40.6	177.0	383.3
MALIGNANT NEOPLASMS	13.3	77.8 17.9	83.3	8.4	20.5	144.3 29.4	347.3 59.4
	8.8	*	16.9	*	3.1	20.2	28.3
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS240-279 DIABETES MELLITUS250	45.1 20.2	35.7 16.9	53.8 23.4	13.4 4.1	24.3 11.5	62.3 35.5	156.9 59.9
DISEASES OF THE BLOCD AND BLOOD-FORMING ORGANS280-289	14.4	13.0	15.8	11.1	8.1	12.6	48.3
MENTAL DISORDERS290-319	71.7	80.1	63.9	9.4	90.8	88.3	84.3
PSYCHOSES	29.6 8.2 16.4	28.4 6.0 27.3	30.7 10.3 6.2	*1.1 *1.0 *	35.5 10.7 21.4	36.6 9.7	47.2 9.0
						26.9	9.3
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389 DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349	51•1 17•9	46.8 17.1	55•1 18•7	44.1 12.2	27.3 12.8	59.5 20.6	143.5 44.1
CATARACT	7.7 10.9	5.9 10.2	9.4 11.6	* 22•7	*0.5 4.9	8.4 10.6	48.2 13.8
DISEASES OF THE CIRCULATORY SYSTEM390-459	230.8	242.8	219.4	6.8	43.1	385.1	1,130.2
ESSENTIAL HYPERTENSION401 HEART DISEASE391-392.0,393-398,402,404,410-416,420-429	9•0 151•2	7.8 166.7	10.2 136.7	* 3.8	4.1	18.7	28.8
ACUTE MYOCARDIAL INFARCTION410	31.8	40.6	23.6	*	22.4 4.5	268.2 59.5	739.8 152.7
ATHEROSCLEROTIC HEART DISEASE411-413,414-1-414.9	12.8	16.6	9.3	*	1.2	29.9	54.9
CONGESTIVE HEART FAILURE428.0	41.8 23.5	47.9 21.5	36.2 25.4	*	6.0 1.0	94.3 21.4	175.6 156.3
CEREBROVASCULAR DISEASE430-438	38.6	36.3	40.8	*	3.0	42.9	240.3
DISEASES OF THE RESPIRATORY SYSTEM	136.6 19.6	138.8 20.6	134.5 18.7	163.1 44.0	58•8 7•0	136.4	393.1
CHRONIC DISEASE OF TONSILS AND ADENOIDS474	12.1	10.8	13.4	35.7	8.8	13.2	34.5
PNEUMONIA, ALL FORMS480-486 ASTHMA493	36.0 19.5	37.8 17.0	34.4 21.8	39•7 27•8	9.0 11.1	32.8 21.5	140.3 34.1
DISEASES OF THE DIGESTIVE SYSTEM520-579	163.4	160.4	166.2	66.5	109.4	231.3	444.1
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534	12.3	13.6	11.2	0.4	6.6	19.1	45.9
GASTRITIS AND DUODENITIS535 APPENDICITIS540-543	8.6 10.5	7.6 12.5	9•5 8•7	2.8 12.5	7.1 13.3	12.8 5.1	18.0 4.8
INGUINAL HERNIA	16.2	29.9	3.4	9.0	9.0	26.2	42.1
NONINFECTIOUS ENTERITIS AND COLITIS555-556,558 CHOLELITHIASIS574	19.3 20.0	16.7 12.2	21 • 7 27 • 2	25•6 *	14.7	14.7	32.8
	20.0	12.2	21.2	•	14.5	34.3	55.0
DISEASES OF THE GENITOURINARY SYSTEM	118.3 13.7	83.5 18.7	150.9 9.0	19•4 *	118.6 14.8	143.9 26.4	257.6 13.7
ABNORMAL VAGINAL BLEEDING626	8.1	-	15.8	*	13.2	9.5	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	40.8 16.1	•••	79.1 31.2	*1.0 *	86.1 33.8	*	•••
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	22.8	23.4	22.3	11.1	18.2	29.9	51.5
DISEASES OF THE MUSCULOSKELETAL SYSTEM							
AND CONNECTIVE TISSUE710-739 ARTHROPATHIES AND RELATED DISORDERS710-719	91.6	82.0	100.6	13.4	77.0	155.8	189.9
INTERVERTEBRAL DISC DISORDERS	19.6 21.4	16.4 24.5	22.6 18.6	3.5 *	11.9 23.7	29.0 42.6	64.2 18.0
CONGENITAL ANOMALIES740-759	11.4	13.6	9.2	28.8	6.4	6.7	6.1
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD760-779	6.7	7.2	6.3	30.4	*	*	-
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS780-799	22.5	22.6	22.4	16.3	21.1	30.2	27 . 5
INJURY AND POISONING	139.4	157.0	122.8	76.5	135.2	134.4	277.8
FRACTURES, ALL SITES800-829 FRACTURE OF NECK OF FEMUR820	47.6 10.9	48.0 5.4	47.3 16.0	25.3 0.6	35.6 1.0	40.3 5.4	146.8 76.9
SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847	10.0	10.2	9.8	0.6	13.1	14.0	8.8
INTRACRANIAL INJURIES (EXCUDING THOSE WITH SKULL FRACTURE)850-854	11.3	14.1	8.7	12.2	12.5	6.8	12.1
LACERATIONS AND OPEN WOUNDS870-904	11.7	17.7	6.1	7.3	16.2	7.9	8.1
SUPPLEMENTARY CLASSIFICATIONS	182.4	13.6	340.5	10.0	367.0	20.4	28.8
PERSONS ADMITTED FOR STERILIZATION	3.5 162.6	*	6.6 314.8	* 2.0	7•2 343•8	* *1_2	_
FEMALES WITH DELIVERIESV27	162.6	•••	314.8	2.0	343.8	*1.2	•••

^{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, 1985

(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)

		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
			AVERAGE LEI	NGTH OF STA	Y IN DAYS		
LL CONDITIONS	6.5	6.9	6.2	4.6	4.8	7.0	8.7
NFECTIOUS AND PARASITIC DISEASES	7.0	7.2	6.7	4.1	5.4	8.6	11.2
IEOPLASMS140-239	8.2	8.6	7.9	4.2	5.9	8.2	9.4
MALIGNANT NEOPLASMS140-208,230-234 MALIGNANT NEOPLASM OF TRACHEA,	8.9	9.1	8.7	5.0	6.9	8.7	9.7
BRONCHUS, AND LUNG	9•2 7•2	8.8 *	9•9 7•2	*	7•9 5•2	9•1 6•5	9.3 8.8
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS	7.3 8.1	7.5 8.0	7.3 8.2	5•1 5•3	5.9 5.9	7•2 8•2	8.6 10.1
DISEASES OF THE BLOCD AND BLOOD-FORMING ORGANS280-289	6.0	5.9	6.1	3.9	5.4	6.4	7.1
MENTAL DISORDERS290-319	12.3	11.5	13.3	20.3	11.8	11.8	13-8
PSYCHOSES	14.9 10.0 10.7	13.1 10.4 10.7	16.4 9.7 11.1	*26.3 *20.5 *	14.1 9.7 11.0	15.6 8.7 9.8	16.0 11.0 12.3
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS320-389	5.4	5.5	5.4	3.6	5.5	5.7	6.3
DISEASES OF THE CENTRAL NERVOUS SYSTEM320-336,340-349 CATARACT366	9.6 2.0	9.7 2.0	9.6 2.0	7.0 *	7.9 *2.5	9.6 2.2	12.9
DISEASES OF THE EAR AND MASTOID PROCESS	2.8	2.6	3.0	2.2	2.7	3.3	4.3
DISEASES OF THE CIRCULATORY SYSTEM	7.9 4.9	7.5 4.4	8.3 5.2	7.1	5.9 4.0	7•2 4•8	8.6 5.6
HEART DISEASE391-392.0,393-398,402,404,410-416,420-429 ACUTE MYOCARDIAL INFARCTION410	7.3 9.5	7.0 9.0	7.6 10.3	7 . 9	5.6 7.1	6.6 9.5	7.9 9.7
ATHEROSCLEROTIC HEART DISEASE414.0	6.6	5.8	7.9	*	4.8	5.3	7.9
OTHER ISCHEMIC HEART DISEASE411-413,414-1-414-9 CONGESTIVE HEART FAILURE428.0	5•4 8•0	5.3 7.8	5.6 8.2	*	4.2 6.6	4.8 7.3	6.1 8.2
CEREBROVASCULAR DISEASE430-438	10.5	10.0	10.9	*	9.3	11.1	10.4
DISEASES OF THE RESPIRATORY SYSTEM	6.0 4.5	6.0 4.4	6-1 4-6	3.2 3.2	4.1 4.0	7•2 5•3	8.7 7.1
CHRONIC DISEASE OF TONSILS AND ADENOIDS474	1.5	1.5	1.6	1.6	1.4	*	'•-
PNEUMONIA; ALL FORMS480-486 ASTHMA493	7.9 4.9	7•8 4•5	8.1 5.3	4.3 3.5	6.6 4.3	8.5 6.1	9.9 6.7
ISEASES OF THE DIGESTIVE SYSTEM520-579	6.2	5.7	6.6	3.4	4.8	6.4	8.1
ULCERS OF THE STOMACH AND SMALL INTESTINE531-534 GASTRITIS AND DUODENITIS535	7.1 4.8	6.8 4.3	7.5 5.1	3.6 2.9	5.1 4.2	6-8 4-9	8•6 6•0
APPENDICITIS	5.0	5.1	4.9	4.3	4.3	7.6	11.7
INGUINAL HERNIA550	3.2	3.1	4.0	1.8	2.6	3.1	4.4
NONINFECTIOUS ENTERITIS AND COLITIS555-556,558 CHOLELITHIASIS574	4.9 7.5	4.6 8.3	5•1 7•2	3.0 *	4.7 6.1	5.8 7.0	7.4 9.5
DISEASES OF THE GENITOURINARY SYSTEM580-629 CALCULUS OF KIONEY AND URETER592 DISORDERS OF MENSTRUATION AND OTHER	5.2 3.7	5.5 3.5	5.0 4.2	3.6 *	4.2 3.1	5•1 3•9	7•2 6•2
ABNORMAL VAGINAL BLEEDING	3.7	-	3.7	*	3.7	3.8	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM	2.5 2.1	•••	2.5 2.1	*2.1	2.5 2.2	*	•••
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE680-709	7.9	7.6	8.2	4.0	6.6	7.8	11.4
DISEASES OF THE MUSCULOSKELETAL SYSTEM							
AND CONNECTIVE TISSUE	6•7 7•7	6.6 7.0	6.9	5.4	5.4	6•7 7•8	9.1
INTERVERTEBRAL DISC DISORDERS722	7.3	6.8	8•2 7•9	6.1 *	4.1 6.8	7.4	10.5 9.3
CONGENITAL ANOMALIES740-759	5.6	5.7	5.5	5.6	4-1	7.8	8.0
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	13.0	12.2	13.8	12.9	*	*	-
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS780-799	3.8	3.7	3.9	3.3	3.3	4.1	5.3
INJURY AND POISONING800-999	6.6	6.1	7.3	3.9	5.4	6.7	10.3
FRACTURES, ALL SITES800-829 FRACTURE OF NECK OF FEMUR820	8.7 14.7	7.7 16.6	9.8 14.1	5•0 *	6.8 12.7	7.4 12.7	12.4 15.0
SPRAINS AND STRAINS OF BACK (INCLUDING NECK)846-847	6.0	5.6	6.4	*	5.7	6.3	7.6
INTRACRANIAL INJURIES (EXCUDING THOSE WITH SKULL FRACTURE)850-854	5.6	6.1	4-8	2.6	5.7	6.8	9.5
LACERATIONS AND OPEN WOUNDS870-904	4.3	4.4	4.2	3.6	4.2	4.3	6.1
SUPPLEMENTARY CLASSIFICATIONS	3.3 1.6	4•4 *	3.3 1.6	4•7 *	3.2 1.6	3.9 *	5.7
FEMALES WITH DELIVERIES	3.3		3.3	3.4	3.3	*3.0	•••

^{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: UNITED STATES, 1985

(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	x	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 O	F ALL-LIST	TED PROCEDU	RES IN TH	DUSANDS	
ALL PROCEDURES	36,760	14,694	22,066	1,937	14,957	8 • 8 38	11,027
OPERATIONS ON THE NERVOUS SYSTEM01-05	898	451	447	157	312	242	187
OPERATIONS ON THE ENDOCRINE SYSTEM06-07	95	24	71	*	37	29	25
OPERATIONS ON THE EYE	718	309	409	54	93	159	413
EXTRACTION OF LENS	211 180	79 67	132 113	*	*8	42 37	157 139
OPERATIONS ON THE EAR	256 104	130 60	126 44	129 89	70 *7	40 *6	18 *
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX21-29	1,173	589	584	306	567 139	188 35	11 1 12
RHINOPLASTY AND REPAIR OF NOSE21.8 TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY28.2-28.3	193 317	99 135	94 183	*6 197	114	*6	*
OPERATIONS ON THE RESPIRATORY SYSTEM	981 195	582 123	398 71	52 13	168 25	331 67	429 89
OPERATIONS ON THE CARDIOVASCULAR SYSTEM35-39	2,414	1,425	989	98	304	973	1,038
OPEN HEART SURGERY	379	264	114	11	37	193	137
DIRECT HEART REVASCULARIZATION	230 681	172 439	58 241	- 24	15 79	126 350	89 227
PACEMAKER INSERTICH, REPLACEMENT, REMOVAL, REPAIR37.7-37.8	223	118	105	*	*8	47	167
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM40-41	397	190	207	21	96	113	167
OPERATIONS ON THE DIGESTIVE SYSTEM42-54 ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE)42.23,44.13 PARTIAL GASTRECTOMY AND RESECTION	5•740 207	2,530 100	3,210 106	236 *7	1,870 47	1,555 62	2,079 91
OF INTESTINE43.5-43.8,45.6-45.8	282 283	127 150	155 133	* 69	46 173	78 26	155 14
APPENDECTOMY, EXCLUDING INCIDENTAL47.0 HEMORRHOI DECTOMY49.43-49.46	123	67	56	*	55	47	19
CHOLECYSTECTOMY51.2 REPAIR OF INGUINAL HERNIA53.0-53.1	475 416	147 370	327 46	* 53	167 106	157 125	150 131
DIVISION OF PERITCHEAL ADHESIONS54.5	309	44	265	*	179	59	68
OPERATIONS ON THE URINARY SYSTEM55-59 ENDOSCOPIES (NATURAL ORIFICE)55.21-55.22,56.31,57-32,58.22	1,729 683	1,049 487	679 195	71 19	387 115	451 173	818 375
DILATION OF URETHRA58.6	119	73	47	*8	21	27	62
OPERATIONS ON THE MALE GENITAL ORGANS60-64	744	744		83	87	160	414
PROSTATECTOMY	367 52	367 52	•••	31	* *8	81 *6	284 *6
OPERATIONS ON THE FEMALE GENITAL ORGANS	3,318 525	•••	3,318 525	14	2,438 304	605 165	260 54
BILATERAL DESTRUCTION OR OCCLUSION		•••		*		*6	_
OF FALLOPIAN TUBES	466 670	•••	466 670	*	461 421	1 90	60
CURETTAGE OF UTERUS TO TERMINATE PREGNANCY69.01,69.51 DILATION AND CURETTAGE OF UTERUS	50	•••	50	*	48	*	•••
AFTER DELIVERY OR ABORTION	227 349	•••	227 349	*	225 232	* 83	33
REPAIR OF CYSTOCELE AND RECTOCELE70-5	165	•••	165	*	56	64	45
OBSTETRICAL PROCEDURES72-75 EPISIOTOMY WITH OR WITHOUT FORCEPS	4,304	•••	4,304	13	4,287	*	•••
OR VACUUM EXTRACTION72.1,72.21,72.31,72.71,73.6	1,820	•••	1,820	*7	1,812	*	•••
CESAREAN SECTION	877 548	•••	877 548	*	875 546	*	•••
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM76-84	3,523	1,734	1,789	233	1,543	886	861
OPEN REDUCTION OF FRACTURE 76.72, 76.74,76.76.77,76.79,79.2-79.3,79.5-79.6	492	251	241	29	215	91	157
OTHER REDUCTION OF FRACTURE76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4	240	125	115	62	89	37	51
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION80.5,81.0	323	191	132	*5	183	108	27
EXCISION OF SEMILUNAR CARTILAGE OF KNEE80.6 ARTHROPLASTY AND REPLACEMENT OF KNEE81.41-81-47	97 160	66 86	31 75	*	60 66	26 32	10 58
ARTHROPLASTY AND REPLACEMENT OF HIP81.5-81.6	196	60	137	-	11	37	148
OPERATIONS ON THE INTEGUMENTARY SYSTEM	1,653 116	658 *	994 114	103 *	674 17	471 50	405 48
MASTECTOMY85.4 SKIN GRAFT (EXCEPT LIP OR MOUTH)86.6-86.7	157	96	60	14	62	41	39
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES87-99	8,819	4,279	4,540	364	2,024	2,630	3,801
COMPUTERIZED AXIAL TOMOGRAPHY87.03,87.41,87.71,88.01,88.38 PYELOGRAM87.73-87.75	1,378 442	671 242	707 200	68 *9	311 156	349 133	650 143
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL88.4-88.5	1,117	693	425	12	128	514	463
DIAGNOSTIC ULTRASOUND88.7	1,234	478 375	756 463	49 17	379 150	300 249	506 421

TABLE 8. RATE OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HCSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE: UNITED STATES, 1985

(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	X		A	SE	
PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS
	R	ATE OF ALL-	·LISTED PRO	OCEDURES PE	R 100,000	POPULATIO	N
ALL PROCEDURES	15,508.1	12,820.1	18,024.7	3,728.4	13,395.6	19,689.5	38,651.0
OPERATIONS ON THE NERVOUS SYSTEM01-05	378.8	393.5	365.0	301.3	279.7	539.4	655.3
OPERATIONS ON THE ENDOCRINE SYSTEM06-07		20.6	58.3	*	33.0	65.5	88.7
OPERATIONS ON THE EYE08-16	303.0	269.4	334.5	104.3	82.9	353.7	1,446.8
EXTRACTION OF LENS	89.2	69.0 58.4	108.0 92.4	*	*7.1 *		551.2 488.3
OPERATIONS ON THE EAR18-20 MYRINGOTOMY20.0		113.8 52.2	102.7 35.8	247.4 171.5	62.9 *6.5	88.6 *12.5	62.0 *
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX21-29 RHINOPLASTY AND REPAIR OF NOSE21-8 TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY28-2-28-3	81.2	513.6 86.1 117.4	477.4 76.7 149.3	589.4 *11.9 378.4	508.2 124.3 101.8	79.1	42.7
OPERATIONS ON THE RESPIRATORY SYSTEM30-34 BRONCHOSCOPY33.21-33.23	413.7	508.1 107.5	325•3 58•3	100•5 25•4	150.9 22.8	737.3	
OPERATIONS ON THE CARDIOVASCULAR SYSTEM	1,018.3	1,243.4	807.6	189.5	272.3	2,167.7	3,638.8
OPEN HEART SURGERY	159.8	230.7	93.4	20.9	33.5	430.5	481.2
DIRECT HEART REVASCULARIZATION36.1 CARDIAC CATHETERIZATION37.21-37.23	97•2 287•1	150.5 383.2	47.3 197.2	46.0	13.7 71.2		310.6 797.1
PACEMAKER INSERTICH, REPLACEMENT, REMOVAL, REPAIR37.7-37.8	94.3	103.0	86.1	*	*7.4	104.7	587•0
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM40-41		165.5	169.3	40.9	85.8	251.7	584.8
OPERATIONS ON THE DIGESTIVE SYSTEM	87.2	2•207•2 87•5	2,622.5 86.9	453.7 *12.8	1,675.2 42.2	3,463.7 137.8	7,288.0 319.4
OF INTESTINE		110.6 130.9	126.4 108.7	* 133•0	41.0 155.2		542.2 50.7
HEMORRHOI DECTOMY49.43-49.46	52.0	58.8	45.6	*	49.2	105.3	68.2
CHOLECYSTECTOMY	175.4	128.6 322.5	267.4 37.6	* 102.1	149•4 95•2	349.1 279.3	526.4 458.9
DIVISION OF PERITONEAL ADHESIONS54.5	130.3	38.4	216.3	*	160.5	131.2	238.4
OPERATIONS ON THE URINARY SYSTEM55-59 ENDOSCOPIES (NATURAL ORIFICE)55.21-55.22,56.31,57.32,58.22 DILATION OF URETHRA58.6	288.0	915.4 425.1 63.3	554.9 159.6 38.0	137.3 36.5 *15.6	346.9 103.4 19.0		2,868.8 1,315.2 218.9
OPERATIONS ON THE MALE GENITAL ORGANS60-64		648.8	•••	159.2	77.9		1,450.7
PROSTATECTOMY		320.0 45.2	•••	59.1	* *7.6	181.0 *14.4	996.6 *21.8
OPERATIONS ON THE FEMALE GENITAL ORGANS		•••	2,709.9 428.5	27 . 5 *	2,183.1 272.7	1,348.6 367.0	912.4 189.5
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES	196.8	•••	381.1	*	412.6	*12.6	
HYSTERECTOMY	282.8	•••	547.6 40.5	*	376.7 43.0		208.7
AFTER DELIVERY OR ABORTION69.02 DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS69.09	95.6 147.1	•••	185.1 284.8	*	201.6 207.5		114.8
REPAIR OF CYSTOCELE AND RECTOCELE70.5	69.4	•••	134.4	*	50.3		156.0
OBSTETRICAL PROCEDURES72-75 EPISIOTOMY WITH OR WITHOUT FORCEPS		•••	3,515.5	24.4	3,839.0	*	•••
OR VACUUM EXTRACTION	767.9 369.9	•••	1,486.9 716.2	*	1,622.6 783.4		
REPAIR OF CURRENT OBSTETRIC LACERATION75.5-75.6	231.0	•••	447.3	*	488.9		• • • •
OPERATIONS ON THE MUSCULGSKELETAL SYSTEM		1,512.5	1,461.6	448.0	1,381.7		
76.74,76.76-76.77,76.79,79.2-79.3,79.5-79.6 OTHER REDUCTION OF		218.6	196.9	56.4	192.2	202.8	549.1
FRACTURE76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4 EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION		108.8 166.5	94.0	119.9	79•7		179.6
EXCISION OF SEMILUNAR CARTILAGE OF KNEE80.6	41.0	57.6	107.7 25.5	*8•7 *	164.1 54.1	56 • 8	35.1
ARTHROPLASTY AND REPLACEMENT OF KNEE81.41-81.47 ARTHROPLASTY AND REPLACEMENT OF HIP81.5-81.6		74•9 52•0	61.0 111.6	*	59.6 10.2		
OPERATIONS ON THE INTEGUMENTARY SYSTEM85-86 MASTECTOMY85.4	48.9	574.5 1.3	812.1	198•3 *	603.2 15.2	110.8	1,418.2 168.0
SKIN GRAFT (EXCEPT LIP OR MOUTH)86.6-86.7		84.1	49.3	27.6	55.3		137.1
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES87-99 COMPUTERIZED AXIAL TOMOGRAPHY87.03,87.41,87.71,88.01,88.38 PYELGGRAM87.73-87.75	581.2	3,733.7 585.3 211.5	3,708.3 577.4 163.0	700.2 130.2 *18.0	1,812.7 278.8 139.8		13,323.8 2,278.1 501.7
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL88.4-88.5	471.3	604.2	346.8	23.0	114.9	1,144.1	1,623.7
DIAGNOSTIC ULTRASGUND	520.5	416.8	617.6	93.7	339.3	668.1	1,775.0

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Technical notes

Survey methodology

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 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 original universe for the survey consisted of 6,965 hospitals contained in the 1963 National Master Facility Inventory. New hospitals were sampled for inclusion in the survey in 1972, 1975, 1977, 1979, 1981, 1983 and 1985. In all, 558 hospitals were sampled in 1985. Of these hospitals, 82 refused to participate, and 62 were out of scope. The 414 participating hospitals provided approximately 194,800 abstracts of medical records.

Sample design and data collection

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 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. The within-hospital sampling ratio for selecting sample discharges varied inversely with the probability of selection of the hospital.

In 1985, for the first time, there were two data collection procedures used for the survey. The first was the traditional manual system of sample selection and data abstraction. The second was an automated method used in approximately 17 percent of the sample hospitals; it involved the purchase of data tapes from commercial abstracting services.

In the manual hospitals, sample discharges were selected 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. The sample selection and abstraction of data from the face sheet and discharge summary of the medical records were performed by the hospital staff or by representatives of the National Center for Health Statistics (NCHS). The completed forms were forwarded to NCHS for coding, editing, and weighting procedures.

For the automated hospitals, tapes containing machinereadable medical record data are purchased from commercial abstracting services. These tapes are subject to NCHS sampling, editing, and weighting procedures. A detailed description of the automated process is to be published.

The Medical Abstract Form and the abstract service data tapes contain items relating to the personal characteristics of the patient, including birth date, sex, race, and marital status

Table I. Approximate relative standard errors of estimated numbers of first-listed discharges and all-listed procedures: United States, 1985

Size of estimate	First-listed diagnosis	All-listed procedures
5,000	13.2	17.3
10,000	10.5	14.2
50,000	6.7	9.5
100,000	5.6	8.2
500,000	3.9	6.0
1,000,000	3.4	5.4
3,000,000	2.8	4.6
5,000,000	2.6	4.3
10,000,000	2.4	3.9
20,000,000	2.2	3.6
30,000,000	2.1	
40,000,000	2.0	

but not name and address; administrative information, including admission and discharge dates, discharge status, and medical record number; and medical information, including diagnoses and surgical and nonsurgical operations or procedures. Since 1977, patient zip code, expected source of payment, and dates of surgery have also been collected. (The medical record number and patient zip code are considered confidential information and are not available to the public.)

Presentation of estimates

Statistics produced by 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 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}

Based on consideration of the complex sample design of NHDS, the following guidelines are used for presenting NHDS estimates in this report:

- If the sample size is less than 30, the value of the estimate is not reported. Only an asterisk (*) is shown in the tables.
- If the sample size is 30-59, the value of the estimate is reported but should be used with caution. The estimate is preceded by an asterisk (*) in the tables.

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 first-listed diagnoses and all-listed procedures are shown in table I. The relative standard errors for region and ownership of hospital are approximately 1½ times larger. The standard errors for average lengths of stay are shown in table II.

NOTE: A list of references follows the text.

Table II. Approximate standard errors of average lengths of stay by number of discharges: United States, 1985

	Average length of stay in day					
Number of discharges	2	6	10	20		
	Standard error in days					
10,000	0.7	1.2	1.7	2.2		
50,000	0.3	0.7	1.0	1.4		
100,000	0.3	0.6	0.9	1.2		
500,000	0.2	0.5	0.8	0.9		
1,000,000	0.2	0.5	0.8	0.7		
5,000,000	0.2	0.5	0.8			

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.

Tests 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

Terms relating to 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 midyear.

Type of ownership of hospital—Determined by the organization that controls and operates the hospital. Hospitals are grouped 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 he 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.

Procedures—One or more surgical or nonsurgical operations, procedures, or special treatments assigned by the phy-

NOTE: A list of references follows the text.

sician to patients discharged from the inpatient service of shortstay 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 is 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.

Population—Civilian population is the resident population excluding members of the Armed Forces.

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

Region	States included
Northeast	Maine, New Hampshire, Vermont, Massa- chusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkan- sas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washing- ton, Oregon, California, Hawaii, and Alaska.

Symbols

- --- Data not available
- ... Category not applicable
- Quantity zero
- $\begin{array}{cc} \text{0.0} & \text{Quantity more than zero but less than} \\ & \text{0.05} \end{array}$
- Quantity more than zero but less than500 where numbers are rounded to thousands
- Figure does not meet standard of reliability or precision (more than 30-percent relative standard error)
- # Figure suppressed to comply with confidentiality requirements

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Suggested citation

National Center for Health Statistics: 1985 summary, National Hospital Discharge Survey. Advance Data From Vital and Health Statistics. No. 127. DHHS Pub. No. (PHS) 86–1250. Public Health Service. Hyattsville, Md., Sept. 25, 1986.

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