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Advance Data

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National Hospital Ambulatory Medical Care Survey: 1996 Outpatient Department Summary

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Abstract

Objective—This report describes ambulatory care visits to hospital outpatient departments in the United States. Statistics are presented on selected patient and visit characteristics.

Methods—The data presented in this report were collected from the 1996 National Hospital Ambulatory Medical Care Survey (NHAMCS). NHAMCS is part of the ambulatory care component of the National Health Care Survey that measures health care utilization across various types of providers. NHAMCS is a national probability survey of visits to hospital outpatient and emergency departments of non-Federal, short-stay, and general hospitals in the United States. Sample data were weighted to produce annual estimates.

Results—During 1996, an estimated 67.2 million visits were made to hospital outpatient departments in the United States, about 25.4 visits per 100 persons. Overall, visit rates did not vary by age. Females and black persons had higher rates of visits than males and white persons, respectively. There were an estimated 6.8 million injury-related outpatient department visits during 1996.

Keywords: outpatient department visits • diagnoses • injury • ICD–9–CM

Introduction

Ambulatory medical care is the predominant method of providing health care services in the United States. Since 1973, data have been collected on patient visits to physicians' offices through the National Ambulatory Medical Care Survey (NAMCS). However, outpatient visits to hospital settings, which represent a significant segment of total ambulatory medical care, are not included in the NAMCS (1). Furthermore, hospital ambulatory patients are known to differ from office patients in their demographic characteristics and in medical aspects (2).

In 1992, the National Center for Health Statistics (NCHS) inaugurated the National Hospital Ambulatory Medical Care Survey (NHAMCS) to gather and disseminate information about the health care provided by hospital outpatient departments (OPD's) and emergency departments (ED's) to the population of the United States. Together, the NHAMCS and NAMCS data provide an important tool for tracking ambulatory care utilization. A third survey, the National Survey of Ambulatory Surgery, was launched in 1994 to focus on the rapidly increasing use of ambulatory surgery centers that are not covered in NHAMCS or NAMCS. These surveys are part of the ambulatory care component of the National Health Care Survey, which measures health care utilization across various types of providers.

This report features data on the patient and visit characteristics of hospital outpatient department visits. Another *Advance Data* report highlights visits to emergency departments (3). Previous years of OPD data have also been published (4–7).

Methods

This report presents data on OPD visits from the 1996 NHAMCS, a national probability sample survey conducted by the Division of Health Care Statistics of the National Center for Health Statistics, Centers for Disease Control and Prevention. The survey was

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

CENTERS FOR DISEASE CONTROL AND PREVENTION

Assurance of Confidentiality—All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose.

Department of Health and Human Services
Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics

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CDC 64.111

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY
1995-96 OUTPATIENT DEPARTMENT PATIENT RECORD

1. DATE OF VISIT
__/__/__
Month Day Year

2. ZIP CODE
_____
Patient's

3. DATE OF BIRTH
__/__/__
Month Day Year

4. SEX
1 ☐ Female
2 ☐ Male

5. RACE
1 ☐ White
2 ☐ Black
3 ☐ Asian / Pacific Islander
4 ☐ American Indian / Eskimo / Aleut

6. ETHNICITY
1 ☐ Hispanic origin
2 ☐ Not Hispanic

7. DOES PATIENT SMOKE CIGARETTES ?
1 ☐ Yes
2 ☐ No
3 ☐ Unknown

8. EXPECTED SOURCE(S) OF PAYMENT FOR THIS VISIT

a. Type of payment *Check one.*
1 ☐ Preferred provider option
2 ☐ Insured, fee-for-service
3 ☐ HMO / other prepaid
If checked, answer b.
4 ☐ Self-pay
5 ☐ No charge
6 ☐ Other
If checked, skip b.

b. Expected sources of insurance *Check all that apply.*
1 ☐ Blue Cross / Blue Shield
2 ☐ Other private insurance
3 ☐ Medicare
4 ☐ Medicaid
5 ☐ Worker's Compensation
6 ☐ Other
7 ☐ Unknown

9. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT
Use patient's own words.
Most
a. Important: _____
b. Other: _____
c. Other: _____

10. IS THIS VISIT INJURY RELATED ?
1 ☐ Yes *(Answer a, b, and c.)* 2 ☐ No *(Skip to Item 11.)*

a. Cause of Injury *Describe events that preceded injury, e.g., reaction to penicillin, wasp sting, driver in motor vehicle traffic accident involving collision with parked car, etc.*
_____
_____
_____

b. Place of occurrence
1 ☐ Home
2 ☐ School
3 ☐ Sports or athletics area
4 ☐ Street or highway
5 ☐ Other: _____
6 ☐ Unknown

c. Is this injury work related ?
1 ☐ Yes 2 ☐ No
3 ☐ Unknown

11. PHYSICIAN'S DIAGNOSES *As specifically as possible, list up to 3 current diagnoses. Include those unrelated to this visit.*
a. Principal diagnosis or problem associated with Item 9a.: _____
b. Other: _____
c. Other: _____

12. DOES PATIENT HAVE:
Check all that apply regardless of entry in Item 11.
1 ☐ Arthritis
2 ☐ Atherosclerosis
3 ☐ COPD
4 ☐ Chronic renal failure
5 ☐ Depression
6 ☐ Diabetes
7 ☐ HIV / AIDS
8 ☐ Hyperactivity / ADD
9 ☐ Hypertension
10 ☐ Obesity
11 ☐ None of the above

13. AMBULATORY SURGICAL PROCEDURES
☐ NONE
List up to 2 surgical procedures performed at this visit.
1. _____
2. _____

14. DIAGNOSTIC / SCREENING SERVICES *Check all ordered or provided at this visit.*
1 ☐ NONE

EXAMINATIONS:
2 ☐ Breast
3 ☐ Pelvic
4 ☐ Rectal
5 ☐ Visual acuity
6 ☐ Mental status
7 ☐ Other: _____

TESTS:
8 ☐ Blood pressure
9 ☐ Urinalysis
10 ☐ TB skin test
11 ☐ Blood lead level
12 ☐ Cholesterol measure
13 ☐ PSA
14 ☐ HIV serology
15 ☐ Other blood test
16 ☐ Other: _____

IMAGING:
17 ☐ X-Ray
18 ☐ CAT scan
19 ☐ MRI
20 ☐ Ultrasound
21 ☐ Other: _____

ALL OTHER: *(specify)*
22 ☐ _____

15. THERAPEUTIC AND PREVENTIVE SERVICES *Check all ordered or provided at this visit. Exclude medications.*
1 ☐ NONE

COUNSELING / EDUCATION:
2 ☐ Diet
3 ☐ Weight reduction
4 ☐ Cholesterol reduction
5 ☐ HIV transmission
6 ☐ Injury prevention
7 ☐ Tobacco use/exposure
8 ☐ Growth/development
9 ☐ Mental health
10 ☐ Other: _____

OTHER THERAPY:
11 ☐ Psychotherapy
12 ☐ Corrective lenses
13 ☐ Physiotherapy
14 ☐ Other: _____

16. MEDICATIONS / INJECTIONS *List names of up to 6 medications that were ordered, supplied, or administered during this visit. Include new medications, continuing medications (with or without new orders), R_x and OTC medications, immunizations, allergy shots, and anesthetics.*
☐ NONE
1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

17. PROVIDERS SEEN THIS VISIT *Check all that apply.*
1 ☐ Resident / Intern
2 ☐ Staff physician
3 ☐ Other physician
4 ☐ Physician assistant
5 ☐ Nurse practitioner
6 ☐ R.N.
7 ☐ L.P.N.
8 ☐ Medical assistant
9 ☐ Other: _____

18. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE?
1 ☐ Yes 2 ☐ No
If "Yes," for condition in Item 11a.?
1 ☐ Yes 2 ☐ No

19. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN ?
1 ☐ Yes
2 ☐ No

20. VISIT DISPOSITION *Check all that apply.*
1 ☐ No followup planned
2 ☐ Return to clinic, P.R.N.
3 ☐ Return to clinic—appointment
4 ☐ Telephone followup planned
5 ☐ Return to referring physician
6 ☐ Refer to other physician / clinic
7 ☐ Admit to hospital
8 ☐ Other: _____

Figure 1. Patient Record form

conducted from December 25, 1995 through December 22, 1996.

The target universe of the NHAMCS is in-person visits made in the United States to OPD's and ED's of non-Federal, short-stay hospitals (hospitals with an average length of stay of less than 30 days) or those whose specialty is general (medical or surgical) or children's general. The sampling frame consisted of hospitals listed in the April 1991 SMG Hospital Database.

A four-stage probability sample design is used in NHAMCS (8). The design involves samples of primary sampling units (PSU's), hospitals within PSU's, ED's within hospitals and/or clinics within outpatient departments, and patient visits within ED's and/or clinics. The PSU sample consists of 112 PSU's that comprise a probability subsample of the PSU's used in the 1985–94 National Health Interview Survey. The sample for 1996 consisted of 486 hospitals. Of this group, 438 hospitals had either an ED or OPD in 1996 and were in scope or eligible for the survey. During this period, 95 percent of the in-scope hospitals participated. There were 235 outpatient departments that provided data for the survey. Hospital staff were asked to complete Patient Record forms (figure 1) for a systematic random sample of patient visits occurring during a randomly assigned 4-week reporting period. The number of Patient Record forms completed for OPD's was 29,806.

For OPD's with more than five clinics, a sample of clinics was included in the survey. A clinic was defined as an administrative unit of the outpatient department where ambulatory medical care is provided under the supervision of a physician. Clinics where only ancillary services, such as radiology, laboratory services, physical rehabilitation, renal dialysis, and pharmacy, were provided, or other settings in which physician services were not typically provided, were out of scope for the survey. In addition, ambulatory surgery centers were out of scope because they were included in the National Survey of Ambulatory Surgery.

Because the estimates presented in this report are based on a sample rather than on the entire universe of OPD visits, they are subject to sampling variability. The Technical notes at the end of this report include an explanation of sampling errors and guidelines for judging the precision of the estimates.

Several medical classification systems were used to code data from the NHAMCS. The Patient Record form contains an item on the patient's expressed reason for the visit. In this item, the hospital staff were asked to record the patient's ''complaint(s), symptom(s), or other reason(s) for this visit in the patient's (or patient surrogate's) own words.'' Up to three reasons for visit were coded and classified according to *A Reason for Visit Classification for Ambulatory Care* (RVC) (9).

The Patient Record form contains an item on the cause of injury for injury-related visits. Up to three external causes of injury were coded and classified according to the ''Supplementary Classification of External Causes of Injury and Poisoning'' of the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (10). In addition, the form contains an item on diagnosis where the hospital staff were asked to record the principal diagnosis or problem associated with the patient's most important reason for the current visit as well as any other significant current diagnoses. Up to three diagnoses were coded and classified according to the ICD–9–CM (10).

The Patient Record form includes items on ambulatory surgical procedures and diagnostic/screening services. Hospital staff were asked to record up to two procedures and to write in up to four services in the open-ended ''other'' categories. These procedures and services were coded and classified according to the ICD–9–CM, volume 3 (10).

In the medication item, hospital staff were instructed to record all new or continued medications ordered, supplied, or administered at the visit, including prescription and nonprescription preparations, immunizations, desensitizing agents, and anesthetics. Up to six medications, referred to in this survey as drug mentions, were coded per visit according to a classification system developed at the National Center for Health Statistics. A report describing the method and instruments used to collect and process drug information is available (11). Therapeutic classification of the drugs mentioned on the Patient Record forms was determined using the *National Drug Code Directory,* 1995 edition (12).

The U.S. Bureau of the Census, Housing Surveys Branch, was responsible for the survey's data collection. Data processing operations and medical coding were performed by Analytic Services, Inc., Durham, North Carolina. As part of the quality assurance procedure, a 10-percent quality control sample of survey records was independently processed. Coding error rates ranged between 0.1 and 1.7 percent for various survey items.

Several tables in this report present data on rates of outpatient department visits. The population figures used in calculating these rates are U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1, 1996, and have been adjusted for net underenumeration (2).

Results

There were an estimated 67.2 million OPD visits in 1996, a rate of 25.4 visits per 100 persons. This was not significantly different from the 1995 rate of 25.7 visits per 100 persons. Patient and visit characteristics of hospital outpatient department visits are described below.

Patient characteristics

OPD visits by patient's age, sex, and race are shown in table 1 and figures 2 and 3. Overall, visit rates did not differ significantly by age. Females made 61.5 percent of all OPD visits. Visit rates were higher for females than for males overall and in the age groups between 15 and 44 years. White persons made up 69.4 percent of all OPD visits, with black persons and Asians/Pacific Islanders accounting for 27.4 percent and 3.0 percent, respectively. Visit rates for black persons were higher than for

Table 1. Number, percent distribution, and annual rate of outpatient department visits with corresponding standard errors by selected patient and visit characteristics: United States, 1996

Selected patient and visit characteristics	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Number of visits per 100 persons per year[1]	Standard error of rate
All visits	67,186	8,057	100.0	. . .	25.4	3.0
Age						
Under 15 years	15,196	2,579	22.6	1.8	25.6	4.3
15–24 years	8,310	1,124	12.4	0.8	22.8	3.1
25–44 years	18,547	2,119	27.6	1.4	22.2	2.5
45–64 years	14,911	1,746	22.2	0.8	28.0	3.3
65–74 years	5,799	756	8.6	0.5	31.8	4.1
75 years and over	4,422	932	6.6	1.0	32.5	6.8
Sex and age						
Female	41,298	4,842	61.5	0.9	30.5	3.6
Under 15 years	7,223	1,180	10.8	0.8	24.9	4.1
15–24 years	6,202	921	9.2	0.8	34.4	5.1
25–44 years	12,223	1,343	18.2	1.1	28.9	3.2
45–64 years	9,376	1,141	14.0	0.5	34.1	4.1
65–74 years	3,417	476	5.1	0.3	33.9	4.7
75 years and over	2,857	674	4.3	0.8	34.0	8.0
Male	25,888	3,310	38.5	0.9	20.1	2.6
Under 15 years	7,974	1,434	11.9	1.1	26.2	4.7
15–24 years	2,108	282	3.1	0.2	11.5	1.5
25–44 years	6,323	835	9.4	0.5	15.4	2.0
45–64 years	5,535	643	8.2	0.4	21.5	2.5
65–74 years	2,383	340	3.6	0.3	29.2	4.2
75 years and over	1,565	282	2.3	0.3	30.1	5.4
Race and age						
White	46,644	6,493	69.4	3.0	21.4	3.0
Under 15 years	9,825	1,950	14.6	1.6	21.0	4.2
15–24 years	5,302	769	7.9	0.6	18.3	2.7
25–44 years	12,816	1,706	19.1	1.2	18.7	2.5
45–64 years	10,634	1,425	15.8	0.8	23.3	3.1
65–74 years	4,457	629	6.6	0.5	27.6	3.9
75 years and over	3,610	848	5.4	0.9	29.4	6.9
Black	18,377	2,618	27.4	2.9	54.4	7.8
Under 15 years	5,020	1,235	7.5	1.5	52.5	12.9
15–24 years	2,760	490	4.1	0.5	50.3	8.9
25–44 years	4,891	640	7.3	0.9	46.1	6.0
45–64 years	3,779	572	5.6	0.7	68.4	10.4
65–74 years	1,176	184	1.8	0.2	74.1	11.6
75 years and over	751	189	1.1	0.2	72.6	18.3
Asian/Pacific Islander	1,993	376	3.0	0.5	20.2	3.8
American Indian/Eskimo/Aleut	171	48	0.3	0.1	7.3	2.1
Geographic region						
Northeast	19,704	3,532	29.3	4.5	36.2	6.5
Midwest	25,056	6,722	37.3	6.3	41.4	11.0
South	14,105	1,931	21.0	3.2	15.5	2.1
West	8,320	1,877	12.4	2.7	14.5	3.3

. . . Category not applicable.

[1]Based on U.S. Bureau of the Census monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1996. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990–1996) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix. Regional estimates have been provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population as of July 1, 1996. DHIS estimates are provisional at this time and differ slightly from monthly postcensal estimates because of differences in the adjustment process.

NOTE: Numbers may not add to totals because of rounding.

white persons overall and in the age categories between 15 and 74 years.

Visit characteristics

Geographic region—The visit rate in the Northeast (36.2 visits per 100 persons) was higher than in the West (14.5 visits per 100 persons) and South (15.5 visits per 100 persons). The proportions of OPD visits in the Midwest (37.3 percent) and Northeast (29.3 percent) were higher than the proportion in the West (12.4 percent).

Clinic type—Visits to hospital OPD's were classified into five types of clinics as presented in table 2. General

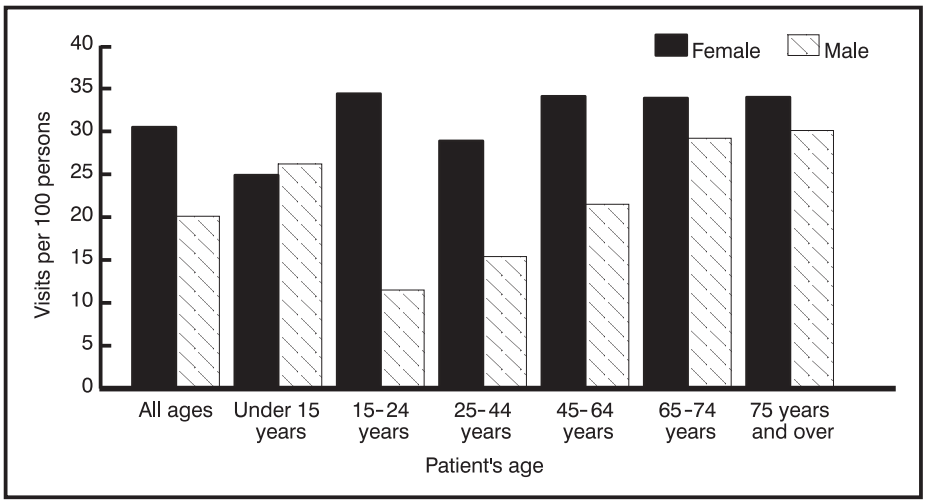

Figure 2. Annual rate of outpatient department visits by patient's age and sex: United States, 1996

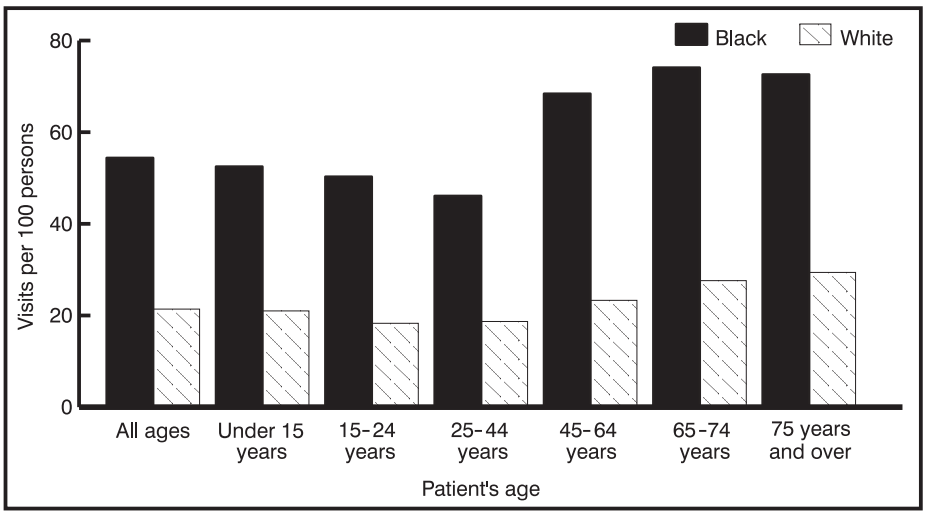

Figure 3. Annual rate of outpatient department visits by patient's age and race: United States, 1996

Table 2. Number and percent distribution of outpatient department visits with corresponding standard errors by clinic type: United States, 1996

Clinic type[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
General medicine	36,308	5,045	54.0	3.0
Surgery	10,689	1,874	15.9	1.8
Pediatrics	8,437	1,683	12.6	1.6
Obstetrics and gynecology	6,594	1,011	9.8	1.5
Other	5,157	479	7.7	0.3

. . . Category not applicable.
[1]Only clinics under the supervision of a physician were included. Clinics specializing in radiology, laboratory services, physical rehabilitation, or other ancillary services were excluded.

NOTE: Numbers may not add to totals because of rounding.

medicine clinics included internal medicine and primary care clinics and represented 54.0 percent of all OPD visits. Surgery, pediatric, and obstetrics and gynecology accounted for 15.9 percent, 12.6 percent, and 9.8 percent of visits, respectively. The ''other'' clinic category that included such clinics as psychiatry and neurology accounted for 7.7 percent of visits.

Expected sources of payment—Data on expected sources of payment are shown in table 3 and figure 4. This item underwent substantial revision for the 1995–96 NHAMCS. The first part of the new item concerns type of payment (for example, Was the visit covered under an insured fee-for-service arrangement, preferred provider option, or HMO/other prepaid plan?). Other options that could be checked were self-pay, no charge, and ''other'' type of payment. Hospital staff were asked to check only one type of payment. If any of the first three options were checked, the hospital staff were then asked to complete part b of the item, expected sources of insurance for the visit. Hospital staff were asked to check all expected sources of insurance that were applicable.

Insured, fee-for-service was the most common type of payment (41.9 percent) followed by HMO/other prepaid plan (21.4 percent) (table 3). Expected sources of payment, regardless of the type of insurance plan, were most often private insurance (32.4 percent), Medicaid (30.7 percent), and Medicare (16.2 percent) (figure 4).

Patient's principal reason for visit—As described earlier, up to three reasons for visit were coded and classified according to *A Reason for Visit Classification for Ambulatory Care* (RVC) (9). The principal reason is the problem, complaint, or reason listed in item 9a. The RVC is divided into eight modules or groups of reasons displayed in table 4. Reasons classified in the symptom module represented 38.4 percent of all OPD visits with respiratory symptoms accounting for 6.5 percent. The treatment module (23.3 percent) and the diagnostic, screening, and preventive module (17.8 percent) were also prominent.

The 20 most frequently mentioned principal reasons for visit, representing 44.7 percent of all visits, are shown in table 5. Progress visit, classified in the treatment module and generally denoting routine followup of an unspecified problem, was the most frequently mentioned principal reason for visit (12.8 percent), followed by general medical examination (5.9 percent), and routine prenatal examination

Table 3. Number and percent distribution of outpatient department visits with corresponding standard errors by type of payment and expected sources of insurance for this visit: United States, 1996

Type of payment and expected sources of insurance[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
Insurance[2]	53,273	6,852	79.3	1.8
Insured, fee-for-service	28,149	3,827	41.9	3.4
Private insurance	10,935	2,089	16.3	2.0
Medicare	7,784	1,407	11.6	1.5
Medicaid	12,792	2,424	19.0	3.0
Worker's compensation	419	112	0.6	0.2
Other	796	194	1.2	0.2
Unknown	311	87	0.5	0.1
HMO/other prepaid[3]	14,400	3,099	21.4	2.8
Private insurance	6,883	1,690	10.2	1.8
Medicare	958	242	1.4	0.3
Medicaid	3,622	709	5.4	0.8
Worker's compensation	*65	47	*0.1	0.1
Other	1,881	538	2.8	0.6
Unknown	*1,883	1,770	*2.8	1.5
Preferred provider option	3,689	663	5.5	0.8
Private insurance	2,419	469	3.6	0.6
Medicare	236	55	0.4	0.1
Medicaid	*745	229	*1.1	0.3
Worker's compensation	*	. . .	*	. . .
Other	277	80	0.4	0.1
Unknown	*182	71	*0.3	0.1
Unspecified type of payment	7,035	1,436	10.5	1.5
Private insurance	*1,520	458	*2.3	0.5
Medicare	1,912	573	2.9	0.7
Medicaid	3,480	786	5.2	1.0
Worker's compensation	*230	74	*0.3	0.1
Other	*543	256	*0.8	0.4
Unknown	*475	175	*0.7	0.3
Self-pay	6,622	768	9.9	0.9
No charge	1,898	510	2.8	0.7
Other	3,085	710	4.6	0.8
No answer[4]	2,307	651	3.4	0.8

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Only one type of payment (preferred provider option, insured fee-for-service, HMO/other prepaid, self-pay, no charge, or other) was coded for each visit. For payment types of preferred provider option, insured fee-for-service, and HMO/other prepaid, respondents were also asked to check all of the applicable expected sources of insurance. As a result, expected sources of insurance will not add to totals because more than one source could be reported per visit.
[2]Includes insured, fee-for-service; HMO/other prepaid; preferred provider option; and unspecified type of payment.
[3]HMO is health maintenance organization.
[4]Neither type of payment nor source of insurance was reported.

(4.3 percent). The most frequently mentioned reasons having to do with a symptomatic problem were throat symptoms (1.7 percent), abdominal pain (1.7 percent), and cough (1.6 percent). It should be noted that estimates that differ in ranked order may not be significantly different from each other.

Injury-related visits—The 1995–96 OPD Patient Record form included a new item that asked hospital staff to record whether the visit was injury related. Visits were considered to be injury related if ''yes'' was checked in response to the question ''Is this visit injury related?'' on the Patient Record form, or if an injury reason for visit or injury diagnosis was recorded, or if a cause of injury was specified on the form. Reporting results from any one of these items alone would underestimate the number of injury-related visits. Each of these items measures a unique aspect of injury. Employing this definition, the number of injury-related visits was 5 percent greater compared with using the injury checkbox alone.

There were an estimated 6.8 million injury-related OPD visits in 1996, representing 10.1 percent of all OPD visits. Injury-related OPD visits are presented in terms of patient's age and sex in table 6. About half of the injury visits (52.1 percent) were made by females, and 35.3 percent were made by persons 25–44 years old. The injury visit rate for females was not significantly higher than the rate for males in 1996 (2.6 per 100 females compared with 2.5 per 100 males), nor were there any differences noted between males and females by age. Among females, injury visit rates were not significantly different for any of the age groups. No statistically significant differences were noted by age for males.

Item 10 on the Patient Record form was also expanded in 1995–96 to

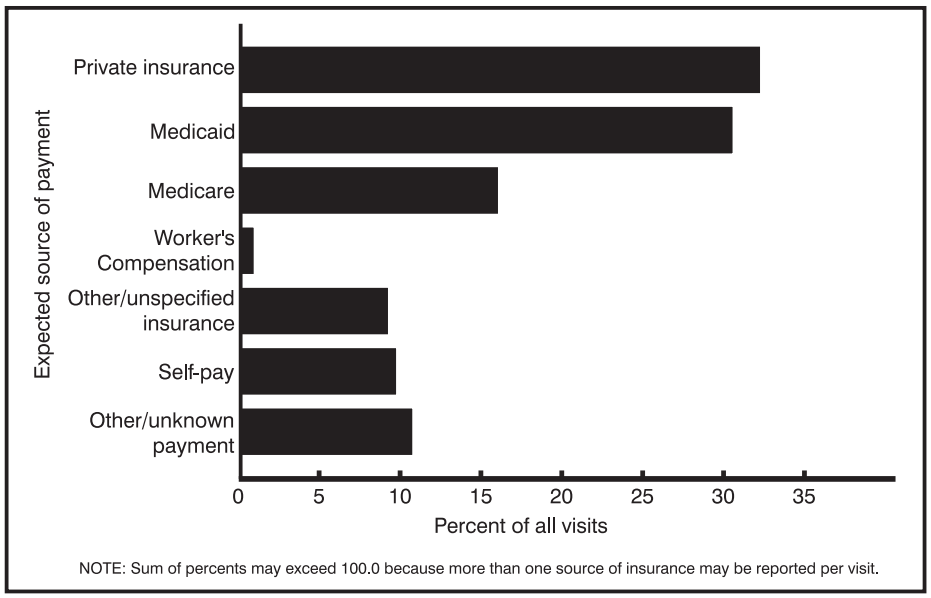

Figure 4. Percent of outpatient department visits by expected source of payment: United States, 1996

capture the place of occurrence, whether the injury was work related, and the external cause of the injury. A work-related injury is defined as an injury that happened while the patient was engaged in work activities occurring on or off the employer's premises. However, these items have high levels of missing data (percent unknown or blank for 57.1 percent and 54.6 percent of the injury-related visits, respectively). Therefore, further statistics are not shown for these items. More complete reporting could change the distribution.

In table 7, data on the intent and mechanism of the first-listed external cause of injury are shown based on ICD–9–CM groupings found in the Technical notes. Over three-fourths of the injury-related visits were due to unintentional injuries (79.9 percent). Falls were cited most often, accounting for 11.7 percent of all injury visits. Cause was not recorded for 9.2 percent of the injury visits.

Principal diagnosis—Displayed in table 8 are OPD visits by principal diagnosis using the major disease categories specified by the ICD–9–CM (10). The supplementary classification, used for diagnoses other than disease or injury (for example, general medical examination), accounted for 20.1 percent of all OPD visits. This was followed by diseases of the respiratory system (8.3 percent), diseases of the circulatory system (7.3 percent), mental disorders (7.1 percent), and diseases of the nervous system and sense organs (7.1 percent).

A selection of the most frequently reported principal diagnoses are presented in table 9. The categories shown in this table are based on the ICD–9–CM, but have been defined to describe ambulatory care visit data. The diagnosis groupings in table 9 accounted

Table 4. Number and percent distribution of outpatient department visits with corresponding standard errors by patient's principal reason for visit: United States, 1996

Principal reason for visit and RVC code[1]		Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits		67,186	8,057	100.0	. . .
Symptom module	S001–S999	25,829	3,551	38.4	2.0
General symptoms	S001–S099	2,920	424	4.3	0.3
Symptoms referable to psychological/mental disorders	S100–S199	*2,158	655	*3.2	0.9
Symptoms referable to the nervous system (excluding sense organs)	S200–S259	1,233	233	1.8	0.2
Symptoms referable to the cardiovascular/lymphatic system	S260–S299	248	63	0.4	0.1
Symptoms referable to the eyes and ears	S300–S399	2,325	364	3.5	0.4
Symptoms referable to the respiratory system	S400–S499	4,381	855	6.5	0.8
Symptoms referable to the digestive system	S500–S639	3,249	634	4.8	0.7
Symptoms referable to the genitourinary system	S640–S829	2,556	405	3.8	0.5
Symptoms referable to the skin, hair, and nails	S830–S899	2,137	333	3.2	0.4
Symptoms referable to the musculoskeletal system	S900–S999	4,622	916	6.9	0.8
Disease module	D001–D999	6,823	1,042	10.2	0.9
Diagnostic/screening and preventive module	X100–X599	11,951	1,497	17.8	1.1
Treatment module	T100–T899	15,686	2,895	23.3	3.0
Injuries and adverse effects module	J001–J999	2,485	518	3.7	0.5
Test results module	R100–R700	1,225	184	1.8	0.2
Administrative module	A100–A140	632	116	0.9	0.1
Other[2]	U990–U999	408	72	0.6	0.3

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Based on *A Reason for Visit Classification for Ambulatory Care* (RVC) (9).
[2]Includes problems and complaints not elsewhere classified, entries of "none," blanks, and illegible entries.
NOTE: Numbers may not add to totals because of rounding.

Table 5. Number and percent distribution of outpatient department visits with corresponding standard errors by the 20 principal reasons for visit most frequently mentioned by patients: United States, 1996

Principal reason for visit and RVC code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
Progress visit T800	8,577	2,222	12.8	2.6
General medical examination X100	3,936	629	5.9	0.6
Routine prenatal examination X205	2,916	541	4.3	0.7
Well-baby examination X105	1,215	215	1.8	0.3
Postoperative visit T205	1,208	194	1.8	0.2
Counseling, not otherwise stated T605	1,194	258	1.8	0.3
Throat symptoms S455	1,168	303	1.7	0.3
Stomach and abdominal pain, cramps and spasms S545	1,141	212	1.7	0.3
Cough S440	1,073	214	1.6	0.2
Hypertension D510	845	243	1.3	0.3
Skin rash S860	827	132	1.2	0.2
Medication, other and unspecified T115	777	165	1.2	0.2
Earache or ear infection S355	756	141	1.1	0.2
Depression S110	*719	251	*1.1	0.3
Back symptoms S905	695	167	1.0	0.2
Test results R700	659	124	1.0	0.2
Head cold, upper respiratory infection (coryza) S445	*640	199	*1.0	0.2
Fever S010	597	130	0.9	0.2
Diagnostic tests, other and unspecified X370	554	154	0.8	0.2
Knee symptoms S925	541	91	0.8	0.1
All other reasons	37,147	4,543	55.3	2.1

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Based on *A Reason for Visit Classification for Ambulatory Care* (RVC) (9).
NOTE: Numbers may not add to totals because of rounding.

for 35.4 percent of all OPD visits made during the year. The four most frequent illness diagnoses were diabetes mellitus, essential hypertension, malignant neoplasms, and acute upper respiratory infections.

Checklist of medical conditions—In addition to the physician's diagnosis reported in item 11 of the Patient Record form, selected information on chronic health conditions was collected in item 12, another addition to the 1995–96 NHAMCS. Hospital staff were given a list of common conditions and asked to record whether the patient now has any of them, regardless of what was recorded as the current diagnosis in item 11. Results from item 12 are shown in table 10. Hypertension was checked most frequently, at 14.0 percent of the total—about 9.4 million visits.

Diagnostic and screening services—For the 1995–96 NHAMCS, item 14 was changed from a predominantly open-ended format back to the checkbox format used in the 1992 survey. Although this somewhat limits the diversity of the services reported, it is thought to increase reliability of the reporting for those categories listed on the form.

Pelvic, breast, and visual examinations were either ordered or provided at 6.3 percent, 4.2 percent, and 3.6 percent at visits, respectively. Blood pressure (50.7 percent) and urinalysis (11.1 percent) were the leading tests. Imaging was most often in the form of an x ray and was either ordered or performed at 8.4 percent of the visits. About 27 percent of the visits had no diagnostic/screening services ordered or provided (table 11).

Procedures—In item 13, up to two ambulatory surgical procedures, performed at this visit, were to be recorded by hospital staff. Item 14, ''Diagnostic/screening services,'' included four open-ended ''other'' categories in addition to the checkbox categories. After analyzing the data from these categories and from the ambulatory surgery data reported in question 13, it was discovered that many of the same procedures were being recorded in either place. The procedures and the results of these open-ended questions were coded and categorized according to the ICD–9–CM, volume 3 (10). Due to small sample sizes, only 5 of the 10 most frequently reported write-in procedures had estimates considered to be reliable. ''Other nonoperative measurements and examinations,'' ''electrocardiogram,'' ''Pap smear,'' ''fetal monitoring,'' and ''culture of specimen from female genital tract'' were recorded for 6.0 million visits (8.9 percent), 1.4 million visits (2.2 percent), 1.2 million visits (1.8 percent), 349,000 visits (0.5 percent), and 336,000 visits (0.5 percent), respectively.

Therapeutic and preventive services—Data on therapeutic and preventive services ordered or provided at OPD visits were collected in item 15 of the Patient Record form. As shown in table 12, these services were recorded at 39.3 percent of all OPD visits in 1996. Counseling or education related to diet (10.4 percent), mental health (5.2 percent), and growth/development (4.6 percent) was mentioned most frequently. Other therapy included psychotherapy (3.5 percent) and physiotherapy (2.9 percent).

Medication Therapy—Up to six medications, called drug mentions, were coded per drug visit. This represents a

Table 6. Number, percent distribution, and annual rate of injury-related outpatient department visits with corresponding standard errors by patient's age and sex: United States, 1996

Patient's age and sex	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Number of visits per 100 persons per year[1]	Standard error of rate
All injury visits	6,761	1,164	100.0	. . .	2.6	0.4
Age						
Under 15 years	1,234	206	18.3	3.0	2.1	0.3
15–24 years	*1,127	368	*16.7	2.9	3.1	1.0
25–44 years	2,384	455	35.3	1.7	2.9	0.5
45–64 years	1,360	258	20.1	1.1	2.6	0.5
65–74 years	366	58	5.4	0.9	2.0	0.3
75 years and over	291	79	4.3	1.1	2.1	0.6
Sex and age						
Female	3,522	707	52.1	2.2	2.6	0.5
Under 15 years	614	105	9.1	1.6	2.1	0.4
15–24 years	*556	265	*8.2	0.7	2.6	1.2
25–44 years	1,110	193	16.4	1.0	2.6	0.5
45–64 years	802	222	11.9	1.5	2.9	0.8
65–74 years	218	44	3.2	0.6	1.9	0.4
75 years and over	*221	73	*3.3	1.0	2.6	0.9
Male	3,239	489	47.9	2.2	2.5	0.4
Under 15 years	620	125	9.2	1.8	2.0	0.4
15–24 years	571	122	8.4	0.8	3.1	0.7
25–44 years	1,274	276	18.8	1.4	3.1	0.7
45–64 years	558	78	8.3	1.2	2.7	0.4
65–74 years	147	34	2.2	0.5	1.8	0.4
75 years and over	70	18	1.0	0.3	1.7	0.4

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Based on U.S. Bureau of the Census monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1996. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990–1996) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

NOTE: Number may not add to totals because of rounding.

minor change from previous years when only five medications could be recorded per visit. As used in the NHAMCS, the term ''drug'' is interchangeable with the term ''medication'' and the term ''prescribing'' is used both broadly to mean ordering and providing any medication, whether prescription or over-the-counter. Visits with one or more drug mentions are termed ''drug visits'' in the NHAMCS. Data on medication therapy are shown in tables 13–15. Medication therapy was the most commonly mentioned therapeutic service in 1996, reported at 40.7 million OPD visits or 60.6 percent of the total (table 13).

The 20 most frequently used generic substances for 1996 are shown in table 14. Drug products containing more than one ingredient (combination products) are included in the data for each ingredient. For example, acetaminophen with codeine is included in both the count for acetaminophen and the count for codeine. Acetaminophen was the generic ingredient most frequently used in drugs ordered or provided by hospital staff at OPD visits in 1996.

There were 99.9 million drug mentions or an average of 1.5 drug mentions per OPD visit. Table 15 presents the 20 medications most frequently mentioned by hospital staff in the NHAMCS, according to the entry name of drug and therapeutic classification. Entry name refers to the actual designation used by the hospital staff on the Patient Record form and may be a trade name, generic name, or simply a desired therapeutic effect. It should be noted that some drugs have more than one therapeutic application. In cases of this type, the drug was classified under its primary therapeutic use. Tylenol was the medication most frequently reported by hospital staff, with 2.5 million mentions (2.5 percent of the total). It was followed by Lasix, Amoxicillin, Prednisone, and Synthroid.

Providers seen—A staff physician and resident/intern were seen at 69.6 percent and 23.1 percent of OPD visits, respectively, while a registered nurse was seen at 42.7 percent of visits (table 16). More than one provider could be reported per visit.

Referral status and prior visit status—Table 17 shows data on OPD visits categorized by patient's referral status and prior-visit status. Almost 21 percent of OPD visits were referred by another physician. Also shown in table 17 are OPD visits by prior-visit status. Patients who had been seen in the clinic on a previous occasion accounted for 82.4 percent of visits and 66.8 percent were made by persons returning to the clinic for care of a previously treated problem. Overall, 17.6 percent of visits were made by new patients.

Disposition of visit—Table 18 displays data on disposition of OPD visits. More than one disposition could be reported per visit. The previously

Table 7. Number and percent distribution of injury-related outpatient department visits with corresponding standard errors according to intent and mechanism of external cause: United States, 1996

Intent and mechanism[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All injury visits	6,761	1,166	100.0	. . .
Unintentional injuries	5,403	955	79.9	1.8
Falls	792	143	11.7	1.4
Motor vehicle traffic	558	124	8.3	0.8
Striking against or struck accidentally by objects or persons	449	91	6.6	0.8
Overexertion and strenuous movements	358	74	5.3	0.8
Cutting or piercing instruments or objects	249	50	3.7	0.7
Natural and environmental factors	223	56	3.3	0.5
Fire and flames, hot substance or object, caustic or corrosive material, and steam	131	31	1.9	0.4
Other and not elsewhere classified	791	148	11.7	0.9
Mechanism unspecified	1,851	444	27.4	2.6
Other and unknown intent[2]	277	69	4.1	0.9
Adverse effects of medical treatment	458	104	6.8	1.3
Blank cause[3]	622	165	9.2	1.2

. . . Category not applicable.
[1]Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM), Supplementary Classification of External Causes of Injury and Poisoning (10). A detailed description of the ICD–9–CM E-codes used to create the groupings in this table is provided in the Technical notes.
[2]Includes assault, self-inflicted, other violence, and unknown intent codes.
[3]Includes illegible entries and blanks.

NOTE: Numbers may not add to totals because of rounding.

Table 8. Number and percent distribution of outpatient department visits with corresponding standard errors by principal diagnosis: United States, 1996

Major disease category and ICD–9–CM code range[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
Infectious and parasitic diseases 001–139	2,045	338	3.0	0.2
Neoplasms 140–239	3,093	822	4.6	0.5
Endocrine, nutritional and metabolic diseases, and immunity disorders 240–279	3,986	1,106	5.9	0.6
Mental disorders 290–319	4,755	1,129	7.1	0.6
Diseases of the nervous system and sense organs 320–389	4,792	843	7.1	0.4
Diseases of the circulatory system 390–459	4,895	930	7.3	0.4
Diseases of the respiratory system 460–519	5,609	1,196	8.3	0.5
Diseases of the digestive system 520–579	3,336	993	5.0	0.5
Diseases of the genitourinary system 580–629	3,100	446	4.6	0.2
Diseases of the skin and subcutaneous tissue 680–709	2,622	491	3.9	0.3
Diseases of the musculoskeletal system and connective tissue 710–739	3,833	839	5.7	0.4
Symptoms, signs, and ill-defined conditions 780–799	3,691	865	5.5	0.3
Injury and poisoning 800–999	*4,034	1,289	*6.0	0.9
Supplementary classification V01–V82	13,522	1,551	20.1	0.6
All other diagnoses[2]	2,526	495	3.8	0.2
Unknown[3]	*1,345	480	*2.0	0.3

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (10).
[2]Includes diseases of the blood and blood-forming organs (280–289); complications of pregnancy, childbirth, and the puerperium (630–676); congenital anomalies (740–759); and certain conditions originating in the perinatal period (760–779).
[3]Includes blanks, uncodable diagnoses, and illegible diagnoses.

NOTE: Numbers may not add to totals because of rounding.

mentioned finding that most OPD patients had been seen in the clinic before and that 64.5 percent of OPD visits resulted in an appointment for a return visit are indications of the continuous nature of care provided in the OPD setting. Almost one-quarter (23.8 percent) of OPD visits included instructions to return as needed.

Additional reports that utilize 1996 NHAMCS data are in the *Advance Data* from Vital and Health Statistics series. Data from the 1996 NHAMCS will be available in a variety of formats including public use data tape, CD-ROM, and as downloadable data files accessed through the NCHS homepage on the Internet. The data are currently available. Questions regarding this report, future reports, or the NHAMCS may be directed to the Ambulatory Care Statistics Branch at (301) 436-7132.

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Table 9. Number and percent distribution of outpatient department visits with corresponding standard errors by selected principal diagnosis groups: United States, 1996

Principal diagnosis group and ICD–9–CM code[1]	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
Normal pregnancy V22	3,428	576	5.1	0.8
Diabetes mellitus 250	*2,684	1,038	*4.0	1.3
Essential hypertension 401	2,456	430	3.7	0.5
Malignant neoplasms 140–208,230–234	*2,283	762	*3.4	1.0
Routine infant or child health check V20.2	2,269	396	3.4	0.5
Acute upper respiratory infections, excluding pharyngitis 460–461,436–466	1,784	471	2.7	0.5
Arthropathies and related disorders 710–719	1,410	342	2.1	0.4
Potential health hazards related to personal and family history V10–V19	1,220	219	1.8	0.3
Otitis media and Eustachian tube disorders 381–382	1,201	235	1.8	0.3
General medical examination V70	1,142	222	1.7	0.2
Dorsopathies 720–724	1,044	297	1.6	0.3
Rheumatism, excluding back 725–729	1,010	183	1.5	0.2
Asthma 493	903	152	1.3	0.2
Psychoses, excluding major depressive disorder 290–296.2,296.4–299	868	214	1.3	0.3
All other diagnoses	43,491	3,620	64.7	0.6

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (9).
NOTE: Numbers may not add to totals because of rounding.

Table 10. Number and percent of outpatient department visits by selected medical conditions: United States, 1996

Medical condition	Number of visits in thousands[1]	Standard error in thousands	Percent of visits	Standard error of percent
All visits	67,186	8,057	. . .	. . .
Hypertension	9,438	1,456	14.0	1.2
Diabetes	6,037	1,283	9.0	1.4
Depression	4,721	818	7.0	0.9
Arthritis	4,908	1,001	7.3	0.8
Obesity	4,111	635	6.1	0.4
COPD[2]	1,136	162	1.7	0.2
Atherosclerosis	*1,261	501	*1.9	0.7
HIV/AIDS[3]	1,028	259	1.5	0.4
Hyperactivity/ADD[4]	783	199	1.2	0.2
Chronic renal failure	441	104	0.7	0.1
None of the above	44,018	5,327	65.5	2.0

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Total exceeds total number of visits because more than one condition may be reported per visit.
[2]COPD is chronic obstructive pulmonary disease.
[3]HIV is human immunodeficiency virus. AIDS is acquired immunodeficiency syndrome.
[4]ADD is attention deficit disorder.

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Table 11. Number and percent of outpatient department visits with corresponding standard errors by the 10 diagnostic and screening services most frequently ordered or provided: United States, 1996

Selected services	Number of visits in thousands[1]	Standard error in thousands	Percent of visits	Standard error of percent
All visits	67,186	8,057	. . .	. . .
Blood pressure	34,094	4,580	50.7	2.7
Other blood test	12,735	1,992	19.0	1.6
Urinalysis	7,447	1,022	11.1	1.0
X ray	5,636	1,045	8.4	0.9
Pelvic exam	4,252	683	6.3	0.8
Breast exam	2,789	473	4.2	0.4
Visual exam	2,396	424	3.6	0.6
Ultrasound	1,739	247	2.6	0.4
Rectal exam	1,740	284	2.6	0.4
Mental status exam	1,793	403	2.7	0.5
None	18,237	2,438	27.1	1.7

. . . Category not applicable.
[1]Total exceeds total number of visits because more than one service may be reported per visit.

Table 12. Number and percent of outpatient department visits with corresponding standard errors by therapeutic and preventive services ordered or provided: United States, 1996

Therapeutic and preventive services	Number of visits in thousands[1]	Standard error in thousands	Percent of visits	Standard error of percent
All visits	67,186	8,057	. . .	. . .
Counseling and education services				
Diet	6,988	1,158	10.4	1.1
Mental health	3,521	740	5.2	0.9
Growth/development	3,115	883	4.6	0.9
Weight reduction	2,351	527	3.5	0.6
Injury prevention	1,868	353	2.8	0.4
Tobacco use/exposure	1,683	287	2.5	0.3
Cholesterol reduction	1,248	317	1.9	0.4
HIV transmission[2]	713	201	1.1	0.3
Other	9,366	1,201	13.9	1.0
None	40,774	4,975	60.7	1.9
Other therapy				
Psychotherapy	2,372	702	3.5	0.9
Physiotherapy	1,950	355	2.9	0.5
Corrective lenses	*258	96	*0.4	0.1
Other therapy	969	167	1.4	0.2

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Total exceeds total number of visits because more than one service may be reported per visit.
[2]HIV is human immunodeficiency virus.

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Table 13. Number and percent distribution of outpatient department visits with corresponding standard errors by number of medications provided or prescribed: United States, 1996

Number of medications provided or prescribed	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
0	26,472	3,620	39.4	2.1
1	16,124	2,058	24.0	1.1
2	9,118	996	13.6	0.7
3	5,858	773	8.7	0.4
4	3,742	658	5.6	0.6
5	2,220	375	3.3	0.4
6 or more	3,651	640	5.4	0.6

. . . Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

Table 14. Number of generic substances and percent of all drug mentions for the 20 most frequently occurring generic substances in drug mentions at outpatient department visits with corresponding standard errors by type of generic substance: United States, 1996

Generic substance	Number of occurrences in thousands[1]	Standard error in thousands	Percent of drug mentions[2]	Standard error of percent
All generic substances	116,017	2,344	. . .	. . .
Acetaminophen	4,727	273	4.7	0.2
Amoxicillin	2,511	228	2.5	0.2
Ibuprofen	2,360	202	2.4	0.2
Insulin	*2,184	697	*2.2	0.7
Aspirin	1,897	148	1.9	0.1
Furosemide	1,673	130	1.7	0.1
Albuterol	1,652	98	1.7	0.1
Hydrochlorothiazide	1,638	145	1.6	0.1
Nifedipine	1,308	123	1.3	0.1
Multivitamins general	1,291	117	1.3	0.1
Levothyroxine	1,262	126	1.3	0.1
Enalapril	1,195	110	1.2	0.1
Estrogens	1,185	108	1.2	0.1
Iron preparations	1,148	131	1.1	0.1
Prednisone	1,122	101	1.1	0.1
Naproxen	1,071	115	1.1	0.1
Codeine	1,007	90	1.0	0.1
Pyridoxine	1,002	136	1.0	0.1
Trimethoprim	997	82	1.0	0.1
Guaifenesin	982	109	1.0	0.1

. . . Category not applicable.

* Figure does not meet standard of reliability or precision.

[1]Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.

[2]Based on an estimated 99,910,000 drug mentions at outpatient department visits in 1996.

Table 15. Number and percent distribution of the 20 drugs most frequently prescribed at outpatient department visits with corresponding standard errors by entry name of drug: United States, 1996

Entry name of drug[1]	Number of drug mentions in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Therapeutic classification[2]
All drug mentions	99,910	13,112	100.0	. . .	. . .
Tylenol	2,522	636	2.5	0.2	Analgesics, nonnarcotic
Lasix	1,512	356	1.5	0.1	Diuretics
Amoxicillin	1,437	334	1.4	0.2	Penicillins
Prednisone	1,120	251	1.1	0.1	Adrenal corticosteroids
Synthroid	*1,111	390	*1.1	0.1	Agents used to treat thyroid disease
NPH Insulin	*1,099	783	*1.1	0.7	Blood glucose regulators
Motrin	1,049	185	1.0	0.1	Antiarthritics
Vasotec	1,041	264	1.0	0.1	ACE inhibitors[3]
Hepatitis B vaccine	951	199	1.0	0.1	Vaccines and antiserums
ASA[4]	*945	315	*1.0	0.1	Analgesics, nonnarcotic
Premarin	934	205	0.9	0.1	Estrogens and progestins
Procardia	*913	278	*0.9	0.1	Calcium channel blockers
Ibuprofen	862	241	0.9	0.1	Antiarthritics
Zantac	835	153	0.8	0.1	Agents used in treatment of upper GI tract[5]
Ativan	*814	387	*0.8	0.1	Antianxiety agents
HCTZ[6]	811	207	0.8	0.1	Diuretics
Coumadin	*809	269	*0.8	0.1	Anticoagulants/thrombolytics
Prenatal vitamins	755	207	0.8	0.1	Vitamins, minerals
Bactrim	748	128	0.8	0.1	Sulfamethoxazole and trimethoprim
Versed	*737	273	*0.7	0.1	Sedatives and hypnotics
All other mentions	78,905	9,871	79.0	0.7	. . .

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]The entry made by the hospital staff on the prescription or other medical records. This may be a trade name, generic name, or desired therapeutic effect.
[2]Therapeutic classification is based on the *National Drug Code Directory*, 1995 Edition (10). In cases where a drug had more than one therapeutic use, it was classified under its primary therapeutic use.
[3]ACE is angiotensin-converting enzyme.
[4]ASA is acetylsalicylic acid.
[5]GI is gastrointestinal.
[6]HCTZ is hydrochlorothiazide.

Table 16. Number and percent of outpatient department visits with corresponding standard errors by type of provider seen: United States, 1996

Type of provider	Number of visits in thousands[1]	Standard error in thousands	Percent of visits	Standard error of percent
All visits	67,186	8,057	. . .	. . .
Staff physician	46,751	6,333	69.6	2.5
Registered nurse	28,674	3,799	42.7	4.0
Resident/intern	15,504	2,467	23.1	2.1
Medical assistant	9,171	2,140	13.7	2.3
Licensed practical nurse	*9,785	3,072	*14.6	3.4
Other physician	2,790	634	4.2	0.8
Nurse practitioner	3,734	932	5.6	1.0
Physician assistant	*1,946	655	*2.9	0.9
Other	8,012	1,221	11.9	1.4

. . . Category not applicable.
* Figure does not meet standard of reliability or precision.
[1]Total exceeds total number of visits because more than one provider may be reported per visit.

Table 17. Number and percent distribution of outpatient department visits with corresponding standard errors by referral status and prior-visit status: United States, 1996

Visit characteristic	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	67,186	8,057	100.0	. . .
Referral status				
Not referred by another physician	53,274	6,577	79.3	1.8
Referred by another physician	13,912	2,051	20.7	1.8
Prior-visit status				
Old patient	55,353	6,857	82.4	1.2
Old problem	44,879	5,624	66.8	1.4
New problem	10,473	1,550	15.6	1.2
New patient	11,833	1,483	17.6	1.2

. . . Category not applicable.

NOTE: Numbers may not add to totals because of rounding.

Table 18. Number and percent of outpatient department visits with corresponding standard errors by disposition of visit: United States, 1996

Disposition[1]	Number of visits in thousands	Standard error in thousands	Percent of visits	Standard error of percent
All visits	67,186	8,057	. . .	. . .
Return to clinic — appointment	43,344	5,147	64.5	1.8
Return to clinic PRN[2]	16,000	2,774	23.8	2.0
Refer to other physician/clinic	4,164	535	6.2	0.6
No followup planned	3,192	484	4.8	0.7
Telephone followup planned	2,049	395	3.0	0.5
Return to referring physician	2,827	581	4.2	0.8
Admit to hospital	*1,182	649	*1.8	0.9
Other	1,818	390	2.7	0.4

. . . Category not applicable.

* Figure does not meet standard of reliability or precision.

[1]Total exceeds total number of visits because more than one disposition may be reported per visit.

[2]PRN is as needed.

Technical notes

Sampling errors

The standard error is primarily a measure of the sampling variability that occurs by chance when only a sample, rather than an entire universe, is surveyed. The standard error also reflects part of the measurement error, but does not measure any systematic biases in the data. The chances are 95 out of 100 that an estimate from the sample differs from the value that would be obtained from a complete census by less than twice the standard error.

The standard errors presented in the tables and used in tests of significance for this report were approximated using SUDAAN software. SUDAAN computes standard errors by using a first-order Taylor approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses has been published (13). Generalized linear models for predicting the relative standard error were not used for OPD data because of lack of fit of the linear models. The relative standard error (RSE) of an estimate is obtained by dividing the standard error by the estimate itself. The result is then expressed as a percent of the estimate.

The reader should be cautioned about using generalized linear models for predicting the relative standard error; however, approximate relative standard errors for aggregate estimates may be calculated using the following general formula, where x is the aggregate of interest in thousands, and A and B are the appropriate coefficients from table I.

$$\mathrm{RSE}(x) = \sqrt{A + \frac{B}{x}} \bullet 100$$

Similarly, relative standard errors for an estimate of a percent may be calculated using the following general formula, where p is the percent of interest, expressed as a proportion, and x is the denominator of the percent in thousands, using the appropriate coefficients from table I.

$$\mathrm{RSE}(x) = \sqrt{\frac{B \bullet (1-p)}{p \bullet x}} \bullet 100$$

Table I. Coefficients appropriate for determining approximate relative standard errors: National Hospital Ambulatory Medical Care Survey, 1996: Outpatient Departments

Type of estimate	Coefficient for use with estimates in thousands		Lowest reliable estimate in thousands
	A	*B*	
Visits	0.009174	7.7749	96
Drug mentions	0.009344	12.477	155

The standard error for a rate may be obtained by multiplying the relative standard error of the total estimate by the rate.

Published and flagged estimates

Estimates are not presented unless a reasonable assumption regarding their probability distributions is possible on the basis of the Central Limit Theorem. The Central Limit Theorem states that, given a sufficiently large sample size, the sample estimate approximates the population estimate and, upon repeated sampling, its distribution would be approximately normal.

In this report, estimates are not presented if they are based on fewer than 30 cases in the sample data. In such cases, only an asterisk (*) appears in the tables. Estimates based on 30 or more cases include an asterisk if the RSE of the estimate exceeds 30 percent.

Adjustments for hospital nonresponse

Estimates from NHAMCS data were adjusted to account for sample hospitals that were in scope but did not participate in the study. This adjustment was calculated to minimize the impact of response on final estimates by imputing to nonresponding hospitals data from visits to similar hospitals. For this purpose, hospitals were judged similar if they were in the same region, ownership control group, and metropolitan statistical area control group.

Adjustments for ED or clinic nonresponse

Estimates from NHAMCS data were adjusted to account for ED's and sample clinics that were in scope, but did not participate in the study. This adjustment was calculated to minimize the impact of nonresponse on final estimates by imputing to nonresponding ED's or clinics data from visits to similar ED's or clinics. For this purpose, ED's or clinics were judged similar if they were in the same ED or clinic group.

Tests of significance and rounding

In this report, the determination of statistical inference is based on the two-tailed *t*-test. The Bonferroni inequality was used to establish the critical value for statistically significant differences (0.05 level of significance) based on the number of possible comparisons within a particular variable (or combination of variables) of interest. Terms relating to differences such as ''higher than'' indicate that the difference is statistically significant. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant.

In the tables, estimates of OPD visits have been rounded to the nearest thousand. Consequently, estimates will not always add to totals. Rates and percents were calculated from original unrounded figures and do not necessarily agree with percents calculated from rounded data.

Injury groupings

Table 7 of this report presents data on the intent and mechanism producing the injuries that resulted in visits to OPD's. Cause of injury was collected for each sampled visit in the NHAMCS and was coded according to the ICD–9–CM's Supplementary Classification of External Causes of Injury and Poisoning. For table 7,

Table II. Reclassification of cause-of-injury codes for use with National Hospital Ambulatory Medical Care Survey data

Intent and mechanism of injury	Cause of injury code[1]
Unintentional injuries	E800–E869,E880–E929
Falls	E880.0–E886.9,E888
Motor vehicle traffic	E810–E819
Striking against or struck accidentally by objects or persons	E916–E917
Overexertion and strenuous movements	E927
Cutting or piercing instruments or objects	E920
Natural and environmental factors	E900–E909,E928.0–E928.2
Fire and flames, hot substance or object, caustic or corrosive material and steam	E890–E899,E924
Other and not elsewhere classified	E846–E848,E911–E915,E918,E921,E923,E925–E926,E929.0–E929.5,E928.8
Mechanism unspecified	E887,E928.9,E929.8,E929.9
Other and unknown intent	E950–E959,E960–E969,E970–E978,E980–E989,E990–E999
Adverse effects of medical treatment	E870–E879,E930–E949

[1]Based on the "Supplementary Classification of External Causes of Injury and Poisoning," *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (8).

however, cause-of-injury data were regrouped to highlight the interaction between intentionality of the injury and the mechanism that produced the injury. Table II displays the groupings used in table 7.

Population figures and rate calculation

The figures represent U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1, 1996. Figures are based on monthly postcensal estimates of this population. Figures are consistent with an unpublished national population estimate release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990–1996) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix (2). Regional estimates have been provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population as of July 1, 1996. DHIS estimates are provisional at this time and differ slightly from monthly postcensal estimates because of differences in the adjustment process.

Definition of terms

Patient—An individual seeking personal health services who is not currently admitted to any health care institution on the premises.

Hospital—Hospitals with an average length of stay for all patients of less than 30 days (short-stay) or hospitals whose specialty is general (medical or surgical) or children's general, except Federal hospitals, hospital units of institutions, and hospitals with less than six beds staffed for patient use.

Emergency department—Hospital facility for the provision of unscheduled outpatient services to patients whose conditions require immediate care and is staffed 24 hours a day. If an ED provided emergency services in different areas of the hospital, then all of these areas were selected with certainty into the sample. Off-site emergency departments that are open less than 24 hours are included if staffed by the hospital's emergency department.

Outpatient department—Hospital facility where nonurgent ambulatory medical care is provided under the supervision of a physician.

Clinic—An administrative unit of the outpatient department where ambulatory medical care is provided under the supervision of a physician. The following are examples of the types of clinics excluded from the NHAMCS: ambulatory surgical centers, chemotherapy, employee health service, renal dialysis, methadone maintenance, and radiology.

Visit—A direct, personal exchange between a patient and a physician or other health care provider working under the physician's supervision for the purpose of seeking care and receiving personal health services.

Injury-related visit—A visit is considered related to an injury if "yes" was checked in response to question 10, "Is visit injury related?" if a cause of injury or a nature of injury diagnosis was provided, or an injury-related reason for visit was reported.

Illness-related visit—A visit is considered related to an illness condition if it was not an injury visit as defined above.

Trade name disclaimer

The use of trade names is for identification only and does not imply endorsement by the Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

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