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North Carolina Hospital Discharges: 1996 Summary

by

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ABSTRACT

Objectives: This report uses CY 1996 hospital discharge data to compare North Carolina to the nation, whites to minorities, and current hospitalization indices to those observed in 1990. The purpose is to discern trends and patterns in hospital use and charges.

Methods: The indices examined include population-based discharge rates, average lengths of hospital stay, and hospital charges according to several categories of principal diagnosis, mentioned procedure, and payer class (public and private insurers). The data are for North Carolina residents discharged from North Carolina hospitals.

Results: Compared to the nation, North Carolina's hospital discharge rates for heart and cerebrovascular disease are higher, especially among minorities and ages 45-64. Compared to whites, the state's minorities have higher discharge rates for most leading diagnoses, especially diabetes. Except for some coronary procedures, minorities also have higher procedure rates. For all discharges, changes observed between 1990 and 1996 include reduced lengths of hospital stay, increased charges, and increases in coronary procedures and knee and hip replacements.

Conclusions: This report reveals several problems associated with the CY 1996 hospital discharge file including that seven state psychiatric hospitals did not report to the system and race was not reported for 11 percent of the discharges used in this analysis.



Introduction

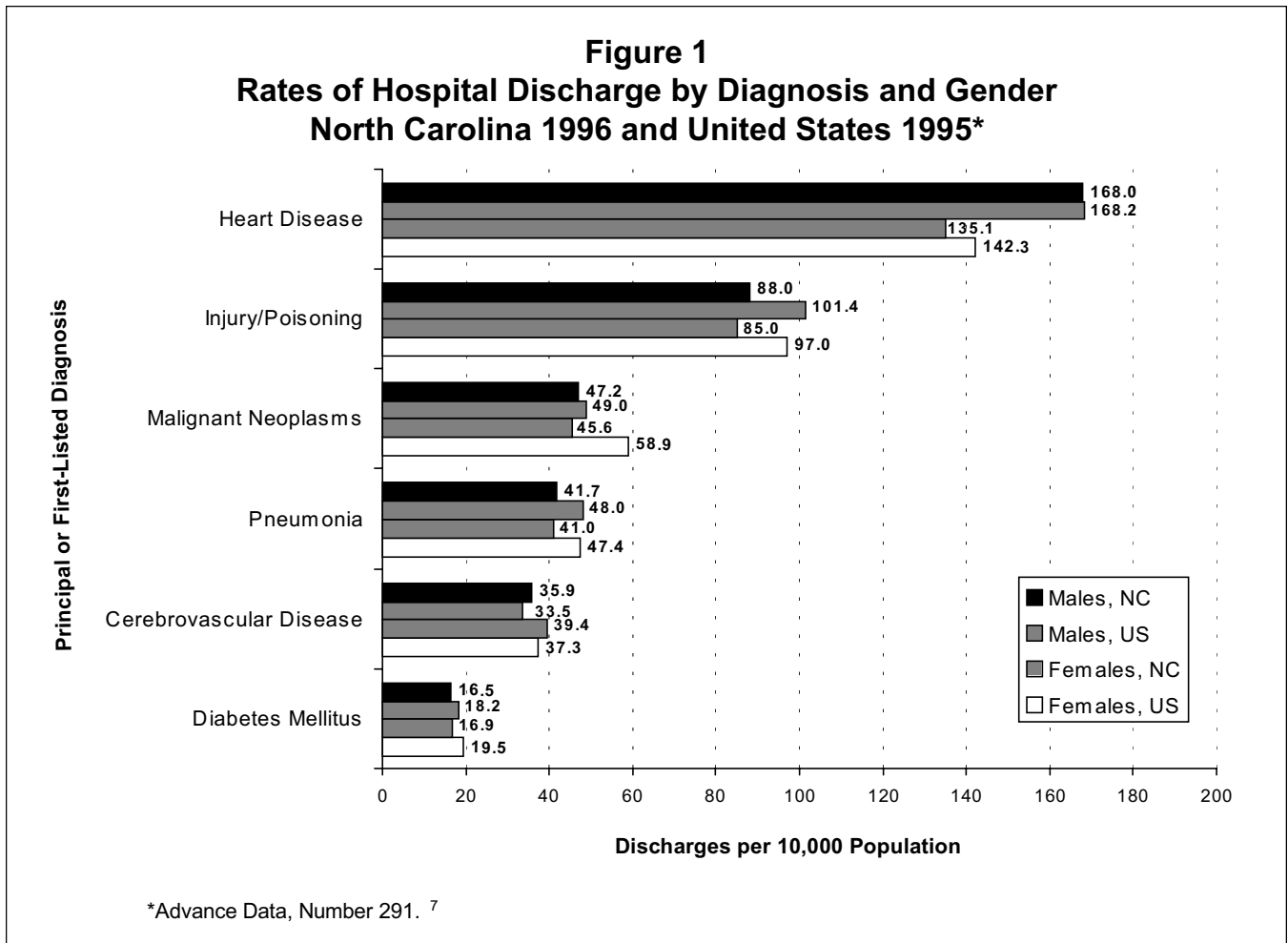
The tracking of hospital discharge data is critically important to an overall assessment of health costs and health care use. The State Center has a history of examining and reporting these data for North Carolina hospitals.¹⁻⁶ Most recently, a statistical brief describes costs and related indicators for CY 1995.⁶ The main purpose of the present report is to present data for CY 1996. First, a brief overview of the state’s hospital discharge reporting experience is presented.

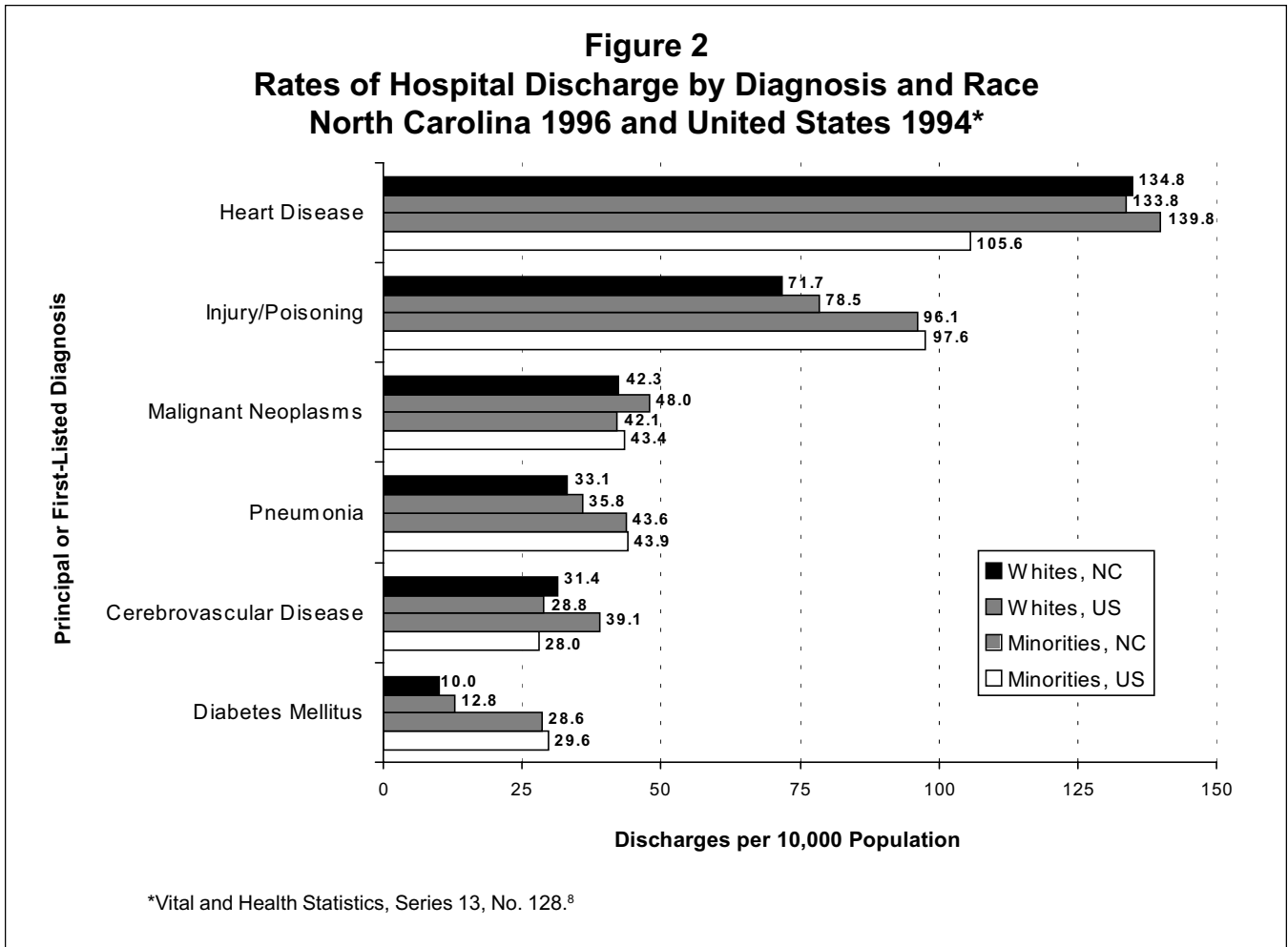
Beginning with FY 1990, the uniform claims form used by hospitals to bill payers was also used to report inpatient data to the North Carolina Medical Database Commission (MDC). In 1995, however, the General Assembly abolished the MDC and passed legislation (G.S. 131E-214) whereby the data are now reported to third-party (private) data

processors, chiefly, HCIA, Inc. Unfortunately, a few private hospitals and all of the state’s seven psychiatric hospitals have so far not reported to the new system. For this reason, the present report excludes patients whose principal diagnosis was a mental disorder (ICD-9-CM codes 290-319). Newborns are also excluded, while pregnancy and childbirth diagnoses are included but not shown separately.

Some needed data items are not **required** to be reported to HCIA, resulting in incomplete information. Race was not reported for 11 percent of the 1996 discharges used in this report. Among hospitals reporting 500 or more discharges for 1996, 19 hospitals never reported race and 14 failed to report race for 10 to 96 percent of their discharges.

The 1996 North Carolina data presented below represent 757,033 state **residents** discharged from





135 North Carolina hospitals. Again, mental disorders and newborns are excluded.

Comparisons to the United States

CY 1995 is the latest year for which national data are available. Those data represent inpatients (except newborns) discharged from a sample of nonfederal short-stay hospitals located in the 50 states and the District of Columbia.⁷ The data by race and payer class represent 1994 United States discharges. Race was not stated for 18.5 percent of those.⁸

For the six leading principal diagnoses other than pregnancy and childbirth, Figures 1 and 2 compare North Carolina to the United States by gender and race respectively. The six diagnosis categories represent 37 percent of the 757,033 inpatients used in this report. Pregnancy and childbirth account for

another 15 percent. The discharge rates are per 10,000 total population for North Carolina and 10,000 civilian population for the United States.

From these data, it is seen that discharge rates are generally lower here than in the nation. A minor factor may be that the military population is **not** excluded from the North Carolina denominators. Also, despite faster growth in the older population in North Carolina, the state's population remains younger than the nation's.

For both males and females (Figure 1), cerebrovascular disease rates are slightly higher in North Carolina than in the nation. For North Carolina minorities (Figure 2), heart disease and cerebrovascular disease rates are especially high. The findings for cerebrovascular disease are consistent with high cerebrovascular disease mortality in North Carolina. In 1995, only 9 states had a higher cerebrovascular death rate, with the state's rate being 20 percent higher than the nation's.⁹

Comparing the North Carolina and United States discharge rates by age (data not shown), higher North Carolina rates for heart disease, cerebrovascular disease, and pneumonia are found at ages 45-64. The North Carolina rates for diabetes exceed the nation's at ages 0-14 and 15-44.

Figures 3 and 4 compare average length of hospital stay for the state and nation by gender and race respectively. Except for heart disease and diabetes, average stays are generally longer in North Carolina (Figure 3). However, the data by race (Figure 4) show that North Carolina minorities and whites both have shorter stays for heart disease, cerebrovascular disease, and diabetes. North Carolina minorities also have shorter stays for malignant neoplasms. Keep in mind that race was not stated for 11 percent of North Carolina discharges and 18.5 percent of United States discharges.⁸ The two-year time difference may also be a factor.

Comparing lengths of stay by age, state and national differences are small except for malignant neoplasm discharges below age 15: an average stay of 12.4 days in North Carolina compares to 7.7 days in the nation.

Comparisons of the 1996 state and 1994 national data⁸ by expected principal source of payment reveals only small differences except for proportionately more Medicare patients in North Carolina (43%) than in the United States (38%). The two-year time difference is probably a factor.

Comparisons by Race

For leading **principal diagnoses**, Figure 5 depicts discharge rates by race and gender. Except for similar malignant neoplasm rates, minorities generally have the higher rates, especially in the case of diabetes. The higher diabetes discharge rate is observed in all age

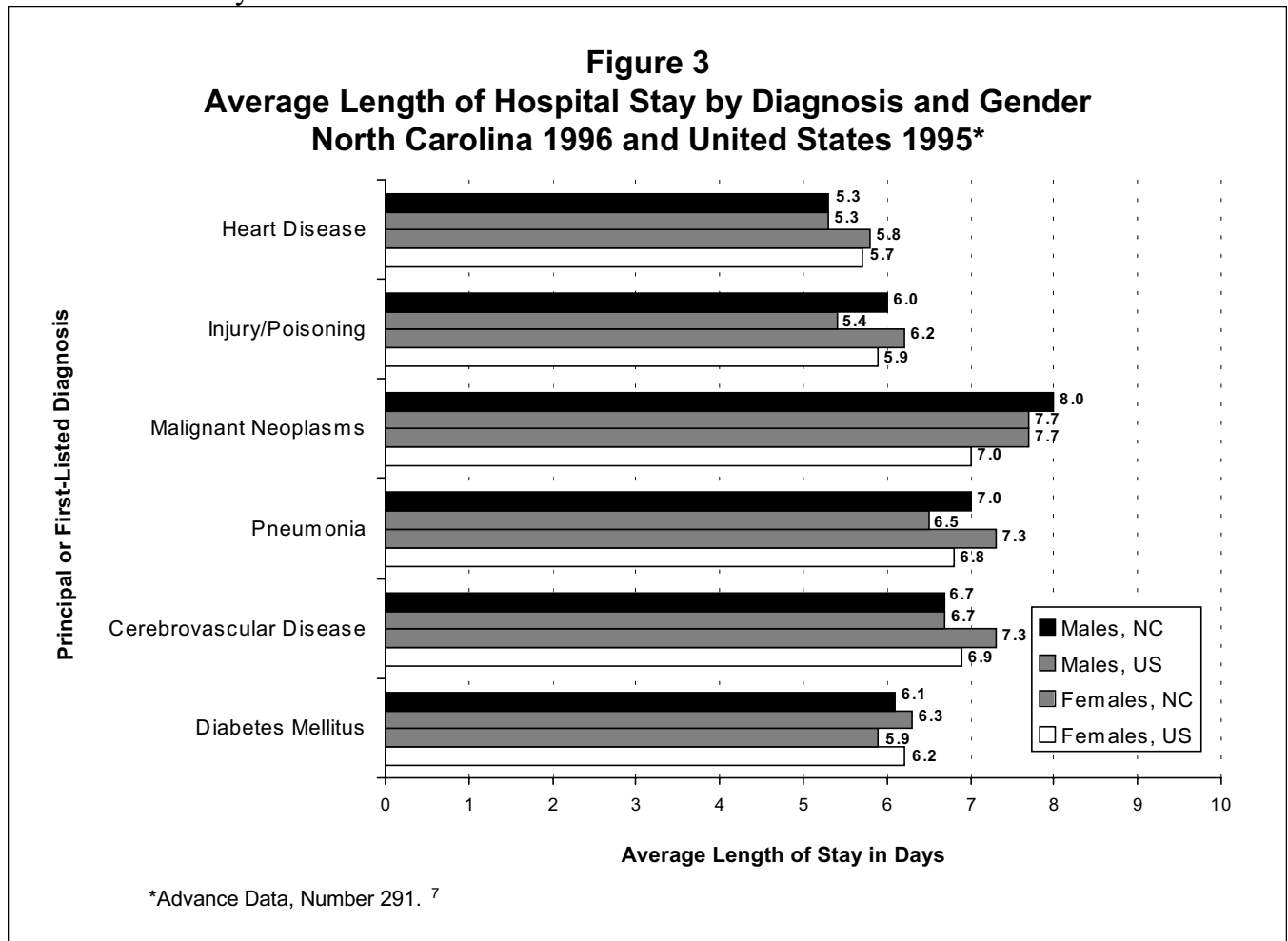
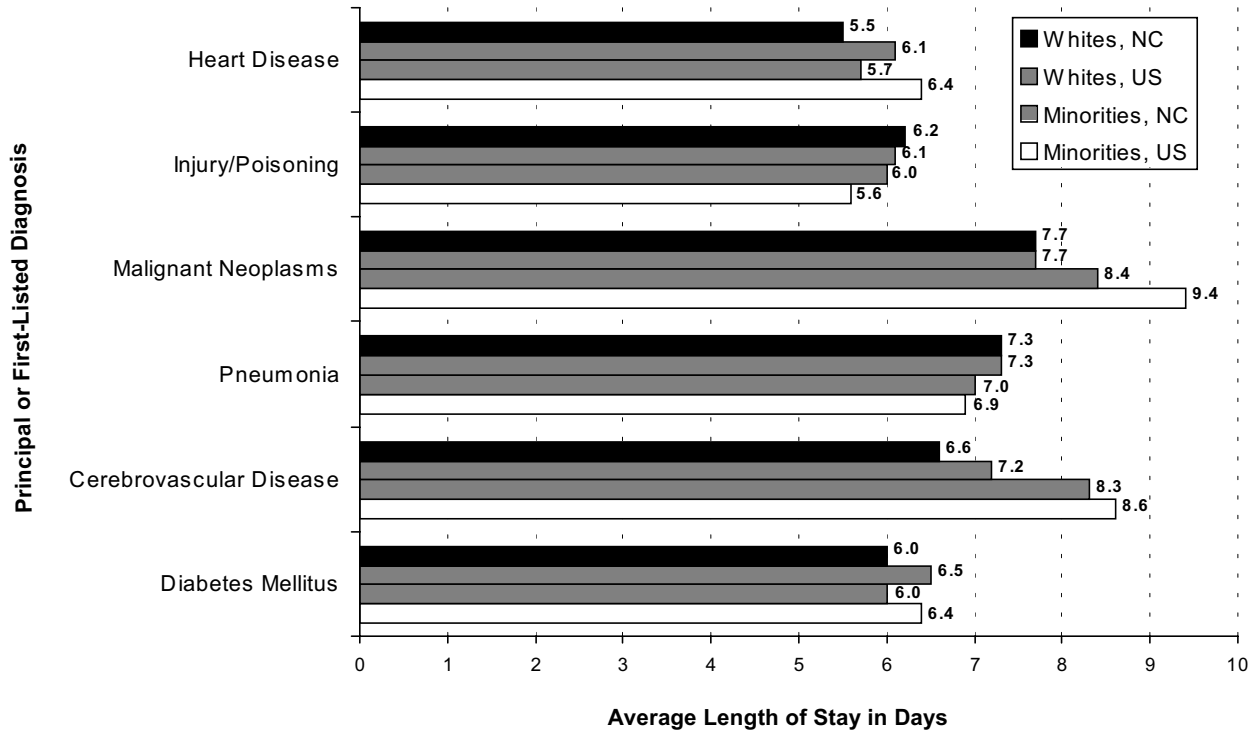


Figure 4
Average Length of Hospital Stay by Diagnosis and Race
North Carolina 1996 and United States 1994*



*Vital and Health Statistics, Series 13, No. 128.⁸

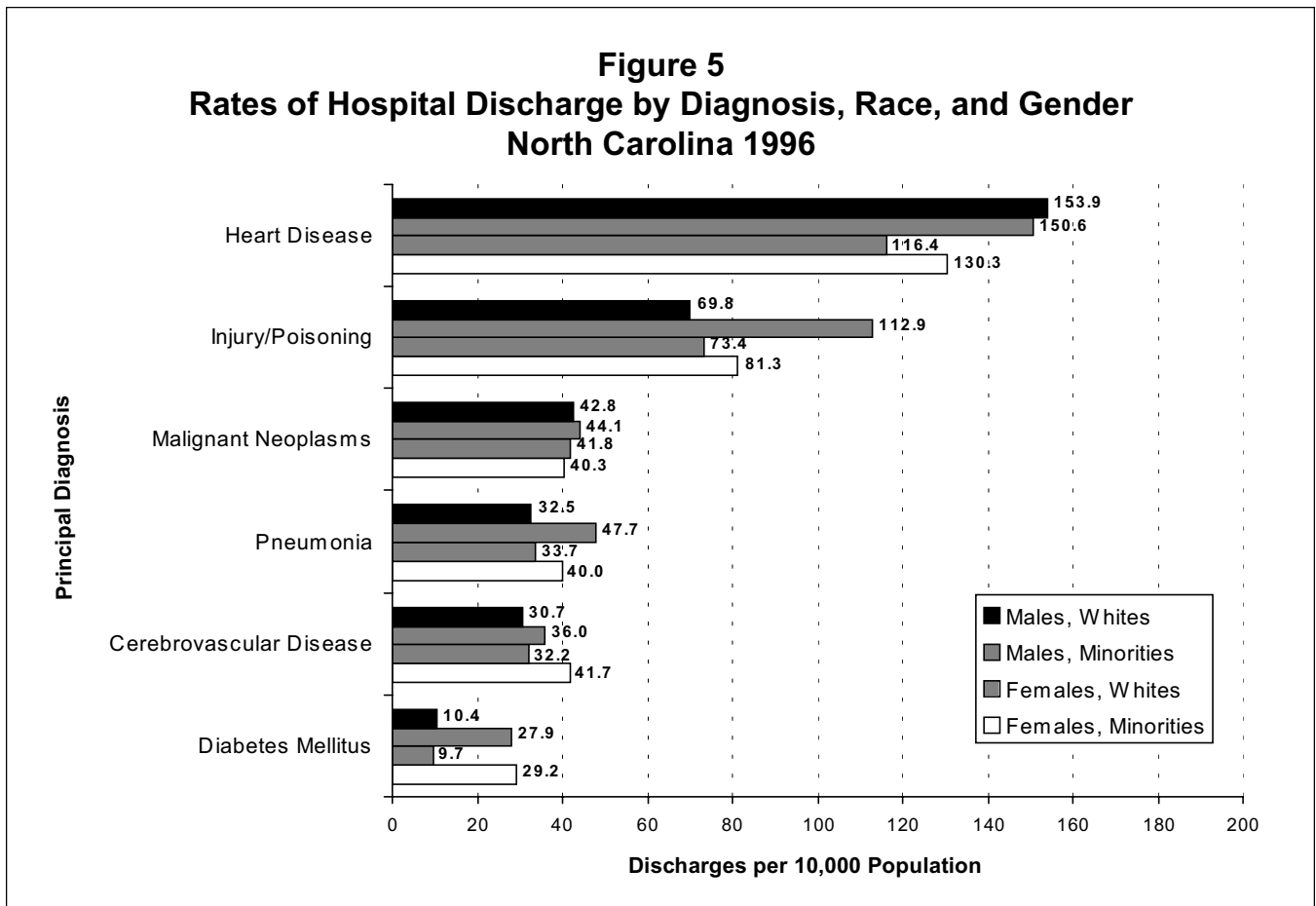
groups, especially ages 45-64 where the minority rate is 4.5 times the white rate. The higher minority male rate for injury/poisoning is also notable.

During 1996, 479,653 discharges (63%) had one or more surgical, diagnostic, or therapeutic procedures. Examining cases of known race, the percentages for whites and minorities are identical at 64.5 percent. The lower total percentage compared to the race-specific percentages is due to cases of unknown race.

For selected **procedures**, Table 1 compares the discharge rates of whites and minorities by gender. State populations for the four race-gender groups were used as the denominators for these procedure rates. The procedures were selected on the basis of their large frequency or because of special interest. Up to six procedures were listed for each discharge, and a single

procedure may be listed multiple times for the same discharge. For example, a patient may have more than one coronary artery bypass graft during a single operation. The rates of Table 1 include a discharge only once, however, reflecting discharges having one or more mentions of the procedure of interest. In contrast, the approach of the National Center for Health Statistics is to count all procedures listed,⁷ so the North Carolina and United States procedure rates are not comparable.

Consistent with their higher hospital morbidity, minorities generally have higher procedure rates (mentioned procedures per 10,000 population) than whites. A notable exception is higher white rates for “coronary artery bypass graft.” Using “patients with a principal diagnosis of heart disease” as the denominator to examine bypass surgery, minorities were 29 percent



less likely than whites to have the procedure. This finding is consistent with a recent Duke Study that found that, compared to whites, blacks with heart disease were 32 percent less likely to undergo bypass surgery.¹⁰

As shown in Table 1, whites were also more likely to have pacemaker-related procedures, while minorities were far more likely to have shunt or vascular bypass. Also from Table 1 is this finding of interest: white women were 20 percent more likely than minority women to have a mastectomy. Although white women are at increased risk for having breast cancer, minority women have the higher death rate. This is primarily due to a later stage at diagnosis for minority women.¹¹ Using women with a principal diagnosis of breast cancer as denominators, whites were 10 percent more likely than minorities to have a mastectomy.

Tables on the next page summarize average length of hospital stay and hospital charges according to race

and principal diagnosis (Table 2) and race and payer class (Table 3). The charge data are based on the amount the hospital **charged** each patient, before taking into account negotiated discounts, bad debt, and charity care. **Charges do not reflect what the care actually cost the hospital or what the hospital received in payment.** The charges reported are for all services provided (e.g., room, laboratory tests, medications) during the hospital stay. They do **NOT** include charges for physician or radiology services, which are billed directly by the physician or radiologist. “Charge per patient day” is total hospital charges divided by total days of care for all patients in a category. It is **not** the hospitals’ average daily room charge.

As shown in Table 2, minority patients generally had longer hospital stays than whites, especially in the case of cerebrovascular disease. This longer stay is reflected in the “average charge per stay,” which was 19 percent higher for minorities (\$12,427) than for whites

Table 1
Rates of Hospital Discharge by Procedure, Race, and Gender
North Carolina 1996
(Rate per 10,000 Population)

Selected Procedures	Total	Males		Females	
		Whites	Minorities	Whites	Minorities
One or More Mentions of Any Procedure	711.8	498.7	622.3	689.5	978.3
Episiotomy	41.6 ¹	—	—	69.8	73.7
Cesarean Section	27.9 ¹	—	—	41.3	70.4
Hysterectomy	24.8 ¹	—	—	40.3	51.7
Tonsillectomy	0.7	0.6	1.6	0.3	0.9
Removal of Coronary Artery Obstruction	19.4	27.5	22.9	12.3	12.1
Coronary Artery Bypass Graft	15.7	23.8	16.8	9.1	7.7
Cardiac Catheterization	54.1	67.4	59.6	37.8	41.0
Pacemaker Procedure ²	6.8	6.9	5.1	6.3	5.6
Shunt/Vascular Bypass	7.9	7.0	12.2	4.4	10.7
Endoscopy of Small Intestine	34.2	26.3	37.9	29.1	38.6
Appendectomy	7.9	7.4	9.2	6.3	6.0
Cholecystectomy	14.6	9.7	7.5	16.3	17.1
Repair of Inguinal Hernia	1.8	2.5	3.4	0.4	0.4
Prostatectomy	7.4 ¹	13.5	13.5	—	—
Open Reduction of Fracture	14.9	10.5	14.4	15.9	12.0
Total Hip Replacement	4.9	3.6	3.5	4.9	5.1
Total Knee Replacement	8.1	5.6	3.7	8.7	9.8
Mastectomy	3.1 ¹	0.1	0.0	5.4	4.5
Computerized Axial Tomography	19.4	15.6	26.6	16.0	24.4
Diagnostic Ultrasound	40.2	30.7	44.9	35.1	58.7
Respiratory Therapy	39.0	33.2	51.2	30.2	43.9

¹Uses total population as denominator; see gender-specific rates.
²Insertion, replacement, removal, and revision of pacemaker leads or device.

(\$10,430). Minorities also had longer hospital stays for malignant neoplasms. Other race differences observed in Table 2 are small.

As shown in Table 3, white patients were more likely than minorities to have private health insurance and Medicare, while minorities were far more likely to be covered by Medicaid. A longer stay for minorities is observed in all payer classes except Medicaid. The largest race difference in hospital charges occurs among HMO patients, with “average charge per day” being 12 percent lower for minorities (\$1,767) than whites

(\$2,000). For both whites and minorities, HMO coverage represents about one in five privately insured patients.

Comparisons to 1990

In this section, data represent North Carolina residents discharged from North Carolina hospitals during calendar years 1990 and 1996. As before, mental disorders and newborns are excluded. Comments about the charge data and mentioned procedures are the same as in the preceding section, except fewer procedures were coded in 1990 (three) compared to 1996 (six).

**Table 2
Hospital Discharges by Principal Diagnosis by Race
North Carolina 1996**

	Principal Diagnosis						
	All Diagnoses ¹	Heart Disease	Injury and Poisoning	Malignant Neoplasms	Pneumonia	Cerebrovascular Disease	Diabetes Mellitus
Count							
Total	757,033	110,576	63,301	33,970	30,238	27,590	12,221
Whites	467,566	74,860	39,804	23,489	18,368	17,479	5,572
Minorities	206,910	24,707	16,982	7,440	7,706	6,904	5,060
Average Days Stay*							
Whites	5.3	5.5	6.2	7.7	7.3	6.6	6.0
Minorities	5.6	5.7	6.0	8.4	7.0	8.3	6.0
Average Charge per Day*							
Whites	\$1,853	\$2,593	\$1,972	\$1,981	\$1,339	\$1,572	\$1,383
Minorities	\$1,714	\$2,443	\$2,089	\$1,901	\$1,429	\$1,495	\$1,343
Average Charge per Stay*							
Whites	\$9,854	\$14,388	\$12,199	\$15,240	\$9,819	\$10,430	\$8,266
Minorities	\$9,576	\$13,916	\$12,550	\$16,042	\$9,981	\$12,427	\$8,046
Total Charges*							
Whites ²	\$4.6 B	\$1.1 B	\$485.6 M	\$358.0 M	\$180.3 M	\$182.3 M	\$46.1 M
Minorities ²	\$2.0 B	\$343.8 M	\$213.1 M	\$119.4 M	\$76.9 M	\$85.8 M	\$40.7 M

¹Excluding mental disorders and newborns.

²M=Million; B=Billion

*See Table 4 for 1996 totals.

Between 1990 and 1996, the reported number of hospital discharges rose 10 percent, while the discharge rate declined 0.3 percent. The rate of discharges with one or more procedures declined 11 percent.

During the 6-year interval, average days per hospital stay dropped 18 percent, while average charge per patient day rose 82 percent. These findings are from Table 4, where the 1990 and 1996 data are detailed by principal diagnosis. Other salient findings from Table 4 are these 1990-1996 changes:

- The discharge rates for heart disease and cerebrovascular disease rose 20 and 27 percent respectively.
- Average days stay declined more than 20 percent for each of the six leading diagnoses.
- Total charges rose 64 percent, above the 45 percent increase in the Consumer Price Index for hospitals and related services.¹² Among leading principal diagnoses, the increase was especially large (83%) for heart disease.
- Charge per **day** increases were especially high for cerebrovascular disease (104%), injury/poisoning (94%), and malignant neoplasms (91%).
- The charge per **stay** increase was lowest for cerebrovascular disease, reflecting a 41 percent reduction in average length of hospital stay.

**Table 3
Hospital Discharges by Payer Class by Race
North Carolina 1996**

	Principal Payer Class							
	All Payers ¹	HMO	Other Private ²	Medicare	Medicaid	Other Government ³	Other ⁴	Unknown
Percent Distribution								
Total	100.0	6.4	27.0	42.8	15.6	2.1	6.0	0.2
Whites	100.0	7.5	30.2	44.9	10.3	2.0	5.0	0.1
Minorities	100.0	5.8	21.2	35.3	26.7	2.1	8.7	0.2
Average Days Stay*								
Whites	5.3	4.0	4.1	6.6	4.9	4.4	4.0	7.2
Minorities	5.6	4.3	4.4	7.4	4.8	4.6	4.5	3.8
Average Charge per Day*								
Whites	\$1,853	\$2,000	\$2,130	\$1,743	\$1,561	\$2,231	\$2,174	\$976
Minorities	\$1,714	\$1,767	\$2,040	\$1,600	\$1,601	\$2,130	\$1,935	\$1,541
Average Charge per Stay*								
Whites	\$9,858	\$8,030	\$8,704	\$11,587	\$7,660	\$9,762	\$8,687	\$7,850
Minorities	\$9,579	\$7,526	\$9,018	\$11,908	\$7,669	\$9,743	\$8,794	\$5,972
Total Charges*								
Whites ⁵	\$4.6 B	\$280.8 M	\$1.2 B	\$2.4 B	\$370.2 M	\$91.0 M	\$203.3 M	\$4.5 M
Minorities ⁵	\$2.0 B	\$90.9 M	\$395.1 M	\$869.9 M	\$422.8 M	\$41.7 M	\$159.0 M	\$2.8 M

¹Excluding mental disorders and newborns.
²Blue Cross, Commercial Insurance, State Employee's Health Plan, Administered Plans.
³CHAMPUS; Department of Environment, Health, and Natural Resources; Worker's Compensation.
⁴"Self-pay," "indigent care," and "charity" cases. Some of those are found post-discharge to be eligible for Medicaid pay.
⁵M=Million; B=Billion
 *See Table 5 for 1996 totals.

The distribution of discharges by payer class changed rather significantly between 1990 and 1996, as shown in Table 5. The percentage for HMOs nearly tripled but remains low at 6.4. The percentages for Medicare and Medicaid each rose more than 20 percent, to 43 and 16 percent respectively, while the percentage for nonHMO private patients declined 32 percent to 27. Other findings from Table 5 data reveal these 1990-1996 changes:

- Average days stay declined more for Medicare patients (29%) than for others.
- Increases in average charge per **day** were lowest (75%) for HMO and Medicaid patients.
- Average charge per **stay** increased most (76%) for HMO patients and least (32%) for Medicare patients.
- The high cost per stay for Medicare patients reflects longer lengths of stay among the elderly.

**Table 4
Hospital Discharges by Principal Diagnosis
North Carolina 1990 and 1996**

	Principal Diagnosis						
	All Diagnoses ¹	Heart Disease	Injury and Poisoning	Malignant Neoplasms	Pneumonia	Cerebrovascular Disease	Diabetes Mellitus
Discharge Rate²							
1990	1,036.5	125.5	88.6	48.7	36.1	29.7	14.8
1996	1,033.8	151.0	86.4	46.4	41.3	37.7	16.7
Average Days Stay							
1990	6.6	7.3	8.1	10.0	9.0	11.9	8.0
1996	5.4	5.5	6.1	7.9	7.1	7.0	6.0
Average Charge per Day							
1990	\$997	\$1,349	\$1,040	\$1,030	\$832	\$767	\$731
1996	\$1,814	\$2,530	\$2,019	\$1,963	\$1,388	\$1,562	\$1,376
Average Charge per Stay							
1990	\$6,572	\$9,805	\$8,410	\$10,286	\$7,515	\$9,097	\$5,879
1996	\$9,762	\$13,982	\$12,301	\$15,420	\$9,921	\$11,009	\$8,213
Total Charges							
1990 ³	\$4.5 B	\$817.9 M	\$495.2 M	\$332.9 M	\$180.3 M	\$179.9 M	\$58.0 M
1996 ³	\$7.4 B	\$1.5 B	\$778.7 M	\$523.8 M	\$300.0 M	\$303.7 M	\$100.4 M

¹Excluding mental disorders and newborns.
²Rate per 10,000 population.
³M=Million; B=Billion

Despite the overall decline (11%) from 1990 to 1996 in the rate of discharges with one or more procedures, certain rate increases and gender differences may be of special interest. These are shown below with rates per 10,000 population. Keep in mind that up to three procedures were listed in 1990 compared to six in 1996.

One or More Mentions of Selected Procedures	1996 Discharge Rates		Percentage Increases Since 1990	
	Males	Females	Males	Females
Cardiac catheterization	68.5	40.6	43.9	41.0
Removal of coronary artery obstruction	26.9	12.5	92.1	98.4
Coronary artery bypass graft	22.9	9.0	56.8	73.1
Pacemaker procedure	6.9	6.6	9.5	17.9
Shunt or vascular bypass	9.1	6.7	19.7	26.4
Total knee replacement	5.8	10.3	107.1	71.1
Total hip replacement	4.0	5.8	37.8	23.4

**Table 5
Hospital Discharges by Payer Class
North Carolina 1990 and 1996**

	Principal Payer Class							
	All Payers ¹	HMO	Other Private ²	Medicare	Medicaid	Other Government ³	Other ⁴	Unknown ⁵
Percent Distribution								
1990	100.0	2.3	39.7	35.1	12.6	3.2	7.1	—
1996	100.0	6.4	27.0	42.8	15.6	2.1	6.0	0.2
Average Days Stay								
1990	6.6	4.1	4.9	9.6	5.3	5.3	5.0	—
1996	5.4	4.1	4.1	6.8	4.7	4.4	4.2	5.6
Average Charge per Day								
1990	\$997	\$1,114	\$1,132	\$920	\$921	\$1,136	\$1,042	—
1996	\$1,814	\$1,953	\$2,115	\$1,704	\$1,609	\$2,236	\$2,076	\$1,161
Average Charge per Stay								
1990	\$6,572	\$4,525	\$5,518	\$8,816	\$4,907	\$6,028	\$5,208	—
1996	\$9,766	\$7,961	\$8,738	\$11,608	\$7,634	\$9,786	\$8,750	\$7,005
Total Charges								
1990 ⁶	\$4.5 B	\$71.7 M	\$1.5 B	\$2.1 B	\$424.6 M	\$132.7 M	\$253.4 M	—
1996 ⁶	\$7.4 B	\$385.1 M	\$1.8 B	\$3.8 B	\$898.7 M	\$153.6 M	\$394.8 M	\$7.9 M

¹Excluding mental disorders and newborns.

²Blue Cross, Commercial Insurance, State Employee's Health Plan, Administered Plans.

³CHAMPUS; Department of Environment, Health, and Natural Resources; Worker's Compensation.

⁴"Self-pay," "indigent care," and "charity" cases. Some of those are found post-discharge to be eligible for Medicaid pay.

⁵Not stated cases were absent from the MDC file in 1990.

⁶M=Million; B=Billion

Several 1990-1996 rate **decreases** are also noteworthy. For females, those include declines of 36% in episiotomy, 18% in C-Section, 13% in hysterectomy, and 43% in mastectomy. For both males and females, the following rates declined by more than 40 percent: tonsillectomy, repair of inguinal hernia, and computerized axial tomography. The rate for prostatectomy dropped by 41 percent. Smaller declines in episiotomy and C-Section rates are observed when "deliveries" are used as the denominators.

Highlights

- Compared to the United States, North Carolina discharge rates appear high for cerebrovascular disease, heart and cerebrovascular disease among minorities, heart/cerebrovascular disease and pneumonia among ages 45-64, and diabetes among ages under 45.
- Compared to whites, North Carolina minorities have higher discharge rates for most leading diagnoses, especially diabetes; higher procedure rates except

for some coronary procedures including coronary artery bypass graft; longer hospital stays, especially for cerebrovascular disease; and they are more likely to be covered by Medicaid.

- Compared to 1990, the 1996 hospital discharge data reveal reduced lengths of hospital stay; increased hospital charges per day and per stay; rising coverage by HMOs, Medicaid, and Medicare; reduced use of procedures including mastectomy, hysterectomy, C-Section and prostatectomy; and increases in coronary procedures and knee and hip replacements.

Comments

Except for cancer and certain communicable diseases, North Carolina does not currently have a comprehensive morbidity reporting system that can identify all cases of a disease. Hospital use is to a substantial degree a reflection of morbidity in the population, but many other factors also affect hospital use. For many diseases, only a fraction of the cases require hospitalization. Also, other factors affect hospital admission, including health insurance coverage and ability to pay.

The data in this report reflect the number of discharges rather than number of people. The same person could be discharged from a hospital several times during a reporting year, for the same or a different diagnosis. Also, the diagnosis data in this report are based only on *principal* diagnosis; up to eight other diagnoses are included on the computerized hospital discharge record.

The State Center plans to monitor the hospital discharge data now available from third-party data processors, chiefly HCIA, Inc. Meanwhile, it is imperative that every hospital operating in North Carolina report to the system. As of CY 1996, several private hospitals and seven state psychiatric hospitals were not reporting, so the data in this report are incomplete. For this reason, the entire group of mental disorders was omitted. For the United States, mental disorders represent about 6.5 percent of all discharges from short-stay hospitals.

On a periodic basis, the State Center produces a summary of data from the most current hospital discharge file. The CY 1996 table is appended, for the use of those who desire additional detail.

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APPENDIX

North Carolina CY 1996 Inpatient Hospital Utilization and Charges by Principal Diagnosis Excluding Newborns and Mental Disorders

North Carolina Residents							
Diagnostic Category	Total Cases	Discharge Rate ¹	Total Days Stay	Average Days Stay	Days Stay Rate ²	Total Charges	Average Charge Per Case
Infectious & Parasitic Diseases	23,547	32.2	164,990	7.0	22.5	\$ 244,455,974	\$10,382
Septicemia	9,446	12.9	86,053	9.1	11.8	130,990,411	13,869
AIDS	2,657	3.6	21,757	8.2	3.0	32,172,925	12,109
Malignant Neoplasms	33,970	46.4	266,793	7.9	36.4	523,808,349	15,424
Colon, Rectum, Anus	3,741	5.1	36,176	9.7	4.9	67,014,754	17,918
Trachea, Bronchus, Lung	4,432	6.1	36,932	8.3	5.0	68,362,134	15,432
Female Breast	2,429	3.3	8,914	3.7	1.2	22,680,551	9,337
Prostate	2,923	4.0	13,154	4.5	1.8	30,531,253	10,445
Benign, Uncertain & Other Neoplasms	11,279	15.4	43,693	3.9	6.0	100,005,755	8,868
Endocrine, Metabolic & Nutrit. Diseases	28,203	38.5	155,031	5.5	21.2	207,761,057	7,368
Diabetes	12,221	16.7	72,924	6.0	10.0	100,372,256	8,213
Blood & Hemopoetic Tissue Diseases	8,023	11.0	45,969	5.7	6.3	69,890,986	8,714
Nervous System & Sense Organ Diseases	9,565	13.1	57,682	6.0	7.9	90,525,649	9,467
Cardiovascular & Circulatory Diseases	158,366	216.3	948,309	6.0	129.5	2,121,884,943	13,402
Heart Disease	110,576	151.0	611,064	5.5	83.4	1,546,042,752	13,986
Cerebrovascular Disease	27,590	37.7	194,428	7.0	26.6	303,735,152	11,010
Respiratory Diseases	78,893	107.7	503,273	6.4	68.7	744,416,368	9,437
Pneumonia	30,238	41.3	216,129	7.1	29.5	299,976,755	9,922
Chronic Obstructive Pulmonary Disease	25,879	35.3	130,616	5.0	17.8	175,220,115	6,772
Digestive System Diseases	74,826	102.2	413,110	5.5	56.4	723,839,738	9,676
Chronic Liver Disease/Cirrhosis	2,345	3.2	17,860	7.6	2.4	32,033,070	13,660
Genitourinary Diseases	41,850	57.1	169,708	4.1	23.2	297,206,700	7,103
Nephritis, Nephrosis, Nephrotic Synd.	3,473	4.7	29,307	8.4	4.0	45,123,158	12,993
Pregnancy & Childbirth	111,633	152.4	276,281	2.5	37.7	416,624,377	3,733
Skin & Subcutaneous Tissue Diseases	9,039	12.3	60,189	6.7	8.2	68,086,431	7,534
Musculoskeletal System Diseases	35,453	48.4	159,312	4.5	21.8	410,005,165	11,568
Arthropathies and Related Disorders	11,872	16.2	63,507	5.3	8.7	191,728,658	16,151
Congenital Malformations	3,098	4.2	20,257	6.5	2.8	61,977,590	20,006
Perinatal Complications	3,205	4.4	36,187	11.3	4.9	55,786,262	17,417
Symptoms, Signs & Ill-Defined Conditions	39,892	54.5	132,371	3.3	18.1	209,292,772	5,248
Injuries & Poisoning	63,301	86.4	385,607	6.1	52.7	778,688,641	12,304
Other Diagnoses	22,890	31.3	235,881	10.3	32.2	265,879,599	11,666
All Conditions	757,033	1033.8	4,074,643	5.4	556.4	7,390,136,354	9,766

¹Per 10,000 population

²Per 1,000 population

Note: Some diagnostic categories have been modified to match those used by the National Center for Health Statistics Hospital Discharge Survey.

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