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1984 Summary: National Hospital Discharge Survey

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Introduction

During 1984 an estimated 37.2 million inpatients, excluding newborn infants, were discharged from short-stay non-Federal hospitals in the United States. These patients were hospitalized an average of 6.6 days and used 244.7 million days of inpatient hospital care. Patients hospitalized during 1984 accounted for 159 discharges and 1,044 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 1984, data were abstracted from the face sheets of medical records of approximately 192,000 patients discharged from 407 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 Modification*³ (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*.

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 37.2 million patients discharged from short-stay hospitals during 1984 included an estimated 14.9 million males and 22.3 million females. The rates per 1,000 population were 132 for males and 184 for females, making the rate for females about 39 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 152, or only about 15 percent higher than the rate for males.

The average length of stay was 7.0 days for males and 6.3 days for females during 1984. 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 3.4 days. The average length of stay for females who were not hospitalized for deliveries during 1984 was 6.9 days.

The number of discharges from short-stay hospitals by geographic region during 1984 ranged from 13.5 million in the South Region to 6.4 million in the West Region, and the rates per 1,000 population ranged from 169 in the South Region to 139 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

discharge 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 and South Regions with no significant difference between them, the number of discharges and the civilian population in the South Region was about 35 percent higher than the North Central Region.

Average lengths of stay by geographic region were 5.7 days in the West, 6.1 days in the South, 6.9 days in the North Central, and 7.8 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 10.4 percent of all discharges regardless of hospital size. The average length of stay increased steadily from 5.3 days in the smallest hospitals (6–99 beds) to 7.5 days in the largest hospitals (500 beds or more) for all patients.

During 1984, voluntary nonprofit hospitals provided medical care to an estimated 25.7 million patients, or 69 percent of all patients hospitalized. Hospitals operated by State and local governments cared for 7.8 million patients, or 21 percent of all discharges, and proprietary hospitals operated for profit cared for 3.7 million patients or 10 percent of all discharges. Average lengths of stay were 6.8 days in voluntary nonprofit hospitals, 6.1 days in State and local government hospitals, and 6.2 days in proprietary hospitals.

Utilization by diagnosis

Diseases of the circulatory system ranked first in 1984 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 5.6 million discharges. Other leading ICD–9–CM diagnostic chapters were diseases of the digestive system (4.3 million discharges) and supplementary classifications (including females with deliveries) (4.3 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 1984 varied for the different age groups. For patients under 15 years of age, the most frequent diagnoses were acute respiratory infections,

except influenza, and chronic disease of tonsils and adenoids. Excluding females with deliveries, the two most frequent diagnoses for patients 15–44 years of age were abortions and ectopic and molar pregnancies, and fractures, all sites. 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 1.7 day for the diagnostic category chronic disease of tonsils and adenoids, 1.8 days for patients admitted for sterilization, and 2.3 days for the diagnostic category abortions and ectopic and molar pregnancies to a high of 15.8 days for the diagnostic category 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 4.5 days for patients under 15 years of age to 8.9 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 (15.8 days) and psychoses (14.5 days).

Utilization by procedures

One or more surgical or nonsurgical procedures were performed for an estimated 20.9 million of the 37.2 million inpatients discharged from short-stay hospitals during 1984. A total of 36.2 million procedures, or an average of 1.7 per patient who underwent at least one procedure, were recorded in 1984.

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 7.2 million procedures ranked first among the surgical and nonsurgical procedures performed during 1984. These were followed by operations on the digestive system with 5.9 million procedures performed. Other leading procedures were obstetrical procedures with 3.9 million procedures, operations on the musculoskeletal system with 3.7 million procedures and operations on female genital organs with 3.5 million procedures. Approximately two-thirds of all procedures performed in 1984 were included in these five ICD–9–CM procedure chapters.

The number and rate of all-listed procedures in 1984 for each ICD–9–CM procedure chapter and selected procedure categories are shown by sex and age in tables 7 and 8. Of the 36.2 million procedures performed during 1984, 14.4 million were for males and 21.8 million were for females. The corresponding rates per 1,000 population were 154 for both sexes, 127 for males, and 180 for females. Of the procedures shown in table 7, some common ones for males were endoscopic on the urinary system (natural orifice) and repair of inguinal hernia; 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 39 for patients under 15 years to 378 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 angiocardiology, and cardiac catheterization; and for patients 65 years of age and over, extraction of lens, computerized axial tomography, and endoscopies of the urinary system (natural orifice).

TABLE 1. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1984 (DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS			
TOTAL.....	37,162	14,899	22,263
AGE			
UNDER 15 YEARS.....	3,208	1,831	1,377
15-44 YEARS.....	14,533	4,305	10,228
45-64 YEARS.....	8,195	3,964	4,231
65 YEARS AND OVER.....	11,226	4,799	6,427
REGION			
NORTHEAST.....	7,408	3,086	4,321
NORTH CENTRAL.....	9,899	4,042	5,857
SOUTH.....	13,451	5,261	8,190
WEST.....	6,405	2,510	3,895
BED SIZE			
6-99 BEDS.....	5,972	2,352	3,621
100-199 BEDS.....	6,624	2,605	4,019
200-299 BEDS.....	6,361	2,614	3,747
300-499 BEDS.....	10,139	4,055	6,084
500 BEDS OR MORE.....	8,066	3,273	4,793
OWNERSHIP			
NONPROFIT.....	25,651	10,208	15,443
STATE AND LOCAL GOVERNMENT.....	7,849	3,218	4,631
PROPRIETARY.....	3,662	1,473	2,189

TABLE 2. RATE OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY AGE, GEOGRAPHIC REGION, AND SEX: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

AGE AND REGION	BOTH SEXES	MALE	FEMALE
RATE OF PATIENTS DISCHARGED PER 1,000 POPULATION			
TOTAL.....	158.5	131.6	183.6
AGE			
UNDER 15 YEARS.....	62.0	69.2	54.5
15-44 YEARS.....	132.2	79.6	183.1
45-64 YEARS.....	183.3	185.8	180.9
65 YEARS AND OVER.....	400.4	424.8	383.9
REGION			
NORTHEAST.....	149.3	130.5	166.4
NORTH CENTRAL.....	167.9	141.4	192.8
SOUTH.....	168.8	137.3	198.0
WEST.....	138.7	110.8	165.5

TABLE 3. AVERAGE LENGTH OF STAY FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS BY SELECTED CHARACTERISTICS: UNITED STATES, 1984

(DISCHARGES FROM NONFEDERAL HOSPITALS. EXCLUDES NEWBORN INFANTS)

SELECTED CHARACTERISTIC	BOTH SEXES	MALE	FEMALE
AVERAGE LENGTH OF STAY IN DAYS			
TOTAL.....	6.6	7.0	6.3
AGE			
UNDER 15 YEARS.....	4.5	4.4	4.6
15-44 YEARS.....	4.9	6.0	4.4
45-64 YEARS.....	7.2	7.1	7.2
65 YEARS AND OVER.....	8.9	8.8	9.0
REGION			
NORTHEAST.....	7.8	8.1	7.6
NORTH CENTRAL.....	6.9	7.3	6.6
SOUTH.....	6.1	6.5	5.9
WEST.....	5.7	6.3	5.3
BED SIZE			
6-99 BEDS.....	5.3	5.5	5.3
100-199 BEDS.....	6.0	6.6	5.7
200-299 BEDS.....	6.6	6.8	6.4
300-499 BEDS.....	6.9	7.3	6.7
500 BEDS OR MORE.....	7.5	8.3	7.0
OWNERSHIP			
NONPROFIT.....	6.8	7.2	6.5
STATE AND LOCAL GOVERNMENT.....	6.1	6.6	5.7
PROPRIETARY.....	6.2	6.5	6.1

Symbols

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

TABLE 4. NUMBER OF INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY CATEGORY OF FIRST-LISTED DIAGNOSIS, SEX, AND AGE: UNITED STATES, 1984
 (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)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
NUMBER OF PATIENTS DISCHARGED IN THOUSANDS							
ALL CONDITIONS.....	37,162	14,899	22,263	3,208	14,533	8,195	11,226
INFECTIOUS AND PARASITIC DISEASES.....001-139	658	301	357	185	217	89	166
NEOPLASMS.....140-239	2,576	1,060	1,516	62	456	884	1,174
MALIGNANT NEOPLASMS.....140-208,230-234	2,059	943	1,117	36	227	727	1,070
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	340	214	126	*	13	155	172
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	234	*	231	*	33	101	100
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	1,139	427	712	78	273	314	474
DIABETES MELLITUS.....250	593	238	354	23	143	199	227
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	354	152	202	57	86	58	153
MENTAL DISORDERS.....290-319	1,690	875	815	50	966	413	261
PSYCHOSES.....290-299	625	283	341	*7	329	155	133
NEUROTIC AND PERSONALITY DISORDERS.....300-301	228	77	151	*7	134	58	28
ALCOHOL DEPENDENCE SYNDROME.....303	392	288	104	*	232	128	31
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	1,669	709	960	257	349	345	718
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	441	211	230	58	157	92	134
CATARACT.....366	481	165	316	*	10	74	395
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	321	158	162	152	60	56	53
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	5,593	2,856	2,737	35	531	1,762	3,265
ESSENTIAL HYPERTENSION.....401	266	110	155	*	48	115	102
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	3,599	1,905	1,694	20	266	1,203	2,110
ACUTE MYOCARDIAL INFARCTION.....410	700	435	266	*	42	257	401
ATHEROSCLEROTIC HEART DISEASE.....414.0	365	225	140	*	18	135	212
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	969	535	434	*	74	422	471
CONGESTIVE HEART FAILURE.....428.0	531	228	303	*	11	92	425
CEREBROVASCULAR DISEASE.....430-438	896	420	476	*5	32	192	667
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	3,365	1,654	1,711	877	708	642	1,137
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	449	207	243	199	86	65	99
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	327	142	185	218	105	*	*
PNEUMONIA, ALL FORMS.....480-486	837	424	413	207	114	136	380
ASTHMA.....493	465	197	268	150	109	102	105
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	4,305	2,013	2,292	409	1,365	1,169	1,361
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	327	179	148	*	81	98	146
GASTRITIS AND DUODENITIS.....535	266	108	158	17	103	85	61
APPENDICITIS.....540-543	270	154	116	69	158	28	15
INGUINAL HERNIA.....550	440	390	50	58	125	131	125
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	540	213	327	171	175	88	106
CHOLELITHIASIS.....574	488	141	347	*	177	155	155
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	3,116	1,043	2,073	134	1,460	753	769
CALCULUS OF KIDNEY AND URETER.....592	328	222	106	*	149	126	52
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	254	...	254	*	191	59	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	969	...	969	*6	960	*	...
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	418	...	418	*	413	*	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	568	263	305	60	205	147	156
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	2,375	1,007	1,368	68	925	755	627
ARTHRITIS AND RELATED DISORDERS.....710-719	536	207	329	19	161	161	196
INTERVERTEBRAL DISC DISORDERS.....722	509	288	221	*	271	183	53
CONGENITAL ANOMALIES.....740-759	317	174	143	166	81	43	26
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	167	88	79	166	*	-	*
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	520	245	276	93	209	140	79
INJURY AND POISONING.....800-999	3,472	1,892	1,580	438	1,622	596	816
FRACTURES, ALL SITES.....800-829	1,114	541	573	146	387	161	420
FRACTURE OF NECK OF FEMUR.....820	244	64	179	*	11	25	205
SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	269	128	142	*	168	70	28
INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	270	157	112	68	141	25	35
LACERATIONS AND OPEN WOUNDS.....870-904	315	230	86	45	204	42	25
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	4,308	141	4,167	66	4,119	81	42
PERSONS ADMITTED FOR STERILIZATION.....V25.2	113	*	111	-	111	*	-
FEMALES WITH DELIVERIES.....V27	3,853	...	3,853	13	3,836	*	...

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, 1984

(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)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
RATE OF INPATIENTS DISCHARGED PER 10,000 POPULATION							
ALL CONDITIONS.....	1,585.1	1,316.2	1,836.2	620.1	1,321.7	1,832.8	4,003.6
INFECTIOUS AND PARASITIC DISEASES.....001-139	28.1	26.6	29.4	35.9	19.8	19.9	59.2
NEOPLASMS.....140-239	109.9	93.7	125.1	12.1	41.5	197.7	418.6
MALIGNANT NEOPLASMS.....140-208,230-234	87.8	83.3	92.1	7.0	20.6	162.6	381.5
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	14.5	18.9	10.4	*	1.2	34.7	61.2
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	10.0	*	19.1	*	3.0	22.5	35.7
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	48.6	37.7	58.8	15.0	24.8	70.3	169.2
DIABETES MELLITUS.....250	25.3	21.0	29.2	4.5	13.0	44.5	81.1
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	15.1	13.4	16.7	11.0	7.8	13.1	54.6
MENTAL DISORDERS.....290-319	72.1	77.3	67.3	9.6	87.8	92.4	93.2
PSYCHOSES.....290-299	26.6	25.0	28.2	*1.4	29.9	34.6	47.5
NEUROTIC AND PERSONALITY DISORDERS.....300-301	9.7	6.8	12.4	*1.4	12.2	13.0	10.0
ALCOHOL DEPENDENCE SYNDROME.....303	16.7	25.5	8.6	*	21.1	28.6	11.1
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	71.2	62.6	79.2	49.7	31.7	77.2	256.1
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	18.8	18.6	19.0	11.1	14.3	20.7	47.9
CATARACT.....366	20.5	14.6	26.1	*	0.9	16.6	140.7
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	13.7	14.0	13.4	29.4	5.4	12.5	18.9
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	238.6	252.3	225.8	6.7	48.3	394.1	1,164.5
ESSENTIAL HYPERTENSION.....401	11.3	9.8	12.8	*	4.4	25.6	36.3
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	153.5	168.3	139.7	3.8	24.2	269.1	752.4
ACUTE MYOCARDIAL INFARCTION.....410	29.9	38.4	21.9	*	3.8	57.5	142.9
ATHEROSCLEROTIC HEART DISEASE.....414.0	15.6	19.9	11.5	*	1.6	30.1	75.6
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	41.3	47.3	35.8	*	6.7	94.3	168.0
CONGESTIVE HEART FAILURE.....428.0	22.6	20.1	25.0	*	1.0	20.6	151.7
CEREBROVASCULAR DISEASE.....430-438	38.2	37.1	39.3	*0.9	3.0	42.9	237.9
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	143.5	146.1	141.1	169.6	64.4	143.6	405.4
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	19.2	18.2	20.0	38.5	7.8	14.5	35.4
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	14.0	12.5	15.3	42.2	9.6	*	*
PNEUMONIA, ALL FORMS.....480-486	35.7	37.4	34.1	39.9	10.3	30.5	135.6
ASTHMA.....493	19.8	17.4	22.1	28.9	9.9	22.8	37.3
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	183.6	177.8	189.0	79.1	124.2	261.5	485.5
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	13.9	15.8	12.2	*	7.3	21.8	51.9
GASTRITIS AND DUODENITIS.....535	11.3	9.5	13.0	3.2	9.4	19.0	21.7
APPENDICITIS.....540-543	11.5	13.6	9.6	13.4	14.4	6.3	5.2
INGUINAL HERNIA.....550	18.8	34.4	4.1	11.3	11.4	29.4	44.5
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	23.0	18.8	27.0	33.0	15.9	19.7	37.9
CHOLELITHIASIS.....574	20.8	12.5	28.6	*	16.1	34.7	55.2
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	132.9	92.1	171.0	26.0	132.8	168.3	274.1
CALCULUS OF KIDNEY AND URETER.....592	14.0	19.6	8.7	*	13.5	28.2	18.5
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	10.8	...	21.0	*	17.3	13.3	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	41.3	...	79.9	*1.2	87.3	*	...
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	17.8	...	34.5	*	37.5	*	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	24.2	23.2	25.1	11.6	18.7	32.8	55.7
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	101.3	89.0	112.8	13.1	84.1	169.0	223.6
ARTHROPATHIES AND RELATED DISORDERS.....710-719	22.9	18.3	27.1	3.7	14.6	35.9	69.8
INTERVERTEBRAL DISC DISORDERS.....722	21.7	25.4	18.2	*	24.6	41.0	19.0
CONGENITAL ANOMALIES.....740-759	13.5	15.4	11.8	32.1	7.4	9.7	9.4
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	7.1	7.8	6.5	32.1	*	-	*
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	22.2	21.6	22.7	17.9	19.0	31.4	28.0
INJURY AND POISONING.....800-999	148.1	167.2	130.3	84.7	147.5	133.3	291.1
FRACTURES, ALL SITES.....800-829	47.5	47.8	47.2	28.3	35.2	36.0	149.6
FRACTURE OF NECK OF FEMUR.....820	10.4	5.7	14.8	*	1.0	5.5	73.2
SPRAINS AND STRAINS OF BACK (INCLUDING NECK).....846-847	11.5	11.3	11.7	*	15.3	15.7	9.9
INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	11.5	13.9	9.3	13.1	12.9	5.6	12.6
LACERATIONS AND OPEN WOUNDS.....870-904	13.5	20.3	7.1	8.7	18.5	9.3	9.0
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	183.8	12.5	343.7	12.8	374.6	18.2	15.0
PERSONS ADMITTED FOR STERILIZATION.....V25.2	4.8	*	9.2	-	10.1	*	-
FEMALES WITH DELIVERIES.....V27	164.4	...	317.8	2.6	348.9	*	...

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, 1984

(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)

CATEGORY OF FIRST-LISTED DIAGNOSIS AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
AVERAGE LENGTH OF STAY IN DAYS							
ALL CONDITIONS.....	6.6	7.0	6.3	4.5	4.9	7.2	8.9
INFECTIOUS AND PARASITIC DISEASES.....001-139	6.6	6.9	6.4	4.0	5.7	8.1	10.1
NEOPLASMS.....140-239	9.0	9.6	8.5	5.1	6.4	8.7	10.4
MALIGNANT NEOPLASMS.....140-208,230-234	9.8	10.1	9.5	6.6	7.9	9.1	10.7
MALIGNANT NEOPLASM OF TRACHEA, BRONCHUS, AND LUNG.....162,197.0,197.3	9.5	9.4	9.8	*	7.6	8.7	10.4
MALIGNANT NEOPLASM OF BREAST.....174-175,198.81	8.3	*	8.3	*	6.9	7.7	9.4
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES, AND IMMUNITY DISORDERS.....240-279	7.6	7.5	7.7	4.7	5.7	7.4	9.4
DIABETES MELLITUS.....250	8.2	7.8	8.5	5.8	5.9	8.2	9.9
DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.....280-289	6.2	5.7	6.5	3.7	5.1	6.7	7.4
MENTAL DISORDERS.....290-319	11.9	11.5	12.4	16.7	11.8	11.4	12.2
PSYCHOSES.....290-299	14.5	14.0	14.9	*26.5	14.5	14.3	14.1
NEUROTIC AND PERSONALITY DISORDERS.....300-301	11.2	10.1	11.7	*22.2	11.7	10.0	8.4
ALCOHOL DEPENDENCE SYNDROME.....303	10.6	10.4	11.2	*	10.6	10.0	13.3
DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.....320-389	4.8	5.1	4.5	3.6	5.0	5.1	5.0
DISEASES OF THE CENTRAL NERVOUS SYSTEM.....320-336,340-349	9.3	9.9	8.8	6.9	7.1	9.6	12.9
CATARACT.....366	2.4	2.2	2.5	*	2.8	2.5	2.4
DISEASES OF THE EAR AND MASTOID PROCESS.....380-389	3.2	3.2	3.1	2.6	2.7	3.6	4.9
DISEASES OF THE CIRCULATORY SYSTEM.....390-459	8.2	7.9	8.6	6.3	6.2	7.5	9.0
ESSENTIAL HYPERTENSION.....401	5.6	5.4	5.8	*	4.4	5.1	6.8
HEART DISEASE.....391-392.0,393-398,402,404,410-416,420-429	7.8	7.5	8.1	6.1	6.1	7.1	8.4
ACUTE MYOCARDIAL INFARCTION.....410	10.0	9.5	10.8	*	8.3	9.5	10.4
ATHEROSCLEROTIC HEART DISEASE.....414.0	7.2	7.2	7.3	*	5.4	6.4	7.9
OTHER ISCHEMIC HEART DISEASE.....411-413,414.1-414.9	6.0	5.8	6.3	*	5.0	5.7	6.4
CONGESTIVE HEART FAILURE.....428.0	8.6	8.2	8.9	*	6.1	8.3	8.7
CEREBROVASCULAR DISEASE.....430-438	10.4	9.8	10.8	*8.5	11.1	10.3	10.4
DISEASES OF THE RESPIRATORY SYSTEM.....460-519	6.0	5.9	6.1	3.4	3.9	6.8	8.9
ACUTE RESPIRATORY INFECTIONS, EXCEPT INFLUENZA.....460-466	4.6	4.3	4.8	3.2	3.9	5.8	7.1
CHRONIC DISEASE OF TONSILS AND ADENOIDS.....474	1.7	1.6	1.7	1.6	1.7	*	*
PNEUMONIA, ALL FORMS.....480-486	7.8	7.3	8.2	4.8	5.9	8.1	9.8
ASTHMA.....493	5.2	4.6	5.6	3.6	4.5	5.7	7.6
DISEASES OF THE DIGESTIVE SYSTEM.....520-579	6.3	6.0	6.6	3.6	4.9	6.6	8.2
ULCERS OF THE STOMACH AND SMALL INTESTINE.....531-534	7.4	7.5	7.3	*	5.2	7.1	8.8
GASTRITIS AND DUODENITIS.....535	4.7	4.5	4.8	2.9	4.0	5.2	5.6
APPENDICITIS.....540-543	5.1	4.9	5.4	4.6	4.7	6.8	9.0
INGUINAL HERNIA.....550	3.8	3.7	3.9	1.9	2.9	4.0	5.2
NONINFECTIOUS ENTERITIS AND COLITIS.....555-556,558	4.9	4.7	5.0	3.4	4.9	6.0	6.4
CHOLELITHIASIS.....574	7.6	8.1	7.4	*	6.2	7.3	9.7
DISEASES OF THE GENITOURINARY SYSTEM.....580-629	5.4	5.9	5.2	3.6	4.4	5.2	7.7
CALCULUS OF KIDNEY AND URETER.....592	4.2	4.0	4.7	*	3.3	4.2	6.7
DISORDERS OF MENSTRUATION AND OTHER ABNORMAL VAGINAL BLEEDING.....626	3.5	...	3.5	*	3.4	3.9	*
COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM.....1/ 630-676	2.6	...	2.6	*6.2	2.6	*	...
ABORTIONS AND ECTOPIC AND MOLAR PREGNANCIES.....630-639	2.3	...	2.3	*	2.3	*	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE.....680-709	8.0	7.8	8.1	4.0	6.0	8.5	11.7
DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE.....710-739	7.0	6.5	7.3	5.5	5.6	6.9	9.3
ARTHROPATHIES AND RELATED DISORDERS.....710-719	8.1	7.0	8.8	6.1	4.7	8.3	10.9
INTERVERTEBRAL DISC DISORDERS.....722	7.6	7.0	8.3	*	7.1	7.9	9.0
CONGENITAL ANOMALIES.....740-759	6.0	5.9	6.2	5.7	4.4	8.3	9.6
CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD.....760-779	12.2	11.1	13.4	12.2	*	-	*
SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS.....780-799	4.1	4.0	4.3	3.1	3.6	4.7	5.6
INJURY AND POISONING.....800-999	6.8	6.3	7.5	3.9	5.4	7.2	11.0
FRACTURES, ALL SITES.....800-829	9.3	8.2	10.3	4.7	7.0	8.7	13.3
FRACTURE OF NECK OF FEMUR.....820	15.8	16.1	15.6	*	17.5	13.6	15.9
SPRAINS AND STRAINS OF BACK (INCLUDING NECK) INTRACRANIAL INJURIES (EXCLUDING THOSE WITH SKULL FRACTURE).....850-854	6.4	6.0	6.8	*	6.1	7.1	7.5
LACERATIONS AND OPEN WOUNDS.....870-904	4.5	4.4	4.9	3.8	4.2	5.5	6.9
SUPPLEMENTARY CLASSIFICATIONS.....V01-V82	3.4	3.7	3.4	3.3	3.4	4.0	5.0
PERSONS ADMITTED FOR STERILIZATION.....V25.2	1.8	*	1.8	-	1.9	*	-
FEMALES WITH DELIVERIES.....V27	3.4	...	3.4	3.2	3.4	*	...

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, 1984

(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)

PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
NUMBER OF ALL-LISTED PROCEDURES IN THOUSANDS							
ALL PROCEDURES.....	36,155	14,359	21,796	2,024	14,757	8,762	10,612
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	895	460	435	133	317	249	196
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	111	26	84	*5	45	43	18
OPERATIONS ON THE EYE.....08-16	1,347	518	829	59	116	258	914
EXTRACTION OF LENS.....13.1-13.6	506	175	331	*5	11	81	409
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	455	159	296	*	*5	73	375
OPERATIONS ON THE EAR.....18-20	326	180	146	168	83	46	29
MYRINGOTOMY.....20.0	138	79	58	121	11	*	*
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	1,331	658	674	351	618	231	131
RHINOPLASTY AND REPAIR OF NOSE.....21.8	235	111	124	*9	163	46	17
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	348	148	200	224	118	*6	*
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	989	587	402	61	174	336	418
BRONCHOSCOPY.....33.21-33.23	214	127	87	16	30	71	97
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	2,101	1,248	853	91	303	832	875
OPEN HEART SURGERY.....35.1-35.51, 35.53-36.2, 36.9, 37.10-37.11, 37.32-37.33, 37.5	314	218	96	13	39	160	102
DIRECT HEART REVASCULARIZATION.....36.1	202	156	46	*	15	115	71
CARDIAC CATHETERIZATION.....37.21-37.23	570	372	198	27	85	288	171
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR.....37.7-37.8	208	110	98	*	*7	35	164
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	367	182	185	18	81	109	159
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	5,930	2,581	3,350	264	1,994	1,591	2,081
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23, 44.13	230	114	117	*8	45	75	102
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8, 45.6-45.8	257	118	138	*	37	76	139
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	294	160	134	70	177	30	16
HEMORRHOIDECTOMY.....49.43-49.46	131	69	62	-	62	49	21
CHOLECYSTECTOMY.....51.2	485	145	339	*	183	155	145
REPAIR OF INGUINAL HERNIA.....53.0-53.1	469	411	57	65	130	136	138
DIVISION OF PERITONEAL ADHESIONS.....54.5	308	40	268	*	185	56	64
OPERATIONS ON THE URINARY SYSTEM.....55-59	1,886	1,149	737	89	392	530	875
ENDOSCOPIES (NATURAL ORIFICE).....55.21-55.22, 56.31, 57.32, 58.22	774	536	238	26	123	208	416
DILATION OF URETHRA.....58.6	164	91	74	14	34	45	71
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	822	822	...	103	113	195	410
PROSTATECTOMY.....60.2-60.6	361	361	*	83	275
CIRCUMCISION.....64.0	71	71	...	42	*10	11	*8
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	3,532	...	3,532	14	2,616	641	261
OOPHORECTOMY AND SALPINGO-OOPHORECTOMY.....65.3-65.6	498	...	498	*	298	155	44
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	488	...	488	-	484	*	-
HYSTERECTOMY.....68.3-68.7	664	...	664	*	416	188	60
CURETTAGE OF UTERUS TO TERMINATE PREGNANCY.....69.01, 69.51	67	...	67	*	66	*	...
DILATION AND CURETTAGE OF UTERUS AFTER DELIVERY OR ABORTION.....69.02	251	...	251	*	249	*	...
DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS.....69.09	470	...	470	*	317	115	38
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	172	...	172	-	59	67	46
OBSTETRICAL PROCEDURES.....72-75	3,872	...	3,872	11	3,858	*	...
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1, 72.21, 72.31, 72.71, 73.6	1,861	...	1,861	*5	1,855	*	...
CESAREAN SECTION.....74.0-74.2, 74.4, 74.99	813	...	813	*	810	*	...
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	483	...	483	*	481	*	...
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	3,698	1,793	1,905	249	1,594	980	874
OPEN REDUCTION OF FRACTURE.....76.72, 76.74, 76.76-76.77, 76.79, 79.2-79.3, 79.5-79.6	436	234	202	32	190	70	143
OTHER REDUCTION OF FRACTURE.....76.70-76.71, 76.73, 76.75, 76.78, 79.0-79.1, 79.4	241	131	109	71	82	35	52
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5, 81.0	277	163	114	*	152	102	19
EXCISION OF SEMILUNAR CARTILAGE OF KNEE.....80.6	136	91	45	*	82	36	15
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	164	85	79	*	70	35	56
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5-81.6	184	53	130	*	*8	34	141
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	1,785	681	1,103	112	743	501	428
MASTECTOMY.....85.4	121	*6	116	*	16	50	54
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	161	101	60	15	68	37	40
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	7,163	3,474	3,689	294	1,710	2,216	2,942
COMPUTERIZED AXIAL TOMOGRAPHY.....87.03, 87.41, 87.71, 88.01, 88.38	1,091	530	561	46	247	297	502
PYEOLOGRAM.....87.73-87.75	421	230	191	14	126	136	145
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	972	587	385	14	134	431	392
DIAGNOSTIC ULTRASOUND.....88.7	836	317	519	32	260	211	333
RADIOISOTOPE SCAN.....92.0-92.1	764	349	414	13	142	230	379

TABLE 8. RATE OF ALL-LISTED PROCEDURES FOR INPATIENTS DISCHARGED FROM SHORT-STAY HOSPITALS, BY PROCEDURE CATEGORY, SEX, AND AGE: UNITED STATES, 1984

(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)

PROCEDURE CATEGORY AND ICD-9-CM CODE	TOTAL	SEX		AGE			
		MALE	FEMALE	UNDER 15 YEARS	15-44 YEARS	45-64 YEARS	65 YEARS AND OVER
RATE OF ALL-LISTED PROCEDURES PER 100,000 POPULATION							
ALL PROCEDURES.....	15,421.7	12,684.7	17,977.1	3,912.9	13,420.4	19,597.5	37,844.7
OPERATIONS ON THE NERVOUS SYSTEM.....01-05	381.8	406.2	359.0	257.3	288.4	557.4	697.3
OPERATIONS ON THE ENDOCRINE SYSTEM.....06-07	47.2	23.2	69.7	*9.3	40.8	96.4	64.2
OPERATIONS ON THE EYE.....08-16	574.8	457.9	683.9	114.8	105.4	576.3	3,261.3
EXTRACTION OF LENS.....13.1-13.6	215.8	154.6	273.0	*9.6	10.4	180.2	1,458.5
INSERTION OF PROSTHETIC LENS (PSEUDOPHAKOS).....13.7	194.0	140.2	244.2	*	*4.4	164.3	1,338.9
OPERATIONS ON THE EAR.....18-20	139.0	159.1	120.2	325.2	75.4	102.7	102.5
MYRINGOTOMY.....20.0	58.7	70.1	48.1	233.4	10.2	*	*
OPERATIONS ON THE NOSE, MOUTH, AND PHARYNX.....21-29	567.8	581.1	555.5	678.9	562.5	516.3	466.3
RHINOPLASTY AND REPAIR OF NOSE.....21.8	100.3	98.1	102.3	*18.0	148.6	101.8	60.1
TONSILLECTOMY WITH OR WITHOUT ADENOIDECTOMY.....28.2-28.3	148.5	130.7	165.0	433.8	107.0	*12.3	*
OPERATIONS ON THE RESPIRATORY SYSTEM.....30-34	421.7	518.5	331.4	118.5	157.9	751.2	1,490.3
BRONCHOSCOPY.....33.21-33.23	91.3	112.5	71.6	31.8	27.2	157.8	346.5
OPERATIONS ON THE CARDIOVASCULAR SYSTEM.....35-39	896.3	1,102.7	703.6	176.8	275.6	1,861.3	3,119.0
OPEN HEART SURGERY.....35.1-35.51,							
35.53-36.2,36.9,37.10-37.11,37.32-37.33,37.5	134.0	192.7	79.3	24.3	35.8	358.9	363.0
DIRECT HEART REVASCULARIZATION.....36.1	86.3	137.7	38.2	*	13.9	257.7	254.5
CARDIAC CATHETERIZATION.....37.21-37.23	242.9	328.6	162.9	51.7	76.9	643.6	608.2
PACEMAKER INSERTION, REPLACEMENT, REMOVAL, REPAIR.....37.7-37.8	88.8	97.1	81.1	*	*6.8	77.8	586.0
OPERATIONS ON THE HEMIC AND LYMPHATIC SYSTEM.....40-41	156.4	160.9	152.3	34.1	73.4	243.7	568.6
OPERATIONS ON THE DIGESTIVE SYSTEM.....42-54	2,529.6	2,279.8	2,762.8	511.0	1,813.3	3,558.4	7,422.2
ESOPHAGOSCOPY AND GASTROSCOPY (NATURAL ORIFICE).....42.23,44.13	98.3	100.3	96.4	*16.4	40.7	168.4	363.0
PARTIAL GASTRECTOMY AND RESECTION OF INTESTINE.....43.5-43.8,45.6-45.8	109.4	104.4	114.1	*	33.6	171.1	494.7
APPENDECTOMY, EXCLUDING INCIDENTAL.....47.0	125.5	141.8	110.3	135.4	161.4	68.1	58.0
HEMORRHOIDECTOMY.....49.43-49.46	56.0	61.1	51.2	-	56.0	108.7	75.0
CHOLECYSTECTOMY.....51.2	206.7	128.5	279.7	*	166.5	346.2	518.4
REPAIR OF INGUINAL HERNIA.....53.0-53.1	199.9	363.3	47.4	125.0	118.2	304.8	491.1
DIVISION OF PERITONEAL ADHESIONS.....54.5	131.3	35.6	220.7	*	168.7	124.6	226.6
OPERATIONS ON THE URINARY SYSTEM.....55-59	804.5	1,015.0	608.0	172.4	356.4	1,185.7	3,120.1
ENDOSCOPIES (NATURAL ORIFICE).....55.21-55.22,56.31,57.32,58.22	329.9	473.1	196.3	51.0	111.5	466.0	1,484.4
DILATION OF URETHRA.....58.6	70.1	80.3	60.6	27.4	30.7	101.5	253.5
OPERATIONS ON THE MALE GENITAL ORGANS.....60-64	350.5	726.0	...	199.7	102.7	436.5	1,463.4
PROSTATECTOMY.....60.2-60.6	154.0	319.0	*	185.7	980.5
CIRCUMCISION.....64.0	30.1	62.3	...	81.1	*8.7	24.8	*28.1
OPERATIONS ON THE FEMALE GENITAL ORGANS.....65-71	1,506.7	...	2,913.4	27.2	2,378.9	1,434.4	931.5
OPHORECTOMY AND SALPINGO-OPHORECTOMY.....65.3-65.6	212.5	...	410.9	*	270.9	347.2	158.5
BILATERAL DESTRUCTION OR OCCLUSION OF FALLOPIAN TUBES.....66.2-66.3	208.0	...	402.1	-	439.8	*	-
HYSTERECTOMY.....68.3-68.7	283.4	...	548.1	*	378.3	421.4	213.8
CURETTAGE OF UTERUS TO TERMINATE PREGNANCY.....69.01,69.51	28.6	...	55.3	*	59.9	*	...
DILATION AND CURETTAGE OF UTERUS AFTER DELIVERY OR ABORTION.....69.02	107.0	...	206.9	*	226.2	*	...
DIAGNOSTIC DILATION AND CURETTAGE OF UTERUS.....69.09	200.4	...	387.5	*	288.1	257.1	134.4
REPAIR OF CYSTOCELE AND RECTOCELE.....70.5	73.5	...	142.2	-	53.7	149.6	165.6
OBSTETRICAL PROCEDURES.....72-75	1,651.7	...	3,193.7	20.4	3,508.8	*	...
EPISIOTOMY WITH OR WITHOUT FORCEPS OR VACUUM EXTRACTION.....72.1,72.21,72.31,72.71,73.6	793.8	...	1,534.8	*10.0	1,687.1	*	...
CESAREAN SECTION.....74.0-74.2,74.4,74.99	346.6	...	670.3	*	736.5	*	...
REPAIR OF CURRENT OBSTETRIC LACERATION.....75.5-75.6	206.1	...	398.5	*	437.2	*	...
OPERATIONS ON THE MUSCULOSKELETAL SYSTEM.....76-84	1,577.2	1,584.0	1,570.9	482.2	1,449.8	2,192.0	3,116.8
OPEN REDUCTION OF FRACTURE.....76.72,							
76.74,76.76-76.77,76.79,79.2-79.3,79.5-79.6	185.9	206.6	166.6	61.8	173.2	157.6	510.0
OTHER REDUCTION OF FRACTURE.....76.70-76.71,76.73,76.75,76.78,79.0-79.1,79.4	102.7	116.1	90.2	138.1	74.4	78.6	186.7
EXCISION OR DESTRUCTION OF INTERVERTEBRAL DISC AND SPINAL FUSION.....80.5,81.0	118.1	143.8	94.2	*	138.4	228.7	67.4
EXCISION OF SEMILUNAR CARTILAGE OF KNEE.....80.6	57.9	80.5	36.8	*	75.0	81.1	54.2
ARTHROPLASTY AND REPLACEMENT OF KNEE.....81.41-81.47	69.9	75.0	65.0	*	63.7	78.9	198.0
ARTHROPLASTY AND REPLACEMENT OF HIP.....81.5-81.6	78.3	47.1	107.5	*	*6.9	77.0	501.6
OPERATIONS ON THE INTEGUMENTARY SYSTEM.....85-86	761.3	601.9	910.1	216.9	675.5	1,121.5	1,527.6
MASTECTOMY.....85.4	51.6	*4.9	95.3	*	14.9	112.6	193.0
SKIN GRAFT (EXCEPT LIP OR MOUTH).....86.6-86.7	68.7	89.5	49.2	29.9	61.7	83.8	143.0
MISCELLANEOUS DIAGNOSTIC AND THERAPEUTIC PROCEDURES.....87-99	3,055.2	3,068.6	3,042.7	568.4	1,555.5	4,956.7	10,492.4
COMPUTERIZED AXIAL TOMOGRAPHY.....87.03,87.41,87.71,88.01,88.38	465.5	468.6	462.6	89.5	224.5	663.5	1,788.5
PYELOGRAM.....87.73-87.75	179.6	203.0	157.8	27.7	114.5	303.9	517.2
ARTERIOGRAPHY AND ANGIOCARDIOGRAPHY USING CONTRAST MATERIAL.....88.4-88.5	414.6	518.7	317.5	26.9	122.3	964.8	1,399.0
DIAGNOSTIC ULTRASOUND.....88.7	356.5	280.3	427.7	61.8	286.5	472.0	1,186.9
RADIOISOTOPE SCAN.....92.0-92.1	325.8	308.7	341.8	26.1	129.0	513.8	1,351.2

References

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- ⁴Data from the American Hospital Association 1983 Annual Survey: American Hospital Association, Chicago, Illinois.
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- ⁶National Center for Health Statistics, M. J. Witkin: Utilization of short-stay hospitals by characteristics of discharged patients, United States, 1965. *Vital and Health Statistics*. Series 13, No. 3. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1967.

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 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 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, and 1983. In all, 553 hospitals were sampled in 1984. Of these hospitals, 86 refused to participate, and 60 were out of scope. The 407 participating hospitals provided approximately 192,000 abstracts of medical records. Table I provides a distribution of the current hospitals in the universe⁴ and NHDS sample of in-scope hospitals for 1984.

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.

Table I. Distribution of non-Federal short-stay hospitals in the universe and National Hospital Discharge Survey in-scope sample by geographic region and bed size of hospital: United States, 1984

Bed size of hospital	All regions	Northeast	North Central	South	West
Number of hospitals					
All sizes					
Universe.....	6,023	902	1,704	2,291	1,126
Sample.....	493	115	140	164	74
6-49 beds					
Universe.....	1,372	78	415	535	344
Sample.....	39	6	11	13	9
50-99 beds					
Universe.....	1,467	160	427	611	269
Sample.....	62	10	14	30	8
100-199 beds					
Universe.....	1,398	203	373	571	251
Sample.....	93	16	22	43	12
200-299 beds					
Universe.....	733	196	177	237	123
Sample.....	72	18	21	20	13
300-499 beds					
Universe.....	715	176	202	224	113
Sample.....	119	37	35	25	22
500-999 beds					
Universe.....	309	78	101	105	25
Sample.....	95	23	34	29	9
1,000 beds or more					
Universe.....	29	11	9	8	1
Sample.....	13	5	3	4	1

NOTE: A list of references follows the text.

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.

The sample selection and the transcription of information from the hospital records to 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.

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.^{5,6}

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 II. 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 III.

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.

Table II. Approximate relative standard errors of estimated numbers of first-listed discharges and all-listed procedures: United States, 1984

<i>Size of estimate</i>	<i>First-listed diagnosis</i>	<i>All-listed procedures</i>
5,000	16.0	17.1
10,000	12.8	14.0
50,000	8.1	9.2
100,000	6.8	7.8
500,000	4.8	5.7
1,000,000	4.2	5.1
3,000,000	3.5	4.3
5,000,000	3.2	4.0
10,000,000	2.9	3.6
20,000,000	2.7	3.3
30,000,000	2.5	...
40,000,000	2.5	...

Table III. Approximate standard errors of average lengths of stay by number of discharges: United States, 1984

<i>Number of discharges</i>	<i>Average length of stay in days</i>			
	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	0.8
5,000,000	0.2	0.5	0.8	...

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

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 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 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, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
North Central. . .	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South.	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska.

NOTE: A list of references follows the text.

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