

National Hospital Ambulatory Medical Care Survey: 2000 Outpatient Department Summary

by Nghi Ly, M.P.H., and Linda F. McCaig, M.P.H., Division of Health Care Statistics

Abstract

Objectives—This report describes ambulatory care visits to hospital outpatient departments (OPDs) in the United States. Statistics are presented on selected hospital, clinic, patient, and visit characteristics. Highlights of trends in OPD utilization from 1997 through 2000 are also presented.

Methods—The data presented in this report were collected from the 2000 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 sample survey of visits to emergency and outpatient departments of non-Federal, short-stay, and general hospitals in the United States. Sample data are weighted to produce annual national estimates. Trends are based on NHAMCS data from 1997 through 2000.

Results—During 2000, an estimated 83.3 million visits were made to hospital OPDs in the United States, about 30.4 visits per 100 persons. Females had higher OPD visit rates than males (35.3 versus 25.2 visits per 100 persons). The OPD utilization rate for black persons was higher than for white persons (48.3 versus 28.0 visits per 100 persons). Of all visits made to hospital OPDs in 2000, private insurance (38.5 percent), Medicaid (22.1 percent), and Medicare (16.9 percent) were listed as the leading primary expected source of payment. Approximately 21 percent of OPD visits reported that patients belonged to an HMO. There were an estimated 9.5 million injury-related OPD visits in 2000. Since 1997, the percent of OPD visits that were for injuries increased by 24% (from 9.2 percent to 11.4 percent). Most of these visits were for unintentional injuries (57.6 percent), including those caused by falls (12.9 percent). Medications were prescribed at 64.0 percent of visits. On average, 1.6 medications were ordered at each OPD visit. In 2000, patients saw one or more physicians (i.e., staff physician, resident/intern, or other physician) at approximately 79 percent of visits. Most patients were given an appointment to return to the clinic (57.2 percent).

Keywords: NHAMCS • outpatient department visits • diagnoses • medications • ICD-9-CM

Introduction

The National Hospital Ambulatory Medical Care Survey (NHAMCS) was inaugurated in 1992 to gather, analyze, and disseminate information about the health care provided by hospital outpatient departments (OPDs) and emergency departments (EDs). The NHAMCS is part of the ambulatory component of the National Health Care Survey, which measures health care utilization across various types of providers. More information about the National Health Care Survey can be found at the National Center for Health Statistics (NCHS) Internet address: www.cdc.gov/nchs/nhcs.htm.

Ambulatory medical care is the predominant method of providing health care services in the United States and occurs in a wide range of settings. The largest proportion of ambulatory care services occurs in physician offices (1). Since 1973, the National Center for Health Statistics (NCHS) has collected data on patient visits to physicians' offices through the National Ambulatory Medical Care Survey (NAMCS). However, visits to hospital OPDs and EDs, which represent a significant segment of ambulatory care visits, are not included in the NAMCS. Furthermore, hospital ambulatory patients are known to differ from office patients in certain demographic and medical characteristics (1). OPDs

account for approximately 9 percent of all ambulatory medical care in the United States (1).

This report presents data from the 2000 National Hospital Ambulatory Medical Care Survey (NHAMCS), a nationally representative survey of hospital OPD utilization. Hospital, patient, and visit characteristics are described. In addition, data on selected OPD utilization trends from 1997 through 2000 are presented. Other *Advance Data* reports highlight visits to EDs (2) and physician offices (3).

Data highlights

- In 2000, 83.3 million visits were made to hospital OPDs, about 30.4 visits per 100 persons.
- Approximately 61 percent of physician-supervised OPD visits were to general medical clinics.
- Private insurance was the most used form of payment, accounting for 38.5 percent of visits, followed by Medicaid and Medicare (22.1 percent and 16.9 percent, respectively).
- Complementary or alternative medicine treatments were ordered or provided at about 4 percent of visits.
- About 130 million drugs were prescribed at approximately 64 percent of OPD visits.
- From 1997 through 2000, the number of influenza virus vaccines administered to children under 15 years of age increased.
- Since 1997, the rate of drug mentions for gastrointestinal agents and for pain relief drugs increased by 30% (6.4 drugs per 100 visits to 8.3 drugs per 100 visits) and by 23% (17.7 drugs per 100 visits to 21.7 drugs per 100 visits), respectively.
- A physician (i.e. staff physician, resident-intern, or other physician) was seen at approximately 79 percent of patient visits.

Methods

The data presented in this report are from the 2000 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 conducted

from December 27, 1999 through December 24, 2000.

The target universe of the NHAMCS is in-person visits made in the United States to OPDs and EDs 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. The 2000 NHAMCS data presented in this report are representative of utilization statistics for hospitals existent in 1991.

A four-stage probability sample design is used in the NHAMCS (4). The design involves samples of primary sampling units (PSUs), hospitals within PSUs, clinics within OPDs, and patient visits within OPDs and/or clinics. The PSU sample consists of 112 PSUs that comprise a probability subsample of the PSUs used in the 1985–94 National Health Interview Survey. The sample for 2000 consisted of 488 hospitals. Of this group, 252 had eligible OPDs and 221 of these participated in the survey, resulting in a participation rate of almost 88 percent.

If an OPD had five or fewer clinics, then all were included in the sample. For OPDs with more than five clinics, systematic samples of clinics proportional to size were included in the survey. A clinic was defined as an administrative unit of the OPD 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. A total of 908 clinics were selected from the 221 participating OPDs. Of this group of clinics, 829 provided data to the survey. Hospital staff were asked to complete Patient Record forms (see [figure 1](#) in the [Technical notes](#) section) 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 OPDs was 27,510.

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 with guidelines for judging the precision of the estimates. The standard errors reported here are calculated using Taylor approximations in SUDAAN, which take into account the complex sample design of the NHAMCS (5).

The U.S. Census Bureau was responsible for data collection. Data processing operations and medical coding were performed by Analytical Sciences Inc., Durham, North Carolina. As part of the quality assurance procedure, a 10-percent quality control sample of survey records was independently keyed and coded. Coding error rates ranged between 0.1 and 2.0 percent for various survey items.

Several of the tables in this report present data on rates of OPD visits. The population figures used in calculating these rates are based on Census Bureau monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2000, and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

Data on selected OPD utilization trends from 1997 through 2000 are also presented. A weighted least-squares regression analysis was used to determine the significance of trends at the .05 level. For details on the surveys conducted from 1997 through 1999, refer to the annual reports (6–8).

Results

Patient characteristics

There were an estimated 83.3 million visits to hospital outpatient departments (OPDs) in 2000, about 30.4 visits per 100 persons. OPD visits by patient's age, sex, and race are shown in [table 1](#). There was a linear trend for females and males by age overall. However, the visit rate for males under 15 years of age (32.0 visits per 100 persons) was higher than the rate for males 15–24 years of age (14.8 visits

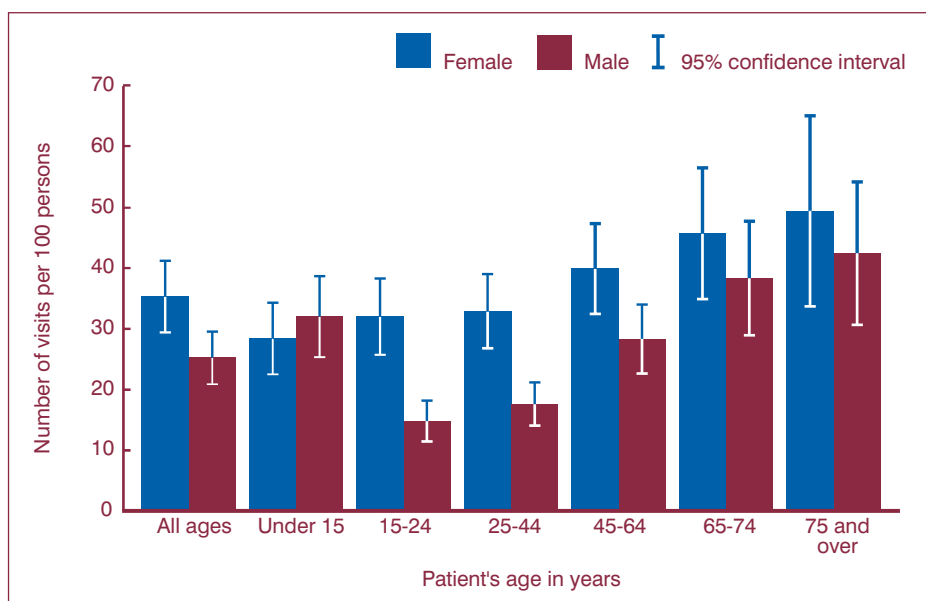


Figure 1. Annual rate of outpatient department visits by patient's age and sex: United States, 2000

per 100 persons). The female visit rate was higher than the rate for males overall, driven by differences in the 15–64 year old age group (figure 1). In figures 1 and 2, 95 percent confidence intervals are given to graphically display the stability of the individual point estimates and to permit the reader to assess general patterns in the data. White persons made 75.7 percent of all OPD visits, while black persons and Asians/Native Hawaiians/Other Pacific Islanders accounted for 20.6 percent and

3.1 percent, respectively. The OPD utilization rate for black persons was 73 percent higher than for white persons. There was a linear trend by age for both black and white persons (figure 2).

Hospital characteristics

Ownership—About 72 percent of OPD visits were made to voluntary nonprofit hospitals while 26.7 percent of visits occurred in non-Federal

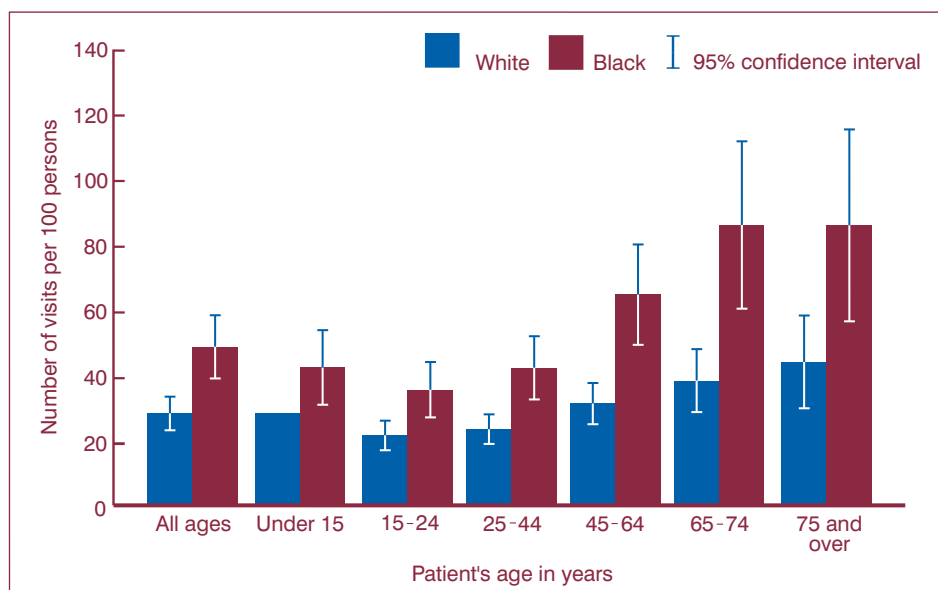


Figure 2. Annual rate of outpatient department visits by patient's age and race: United States, 2000

government (i.e., State, county, city) hospitals (table 1).

Geographic region—OPD visit rates in the Northeast (44.3 visits per 100 persons) were higher than in the South (25.9 visits per 100 persons) and the West (19.8 visits per 100 persons). The proportion of visits in the West (13.6 percent) was lower than the proportions in the other three regions (table 1).

Metropolitan status—About 80 percent of OPD visits were in metropolitan statistical areas (MSAs) (table 1). There was no significant difference in the visit rates for MSAs and non-MSAs.

Clinic characteristics

Clinic type—Visits to hospital OPDs were classified into five types of clinics (table 2). General medicine clinics included internal medicine and primary care clinics and represented 60.7 percent of all OPD visits. Pediatrics, surgery, and obstetrics and gynecology accounted for 12.6 percent, 12.2 percent, and 7.0 percent of visits, respectively. The “other” clinic category, which included such clinics as psychiatry and neurology, accounted for 7.6 percent of visits.

Visit characteristics

Referral status and prior visit status—Table 3 shows data on OPD visits categorized by patient's referral status and by prior-visit status. About 19 percent of OPD visits were referred by another physician. Visits to the OPD were mostly made by patients who had been seen before in the clinic (82.3 percent); new patients made 15.7 percent of visits. A significantly higher proportion of new patients were referred by another physician or health plan (36.1 percent) compared with old patients (15.7 percent) (data not shown).

Managed care—Managed care variables measured in the 2000 NHAMCS are displayed in table 4. These include whether the visit was made to the patient's primary care physician, whether authorization was required for the visit, whether the visit was capitated, and whether the patient belonged to a health maintenance

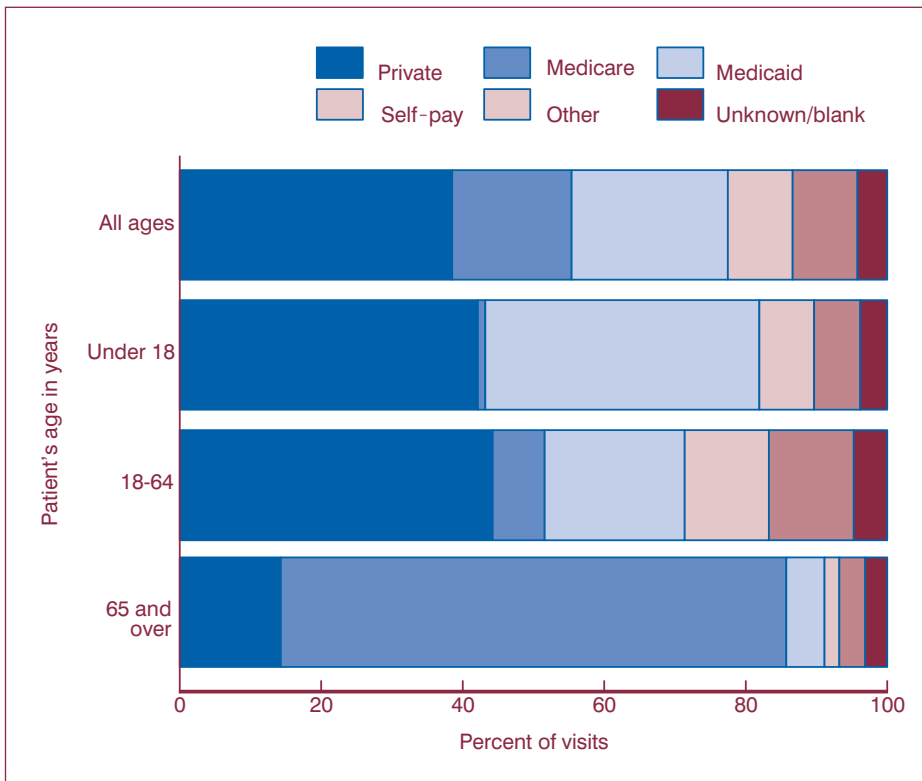


Figure 3. Percent distribution of outpatient department visits by primary expected source of payment according to patient's age: United States, 2000

Primary expected source of payment and health maintenance organization status—Private insurance was listed as the dominant expected source of payment, occurring for 38.5 percent of OPD visits in 2000, followed by Medicaid (22.1 percent) and Medicare (16.9 percent) (table 5). Payment mechanism varied by patient age as shown in figure 3. From 1997 through 2000, the relative proportion of all OPD visits that had Medicaid as the primary expected source of payment decreased by 21% (from 27.9 percent to 22.1 percent), driven by a decline in the percent of visits made by Medicaid patients 18 years of age and over (figure 4).

The distribution of visits by HMO members varied by expected source of payment. Approximately one-third of visits with private insurance recorded also had HMO checked (32.6 percent) compared to 23.4 percent for Medicaid and 8.2 percent for Medicare. HMO status was unknown for 26.5 percent of visits.

Patient's principal reason for visit—The principal reason for visit is the main complaint, symptom, or reason why the patient came to the OPD. Up to three reasons for visit were coded according to *A Reason for Visit Classification for Ambulatory Care (RVC)* (9). The RVC is a classification scheme developed by NCHS and has been used for over 20 years to code the patient's complaints or reasons for seeking care. It is divided into eight modules or groups of reasons as shown in table 6 and includes all the reasons for which patients see their health care provider. This includes symptoms, follow-up for prior diagnoses, routine examinations and screening, treatment for conditions and operations, various therapies, and injuries. Also included are visits to receive test results and to fulfill third party requirements for a physical examination such as for employment or a driver's license. The symptoms module is further divided into symptoms that refer to specific body systems, such as digestive or respiratory. Each reason is assigned a 3- or 4-digit classification code (for example, S845- "Symptoms of skin mole" is further detailed to S845.1-

organization (HMO). Overall, one-third (36.7 percent) of OPD visits were to the patient's primary care physician. Of these visits, 8 out of 10 visits did not require authorization for care. However, visits to physicians other than their primary care physician were more likely to require authorization (19.1 percent) than visits to the patient's primary care physician (4.6 percent). It should be

noted that there were fairly high levels of missing data for the capitation item (38.9 percent), so the results should be interpreted with caution. About 21 percent of OPD visits were made by patients who belonged to an HMO. Visits by HMO members and non-HMO members were equally likely to be made to the patient's primary care physician.

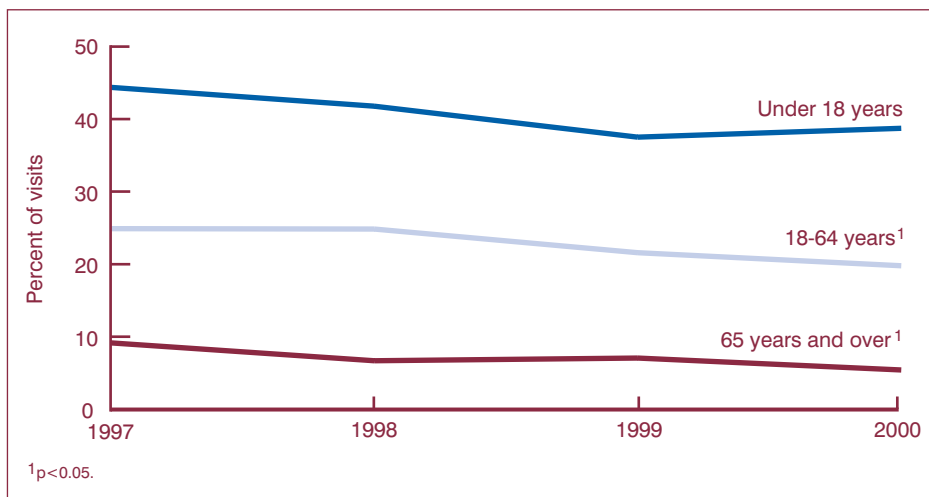


Figure 4. Trends in percent of outpatient department visits with Medicaid as primary expected source of payment by age: United States, 1997–2000

¹p<0.05.

“Change in size and color” and S845.2-“Bleeding mole”).

In 2000, reasons classified in the symptom module represented 43.8 percent of all OPD visits with symptoms referable to the musculoskeletal system accounting for 8.7 percent. The diagnostic/screening and preventive module (19.6 percent) and the treatment module (17.0 percent) were also prominent (table 6). The 20 most frequently mentioned principal reasons for visit, representing 43.3 percent of all visits, are shown in table 7. General medical examination was the most frequently mentioned principal reason for visit (7.8 percent). This was followed by progress visit (7.7 percent) and routine prenatal examination (2.9 percent). The most frequently mentioned reasons related to a symptomatic problem were cough (2.5 percent), throat symptoms (1.9 percent), and stomach and abdominal pain (1.7 percent). All of the top 20 reasons for OPD visits in 2000 were also listed among the most frequently mentioned reasons in 1999, except for knee symptoms and physical examination required for school or employment. It should be noted that estimates differing in ranked order might not be significantly different from each other.

Major reason for this visit—The intent of this item was to provide a better picture of the general nature of the OPD visit—whether for an acute problem; routine chronic problem; flare-up of a chronic problem; pre- or post-surgery visit or injury follow-up; or for preventive care, including routine medical examinations. The major reason for visit item differs from the principal reason for visit item in that the former presents the physician’s rather than the patient’s perspective of the major reason that the patient sought care. As seen in table 8, acute problems comprised 36.8 percent of visits overall, but 42.7 percent among visits by children under 15 years of age. About 30 percent of all visits were for a routine chronic problem, but for persons 65 years of age and over, it represented approximately 46 percent. Approximately 18 percent of visits were for preventive or nonillness care. Females and black persons had a

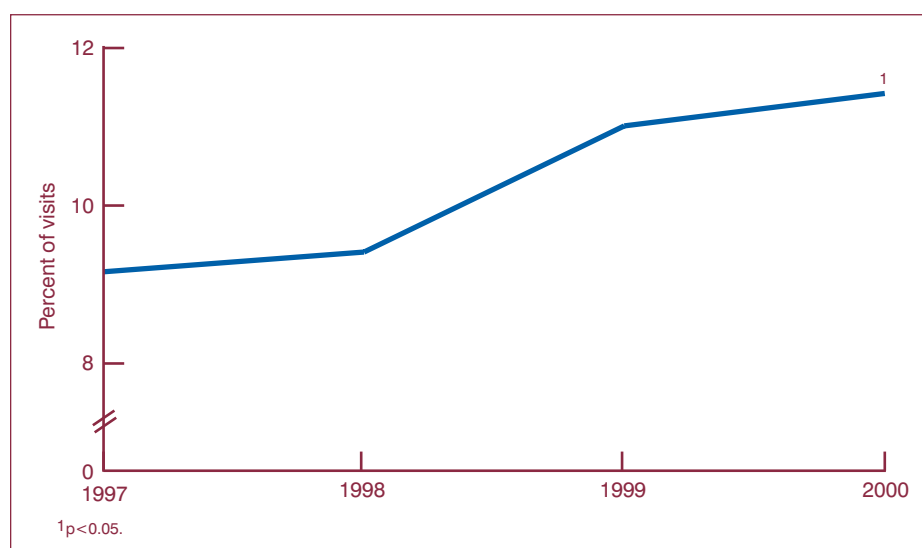


Figure 5. Trend in the percent of outpatient department visits for injuries: United States, 1997–2000

significantly higher proportion of visits for preventive care compared with males and white persons, respectively. White persons had a higher proportion of visits for acute problems compared with black persons.

Primary diagnosis—Hospital staff were asked to record the primary diagnosis or problem associated with the patient’s most important reason for the current visit and any other significant current diagnoses. Up to three diagnoses were coded according to the ICD–9–CM (10). Displayed in table 9 are OPD visits by primary diagnosis using the major disease categories specified by the ICD–9–CM. The most frequently listed disease category, accounting for 18.5 percent of visits, was supplementary classification, used for diagnoses not classifiable to injury or illness (for example, general medical examination, routine prenatal examination, and health supervision of an infant or child). Diseases of the respiratory system (10.6 percent) were also prominent on the list. The 20 most frequently reported primary diagnoses, accounting for 42.7 percent of all the OPD visits in 2000, are shown in table 10. The four most frequent diagnoses recorded were essential hypertension (4.3 percent); routine infant or child health check (3.8 percent); acute upper respiratory infection, excluding pharyngitis (3.6 percent); and diabetes mellitus (3.2 percent).

Injury-related visits—While there is a separate item on the Patient Record form to indicate whether the visit was for an injury or poisoning, sometimes an injury reason for visit is specified or an injury diagnosis is rendered without the injury item being checked. Therefore, the visit is counted as an injury visit and the checkbox is coded to “yes” if any of the three reasons for visit were in the injury module or any of the three diagnoses were in the injury or poisoning chapter of the *International Classification of Diseases, 9th Revision Clinical Modification* (ICD–9–CM) (10). This provides a better indicator that the visit involves an injury than using the reason-for-visit module, ICD–9–CM injury diagnosis, or the unedited injury item alone. A more detailed discussion of this is documented elsewhere (11).

There were an estimated 9.5 million injury- or poisoning-related OPD visits in 2000, representing 11.4 percent of all OPD visits and yielding a rate of 3.5 visits per 100 persons (table 11). Visits for injuries represent a larger proportion of the OPD case mix in 2000 compared with 1997 (a 24-percent increase) (figure 5). This was driven by an increase in the population visit rate for injuries by patients 45 years of age and over (figure 6).

Table 12 shows OPD visits by the intent and mechanism of the first-listed external cause-of-injury codes (E-codes). Up to three external causes of injury

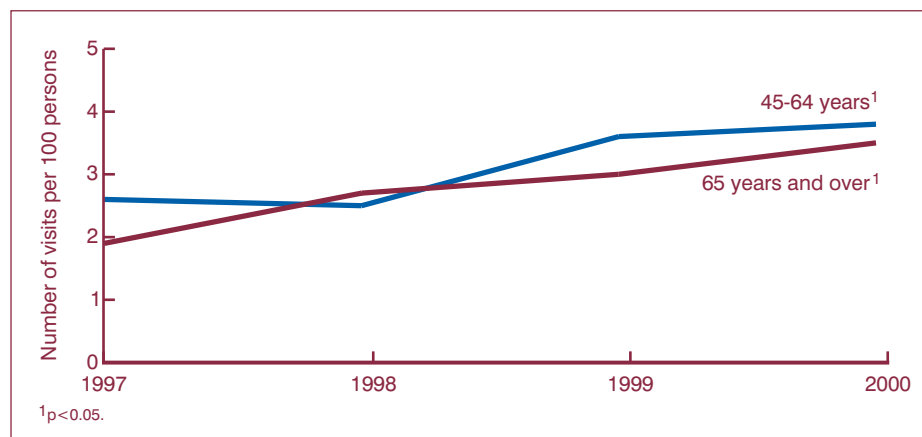


Figure 6. Trends in injury-related outpatient department visit rates by persons 45 years of age and over: United States, 1997–2000

were coded according to the “Supplementary Classification of External Causes of Injury and Poisoning” in the ICD–9–CM (10). The most prominent cause of injuries was falls (12.9 percent), followed by motor vehicle traffic crashes (7.3 percent). It should be noted that there are high levels of missing data for the external cause of injury item (34.0 percent), so

the results should be interpreted with caution. For a detailed description of the cause-of-injury codes, refer to [table II](#).

Diagnostic and screening services—Statistics on various diagnostic and screening services ordered or provided by hospital staff during an OPD visit are displayed in [table 13](#). The most frequently cited examinations were skin (7.2 percent),

pelvic (4.4 percent), and visual acuity (4.1 percent). Blood pressure check (52.4 percent) was the leading diagnostic screening test. Imaging was ordered or provided at 12.7 percent of all visits (data not shown) and was most often in the form of an x ray (7.0 percent). About 22 percent of the visits had no diagnostic or screening services ordered or provided.

Therapeutic and preventive services—One or more therapeutic or preventive services were ordered or provided at 35.1 percent of OPD visits during 2000. Counseling or education related to diet (11.8 percent) and exercise (5.7 percent) were mentioned most frequently ([table 14](#)). Psychotherapy, complementary and alternative medicine (CAM), and physiotherapy accounted for 4.8 percent, 4.2 percent, and 2.4 percent of visits, respectively. In prior years, it was not possible to estimate the number of visits for CAM. However, in 2000, the number of visits for CAM increased to the point where reliable estimates could be made.

Medication therapy—Hospital staff were instructed to record all new or continued medications ordered, supplied, or administered at the visit. This included 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 NCHS. A report describing the method and instruments used to collect and process drug information is available (12). As used in the NHAMCS, the term “drug” is interchangeable with the term “medication.” Visits with one or more drug mentions are termed “drug visits” in the NHAMCS.

Medications were used at 64.0 percent of OPD visits in 2000 ([table 15](#)), for a total of 129.9 million drug mentions or an average of 1.6 mentions per visit (data not shown). Of the 53.3 million drug visits, 60.7 percent had multiple drugs prescribed or continued. The drug mention rate increased with age; persons 65 years

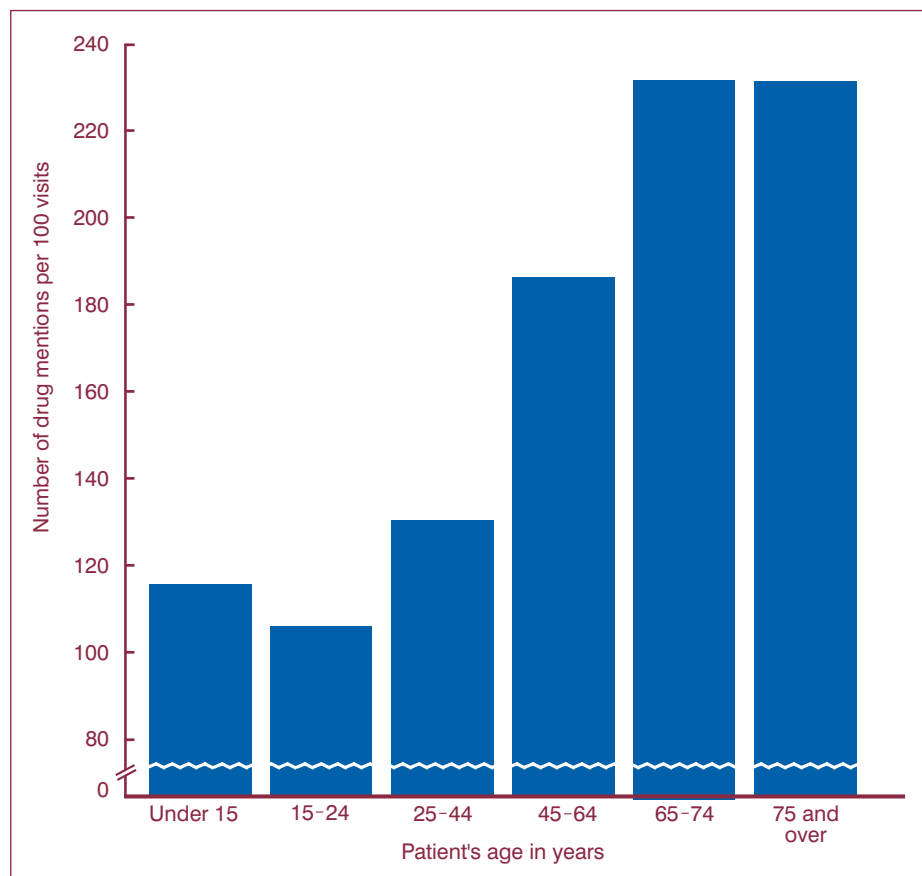


Figure 7. Annual drug mention rates at outpatient department visits by patient's age: United States, 2000

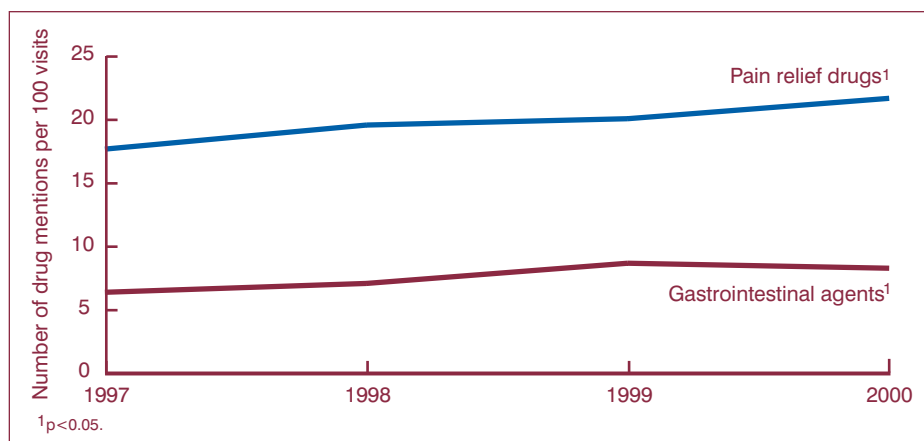


Figure 8. Trends in drug mention rates at outpatient department visits by selected therapeutic classes: United States, 2000

and over had about twice the rate of persons under 45 years of age (figure 7).

Drug mentions are displayed by therapeutic class in table 16. This classification is based on the therapeutic categories used in the *National Drug Code Directory*, 1995 edition (NDC) (13). It should be noted that some drugs have more than one therapeutic application. In these cases, the drug was classified under its primary therapeutic use. Cardiovascular-renal drugs (14.2 percent), drugs used for relief of pain (13.9 percent), and antimicrobial agents (9.8 percent) were listed most frequently. From 1997 through 2000, the drug mention rate for pain relief drugs increased by 23 percent, whereas the drug mention rate for gastrointestinal agents increased by 30 percent (figure 8).

The 20 most frequently used generic substances for 2000 are shown in table 17. 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. The most frequently occurring generic substances in drugs mentioned at OPD visits were acetaminophen, amoxicillin, and ibuprofen. Influenza virus vaccine, which was not among the 20 most frequently used generic substances in 1997, ranked 15th in 2000 and was mostly recorded for children less than 15 years of age (data not shown). From 1997 through 2000, the number of

influenza virus vaccines reported for children under 15 years of age increased by 40% (from approximately 590,000 vaccines to 825,000 vaccines) (figure 9). This increase is consistent with the current recommendation for childhood influenza immunization (14).

The 20 most frequently mentioned medications are shown in table 18 according to the name written on the Patient Record form by hospital staff. This could be a brand name, generic name, or therapeutic effect. Tylenol, which is classified as a nonnarcotic analgesic, was the drug most frequently mentioned, accounting for 2.3 percent of all OPD drug mentions. Amoxicillin, which is classified as a penicillin, was

prescribed at 1.4 percent of mentions. Other frequent drug mentions were prednisone (1.2 percent) and albuterol sulfate (1.1 percent).

Providers seen—In this item, staff were asked to check all of the providers seen during the visit. Multiple responses could be coded per visit. A staff physician and resident/intern were seen at 70.1 percent and 16.4 percent of OPD visits, respectively (table 19). A registered nurse, medical/nursing assistant, and licensed practical nurse were seen at 35.9 percent, 14.7 percent, and 12.0 percent of visits, respectively. Visits in which any physician was seen (i.e., visits with staff physicians, residents/interns, or other physicians) accounted for 78.5 percent of visits. Therefore, patients did not see a physician at 21.5 percent of OPD visits.

Visit disposition—Staff were asked to record all visit dispositions and instructed that multiple responses could be coded for this item. For more than half of OPD visits (57.2 percent), patients were told to return to the clinic by appointment. Return to clinic, P.R.N. (as needed) and referred to other physician/clinic accounted for the disposition at 22.4 percent and 9.7 percent of visits, respectively (table 20).

Time spent with physician—Time spent in face-to-face contact between the

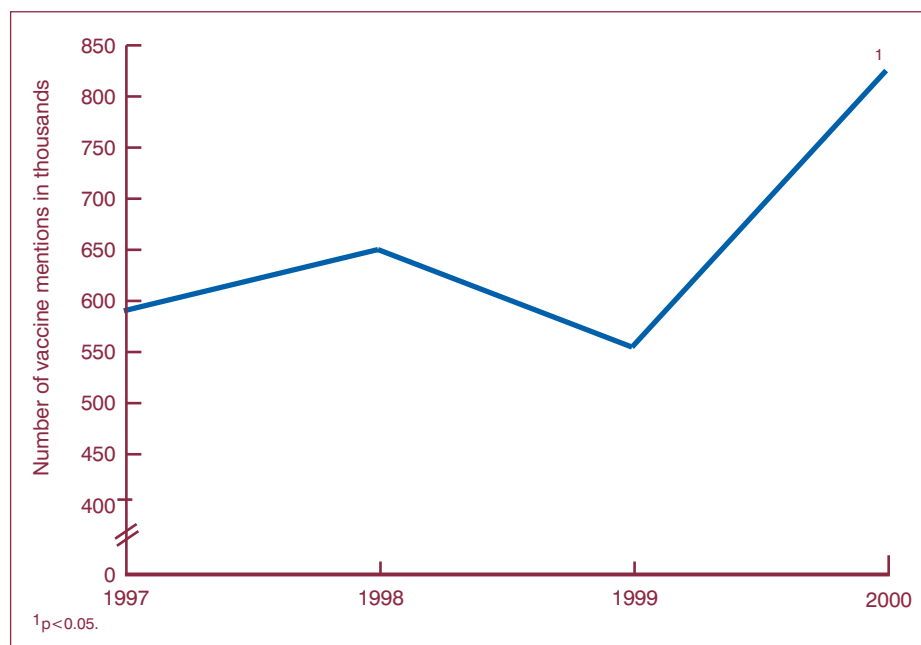


Figure 9. Trends in the number of influenza virus vaccine mentions for children under 15 years of age at outpatient department visits: United States, 1997–2000

physician and patient is estimated and recorded by the hospital staff. It excludes time spent waiting to see the physician, time spent receiving care from someone other than the physician without the presence of the physician, and time spent by the physician in reviewing patient records and/or test results. In cases where the patient received care from a nonphysician member of the hospital staff but did not actually see the physician during the visit, duration was recorded as "0" minutes. More than half of all visits (54.7 percent) were longer than 15 minutes (table 21). The average time spent with the physician was 18.4 minutes (data not shown). It should be noted that there were high levels of missing data for the time spent with physician item (53.6 percent), so the results should be interpreted with caution. Missing data were imputed for this analysis.

Additional information about OPD utilization is available from the NCHS Ambulatory Health Care Web site: <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

Individual-year reports and public-use data files are available for download from the Web site. Data from the 2000 NHAMCS will also be available on a public use data tape and CD-ROM. These and other products can be obtained by contacting the NCHS Ambulatory Care Statistics Branch at (301) 458-4600. Queries regarding NHAMCS data may be sent to NCHS via nchsquery@cdc.gov.

References

- Burt CW, Schappert SM. Ambulatory care visits to physician offices, hospital outpatient departments, and emergency departments: United States, 1999–2000. National Center for Health Statistics. *Vital Health Stat*. In preparation.
- McCaig LF, Ly N. National Hospital Ambulatory Medical Care Survey: 2000 emergency department summary. Advance data from vital and health statistics; no. 326. Hyattsville, Maryland. 2002.
- Cherry D, Woodwell DA. National Ambulatory Medical Care Survey: 2000 summary. Advance data from vital and health statistics; no. 328. Hyattsville, Maryland. 2002.
- McCaig LF, McLemore T. Plan and operation of the National Hospital Ambulatory Medical Care Survey. National Center for Health Statistics. *Vital Health Stat* 1(34). 1994.
- Shah BV, Barnwell BG, Hunt PN, La Vange LM. SUDAAN user's manual release 7.0. Research Triangle Institute. Research Triangle Park, North Carolina. 1996.
- McCaig LF. National Hospital Ambulatory Medical Care Survey: 1997 outpatient department summary. Advance data from vital and health statistics; no. 307. Hyattsville, Maryland: National Center for Health Statistics. 1999.
- Slusarcick AL, McCaig LF. National Hospital Ambulatory Medical Care Survey: 1998 outpatient department summary. Advance data from vital and health statistics; no. 317. Hyattsville, Maryland: National Center for Health Statistics. 2000.
- Ly N, McCaig LF, Burt CW. National Hospital Ambulatory Medical Care Survey: 1999 outpatient department summary. Advance data from vital and health statistics; no. 321. Hyattsville, Maryland: National Center for Health Statistics. 2001.
- Schneider D, Appleton L, McLemore T. A reason for visit classification for ambulatory care. National Center for Health Statistics. *Vital and Health Stat* 2(78). 1979.
- Public Health Service and Health Care Financing Administration. International Classification of Diseases, 9th Revision, Clinical Modification, 6th ed. Washington: Public Health Service. 1998.
- Burt CW, Fingerhut LA. Injury visits to hospital emergency departments: United States, 1992–1995. National Center for Health Statistics. *Vital Health Stat* 13(131). 1998.
- Koch H, Campbell W. The collection and processing of drug information. National Ambulatory Medical Care Survey: United States, 1980. National Center for Health Statistics. *Vital Health Stat* 2(90). 1982.
- Food and Drug Administration. National Drug Code Directory, 1995 edition. Washington: Public Health Service, 1995.
- Centers for Disease Control and Prevention. General recommendations on immunization: Recommendations of the Advisory Committee on Immunization Practices and the American Academy of Family Physicians. *MMWR* 2002; 51(No. RR-2).

Table 1. Number, percent distribution, and annual rate of outpatient department visits with corresponding standard errors, by selected patient and hospital characteristics: United States, 2000

Selected patient and hospital characteristics	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Number of visits per 100 persons per year ^{1,2}	Standard error of rate
All visits	83,289	7,018	100.0	. . .	30.4	2.6
Patient characteristics						
Under 15 years	18,243	1,936	21.9	1.7	30.2	3.2
15–24 years	8,977	865	10.8	0.6	23.3	2.2
25–44 years	20,803	1,878	25.0	1.0	25.4	2.3
45–64 years	20,772	1,937	24.9	0.9	34.3	3.2
65–74 years	7,515	866	9.0	0.6	42.3	4.9
75 years and over	6,979	1,054	8.4	0.9	46.7	7.0
Sex and age:						
Female	49,629	4,175	59.6	0.8	35.3	3.0
Under 15 years	8,379	899	10.1	0.8	28.4	3.0
15–24 years	6,116	602	7.3	0.5	32.0	3.2
25–44 years	13,731	1,279	16.5	0.8	32.9	3.1
45–64 years	12,481	1,186	15.0	0.6	39.9	3.8
65–74 years	4,433	536	5.3	0.4	45.7	5.5
75 years and over	4,490	728	5.4	0.7	49.4	8.0
Male	33,660	2,966	40.4	0.8	25.2	2.2
Under 15 years	9,865	1,059	11.8	0.9	32.0	3.4
15–24 years	2,861	327	3.4	0.2	14.8	1.7
25–44 years	7,073	732	8.5	0.5	17.6	1.8
45–64 years	8,291	837	10.0	0.5	28.3	2.9
65–74 years	3,082	383	3.7	0.3	38.3	4.8
75 years and over	2,489	353	3.0	0.3	42.4	6.0
Race and age:						
White	63,037	5,942	75.7	1.9	28.0	2.6
Under 15 years	13,329	1,584	16.0	1.4	28.2	3.4
15–24 years	6,524	715	7.8	0.5	21.3	2.3
25–44 years	15,459	1,519	18.6	0.8	23.2	2.3
45–64 years	15,952	1,622	19.2	0.8	31.0	3.2
65–74 years	5,891	752	7.1	0.6	38.0	4.9
75 years and over	5,881	969	7.1	0.9	43.7	7.2
Black	17,165	1,747	20.6	1.7	48.3	4.9
Under 15 years	4,061	560	4.9	0.6	42.0	5.8
15–24 years	2,040	250	2.4	0.3	35.2	4.3
25–44 years	4,536	532	5.4	0.6	41.9	4.9
45–64 years	4,163	508	5.0	0.5	64.2	7.8
65–74 years	1,409	215	1.7	0.2	85.4	13.0
75 years and over	956	167	1.1	0.2	85.3	14.9
Asian/Native Hawaiian/Other Pacific Islander	2,612	451	3.1	0.5	23.2	4.0
American Indian/Alaska Native	*331	141	*0.4	0.2	*13.3	5.7
Multiple races	143	31	0.2	0.0	#	#
Hospital characteristics						
Ownership:						
Voluntary	60,123	6,688	72.2	4.4	21.9	2.4
Government	22,272	3,931	26.7	4.4	8.1	1.4
Proprietary	*894	389	*1.1	0.5	*0.3	0.1
Geographic region:						
Northeast	23,099	3,683	27.7	3.8	44.3	7.1
Midwest	23,701	4,586	28.5	4.3	35.1	6.8
South	25,152	3,089	30.2	3.5	25.9	3.2
West	11,337	2,266	13.6	2.6	19.8	4.0
Metropolitan status:						
MSA ³	66,705	6,008	80.1	3.8	30.5	2.7
Non-MSA ³	16,584	3,676	19.9	3.8	30.1	6.7

. Category not applicable.

* Figure does not meet standard of reliability or precision.

No denominator data available; see Technical notes.

¹Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999 (with short-term projection to dates in 2000)" and are available at the Census Bureau Internet site: http://eire.census.gov/popest/archives/national/nat_90s_detail/nat_90s_4.php. Figures have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.²Regional and metropolitan area estimates were provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on Census Bureau estimates of the civilian noninstitutional population of the United States as of July 1, 2000. DHIS estimates differ slightly from Census Bureau monthly postcensal estimates because of differences in the adjustment process.³MSA is metropolitan statistical area.

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

Table 2. Number and percent distribution of outpatient department visits with corresponding standard errors, by clinic type: United States, 2000

Clinic type ¹	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	83,289	7,018	100.0	...
General medicine	50,590	5,598	60.7	2.7
Pediatrics	10,453	1,292	12.6	1.5
Surgery	10,130	1,343	12.2	1.5
Obstetrics and gynecology	5,813	857	7.0	1.0
Other	6,304	1,106	7.6	1.3

... Category not applicable.

¹Only 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.

Table 3. Number and percent distribution of outpatient department visits with corresponding standard errors, by patient's referral status and prior-visit status: United States, 2000

Visit characteristic	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	83,289	7,018	100.0	...
Referral status				
Referred by another physician or health plan for this visit	15,772	2,036	18.9	1.9
Not referred by another physician or health plan for this visit	53,018	5,263	63.7	2.8
Unknown/blank	14,499	2,250	17.4	2.4
Prior-visit status				
New patient	13,108	1,409	15.7	1.2
Old patient	68,567	6,036	82.3	1.2
Unknown/blank	1,614	314	1.9	0.4

... Category not applicable.

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

Table 4. Number and percent distribution of outpatient department visits with corresponding standard errors by selected visit characteristics, according to primary care physician status: United States, 2000

Visit characteristic	Are you the patient's primary care physician?			
	All visits	Yes	No	Unknown
		Number of visits in thousands		
All visits	83,289	30,566	41,438	11,284
Percent distribution	100.0	36.7	49.8	13.6
Was authorization required for care?				
Yes	9,986	1,414	7,901	*674
No	52,414	24,953	24,118	3,343
Unknown/blank	20,889	4,199	9,419	7,270
Is this a capitated visit?				
Yes	6,816	2,237	3,647	*931
No	44,082	18,218	23,137	2,726
Unknown/blank	32,392	10,111	14,654	7,627
HMO ¹ status				
Yes	17,639	6,301	9,983	1,355
No	43,602	17,583	22,645	3,374
Unknown/blank	22,049	6,683	8,811	6,555
		Standard error in thousands		
All visits	7,018	3,737	3,887	1,660
Was authorization required for care?				
Yes	1,421	264	1,191	395
No	5,350	3,393	2,563	720
Unknown/blank	3,171	1,297	1,390	1,413
Is this a capitated visit?				
Yes	1,463	482	932	475
No	4,892	2,865	2,871	609
Unknown/blank	3,570	1,989	1,474	1,363
HMO ¹ status				
Yes	2,212	1,179	1,199	420
No	4,503	2,624	2,506	641
Unknown/blank	2,774	1,371	1,013	1,249
		Percent distribution		
All visits	100.0	100.0	100.0	100.0
Was authorization required for care?				
Yes	12.0	4.6	19.1	*6.0
No	62.9	81.6	58.2	29.6
Unknown/blank	25.1	13.7	22.7	64.4
Is this a capitated visit?				
Yes	8.2	7.3	8.8	*8.3
No	52.9	59.6	55.8	24.2
Unknown/blank	38.9	33.1	35.4	67.6
HMO ¹ status				
Yes	21.2	20.6	24.1	12.0
No	52.4	57.5	54.7	29.9
Unknown/blank	26.5	21.9	21.3	58.1
		Standard error of percent		
All visits . . . . .	...	...	...	...
Was authorization required for care?				
Yes	1.5	0.9	2.1	2.6
No	3.1	4.0	2.7	5.7
Unknown/blank	3.3	3.9	2.8	6.3
Is this a capitated visit?				
Yes	1.6	1.4	2.1	3.8
No	3.3	5.3	3.3	5.1
Unknown/blank	3.3	5.3	2.9	5.7
HMO ¹ status				
Yes	2.0	3.1	2.0	3.2
No	2.8	4.4	2.4	5.0
Unknown/blank	2.6	3.7	1.8	5.5

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹HMO is health maintenance organization.

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 primary expected source of payment and health maintenance organization status: United States, 2000

Primary expected source of payment	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of distribution
All visits	83,289	7,018	100.0	...
Private insurance.	32,065	3,670	38.5	2.3
Medicaid	18,390	1,570	22.1	1.6
Medicare	14,080	1,603	16.9	1.1
Self-pay	7,621	846	9.1	0.8
Worker's compensation	*1,104	419	*1.3	0.5
No charge	*846	258	*1.0	0.3
Other	5,676	1,348	6.8	1.4
Unknown/blank	3,508	476	4.2	0.5

Primary expected source of payment	HMO ¹ status						
	Percent distribution				Standard error of percent		
	Total	HMO ¹	Non-HMO ¹	Unknown/blank	HMO ¹	Non-HMO ¹	Unknown/blank
All visits	100.0	21.2	52.3	26.5	2.0	2.8	2.6
Private insurance.	100.0	32.6	42.8	24.6	3.4	3.7	3.6
Medicaid	100.0	23.4	57.6	18.9	2.7	3.4	2.5
Medicare	100.0	8.2	66.3	25.5	1.4	5.1	5.3
Self-pay	100.0	*1.6	73.0	25.4	0.5	4.6	4.6
Worker's compensation	100.0	*	41.2	56.6	*	10.1	10.8
No charge	100.0	*	72.7	*24.0	*	13.7	13.7
Other	100.0	*24.9	51.5	23.6	8.8	9.4	4.3
Unknown/blank	100.0	3.9	10.7	85.3	1.2	2.8	2.9

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹HMO is health maintenance organization.

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

Table 6. Number and percent distribution of outpatient department visits with corresponding standard errors, by patient's principal reason for visit: United States, 2000

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	83,289	7,018	100.0	...
Symptom module. S001–S999	36,468	3,456	43.8	1.5
General symptoms S001–S099	4,800	505	5.8	0.3
Symptoms referable to psychological/mental disorders S100–S199	2,719	457	3.3	0.5
Symptoms referable to the nervous system (excluding sense organs) S200–S259	1,944	236	2.3	0.2
Symptoms referable to the cardiovascular/lymphatic system S260–S299	295	68	0.4	0.1
Symptoms referable to the eyes and ears S300–S399	3,256	424	3.9	0.4
Symptoms referable to the respiratory system S400–S499	6,924	823	8.3	0.7
Symptoms referable to the digestive system. S500–S639	3,724	388	4.5	0.3
Symptoms referable to the genitourinary system S640–S829	2,753	321	3.3	0.3
Symptoms referable to the skin, hair, and nails S830–S899	2,791	425	3.4	0.4
Symptoms referable to the musculoskeletal system S900–S999	7,261	977	8.7	0.8
Disease module D001–D999	8,282	821	9.9	0.6
Diagnostic/screening and preventive module. X100–X599	16,284	1,620	19.6	1.2
Treatment module T100–T899	14,161	1,539	17.0	1.2
Injuries and adverse effects module J001–J999	3,337	466	4.0	0.4
Test results module R100–R700	1,470	225	1.8	0.2
Administrative module. A100–A140	1,221	304	1.5	0.3
Other ² U990–U999	*2,066	756	*2.5	0.9

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹Based on *A Reason for Visit Classification for Ambulatory Care* (RVC) (9).

²Includes problems and complaints not elsewhere classified, entries of "none," blanks, and illegible entries.

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

Table 7. 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, 2000

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	83,289	7,018	100.0	...
General medical examination X100	6,477	938	7.8	0.9
Progress visit, not otherwise specified T800	6,402	1,009	7.7	1.0
Routine prenatal examination X205	2,406	378	2.9	0.4
Cough S440	2,072	297	2.5	0.3
Throat symptoms. S455	1,597	243	1.9	0.2
Postoperative visit T205	1,591	330	1.9	0.4
Well-baby examination X105	1,415	243	1.7	0.3
Stomach and abdominal pain, cramps, and spasms S545	1,383	175	1.7	0.1
Medication, other and unspecified kinds. T115	1,347	236	1.6	0.2
Back symptoms. S905	1,290	249	1.5	0.3
Earache or ear infection S355	1,270	209	1.5	0.2
Skin rash. S860	1,155	165	1.4	0.2
Fever S010	1,144	182	1.4	0.2
Hypertension D510	1,112	246	1.3	0.3
Depression S110	1,070	217	1.3	0.2
Knee symptoms S925	923	122	1.1	0.1
Physical examination required for school or employment A100	908	251	1.1	0.3
Counseling, not otherwise specified T605	884	149	1.1	0.2
Chest pain and related symptoms (not referable to body system) S050	837	113	1.0	0.1
Diabetes mellitus. D205	822	126	1.0	0.1
All other reasons.	47,183	3,999	56.7	1.2

... Category not applicable.

¹Based on *A Reason for Visit Classification for Ambulatory Care* (RVC) (9).

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 major reason for visit, according to patient's age, sex, and race: United States, 2000

Patient characteristics	Total	Major reason for this visit					
		Acute problem	Chronic problem, routine	Chronic problem, flare-up	Pre- or post-surgery/injury follow-up	Nonillness care	Unknown/blank
Number of visits in thousands							
All visits	83,289	30,660	24,960	5,279	4,899	14,637	2,853
Age							
Under 15 years	18,224	7,782	3,546	1,019	827	4,662	408
15–24 years	8,996	3,455	1,588	443	475	2,759	256
25–44 years	20,803	8,433	5,327	1,306	1,433	3,654	649
45–64 years	20,772	6,943	7,837	1,498	1,363	2,192	939
65–74 years	7,515	1,922	3,450	494	504	805	*340
75 years and over	6,979	2,126	3,210	519	297	564	262
Sex							
Female	49,629	17,623	14,147	3,140	2,683	10,340	1,696
Male	33,660	13,038	10,813	2,139	2,217	4,297	1,158
Race							
White	63,037	25,107	18,464	4,038	3,468	9,834	2,126
Black	17,165	4,632	5,700	1,072	1,179	3,967	615
Other	3,087	921	795	169	253	837	*112
Standard error in thousands							
All visits	7,018	3,364	2,393	643	657	1,432	599
Age							
Under 15 years	1,931	948	580	239	189	628	65
15–24 years	867	478	206	80	93	329	55
25–44 years	1,878	1,012	595	191	245	404	168
45–64 years	1,937	833	806	258	242	313	248
65–74 years	866	262	472	75	104	145	110
75 years and over	1,054	356	574	122	74	120	70
Sex							
Female	4,175	1,891	1,432	421	379	966	408
Male	2,966	1,525	1,028	263	325	579	220
Race							
White	5,942	3,034	1,975	541	476	1,061	466
Black	1,747	520	715	189	193	586	180
Other	493	167	165	45	69	147	37
Percent distribution							
All visits	100.0	36.8	30.0	6.3	5.9	17.6	3.4
Age							
Under 15 years	100.0	42.7	19.5	5.6	4.5	25.6	2.2
15–24 years	100.0	38.5	17.7	4.9	5.3	30.7	2.8
25–44 years	100.0	40.5	25.6	6.3	6.9	17.6	3.1
45–64 years	100.0	33.4	37.7	7.2	6.6	10.6	4.5
65–74 years	100.0	25.6	45.9	6.6	6.7	10.7	*4.5
75 years and over	100.0	30.5	46.0	7.4	4.3	8.1	3.7
Sex							
Female	100.0	35.5	28.5	6.3	5.4	20.8	3.4
Male	100.0	38.7	32.1	6.4	6.6	12.8	3.4
Race							
White	100.0	39.8	29.3	6.4	5.5	15.6	3.4
Black	100.0	27.0	33.2	6.2	6.9	23.1	3.6
Other	100.0	29.8	25.8	5.5	8.2	27.1	*3.6

See footnotes at end of table.

Table 8. Number and percent distribution of outpatient department visits with corresponding standard errors by major reason for visit, according to patient's age, sex, and race: United States, 2000

Patient characteristics	Total	Major reason for this visit					
		Acute problem	Chronic problem, routine	Chronic problem, flare-up	Pre- or post-surgery/injury follow-up	Nonillness care	Unknown/blank
		Standard error of percent					
All visits	1.9	1.6	0.5	0.7	1.0	0.7
Age							
Under 15 years	2.6	2.4	1.1	0.9	2.2	0.3
15–24 years	2.8	2.1	0.7	0.9	2.3	0.6
25–44 years	2.6	2.2	0.6	0.9	1.3	0.8
45–64 years	2.2	1.9	0.9	1.0	1.2	1.2
65–74 years	2.5	2.4	0.8	1.1	1.2	1.4
75 years and over	1.9	2.7	1.5	1.0	1.5	1.0
Sex							
Female	1.9	1.6	0.6	0.6	1.2	0.8
Male	2.1	1.8	0.6	0.9	1.1	0.7
Race							
White	2.1	1.8	0.6	0.7	0.9	0.8
Black	1.9	2.3	1.0	0.7	2.2	1.0
Other	2.5	2.4	1.1	1.9	2.9	1.1

... Category not applicable.

* Figure does not meet standard of reliability or precision.

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

Table 9. Number and percent distribution of outpatient department visits with corresponding standard errors, by primary diagnosis: United States, 2000

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	83,289	7,018	100.0	...
Infectious and parasitic diseases 001–139	2,502	282	3.0	0.2
Neoplasms 140–239	3,190	474	3.8	0.5
Endocrine, nutritional and metabolic diseases, and immunity disorders 240–279	4,510	541	5.4	0.4
Mental disorders 290–319	6,039	964	7.3	1.0
Diseases of the nervous system and sense organs 320–389	5,587	635	6.7	0.5
Diseases of the circulatory system 390–459	6,854	923	8.2	0.8
Diseases of the respiratory system 460–519	8,837	1,072	10.6	0.8
Diseases of the digestive system 520–579	2,999	356	3.6	0.3
Diseases of the genitourinary system 580–629	3,885	491	4.7	0.5
Diseases of the skin and subcutaneous tissue 680–709	2,845	372	3.4	0.4
Diseases of the musculoskeletal system and connective tissue 710–739	5,744	807	6.9	0.7
Symptoms, signs, and ill-defined conditions 780–799	5,350	545	6.4	0.4
Injury and poisoning 800–999	5,301	746	6.4	0.6
Supplementary classification V01–V82	15,377	1,369	18.5	1.0
All other diagnoses ²	3,101	363	3.7	0.4
Unknown ³	1,167	284	1.4	0.3

... Category not applicable.

¹Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (10).

²Includes diseases of the blood and blood-forming organs (280–289); complications of pregnancy, childbirth, and the puerperium (630–677); congenital anomalies (740–759); and certain conditions originating in the perinatal period (760–779).

³Includes blank diagnoses, uncodable diagnoses, and illegible diagnoses.

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

Table 10. Number and percent distribution of outpatient department visits with corresponding standard errors, by selected primary diagnosis groups: United States, 2000

Primary diagnosis group and ICD-9-CM code(s) ¹	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	83,289	7,018	100.0	. . .
Essential hypertension 401	3,591	552	4.3	0.5
Routine infant or child health check V20.2	3,201	456	3.8	0.4
Acute upper respiratory infection, excluding pharyngitis 460-461,463-466	2,980	433	3.6	0.4
Diabetes mellitus 250	2,633	318	3.2	0.3
Malignant neoplasms 140-208,230-234	2,420	441	2.9	0.5
Normal pregnancy V22	2,291	353	2.8	0.4
Arthropathies and related disorders 710-719	2,125	409	2.6	0.4
Otitis media and eustachian tube disorders 381-382	1,806	278	2.2	0.3
Spinal disorders 720-724	1,695	297	2.0	0.3
General medical examination V70	1,654	281	2.0	0.3
Follow-up examination V67	1,478	242	1.8	0.3
Rheumatism, excluding back 725-729	1,412	214	1.7	0.2
Chronic sinusitis 473	1,239	236	1.5	0.2
Heart disease, excluding ischemic 391-392.0,393-398,402,404,415-416,420-429	1,225	301	1.5	0.3
Asthma 493	1,036	161	1.2	0.2
Psychoses, excluding major depressive disorder. 290-295,296.0-296.1,296.4-299	1,026	246	1.2	0.3
Acute pharyngitis 462	1,017	165	1.2	0.2
Complications of pregnancy, childbirth, and the puerperium. 630-677	991	212	1.2	0.2
Ischemic heart disease 410-414.9	942	204	1.1	0.2
Abdominal pain 789	814	125	1.0	0.1
All other diagnoses	47,713	3,969	57.3	1.0

. . . Category not applicable.

¹Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (10). However, certain codes have been combined in this table to describe the utilization of ambulatory care services.

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

Table 11. Number, percent distribution, and annual rate of injury-related outpatient department visits with corresponding standard errors, by patient's age, sex, and race: United States, 2000

Patient's age, sex, and race	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-related visits	9,515	1,191	100.0	...	3.5	0.4
Age						
Under 15 years	1,610	228	16.9	2.0	2.7	0.4
15–24 years	1,277	197	13.4	1.0	3.3	0.5
25–44 years	3,172	446	33.3	1.6	3.9	0.5
45–64 years	2,299	335	24.2	1.5	3.8	0.6
65–74 years	482	83	5.1	0.7	2.7	0.5
75 years and over	675	191	7.1	1.7	4.5	1.3
Sex and age						
Female	4,809	582	50.5	1.4	3.4	0.4
Under 15 years	778	120	8.2	1.1	2.6	0.4
15–24 years	559	85	5.9	0.6	2.9	0.4
25–44 years	1,443	203	15.2	1.0	3.5	0.5
45–64 years	1,285	198	13.5	1.1	4.1	0.6
65–74 years	285	58	3.0	0.5	2.9	0.6
75 years and over	458	118	4.8	1.1	5.0	1.3
Male	4,707	637	49.5	1.4	3.5	0.5
Under 15 years	832	128	8.7	1.1	2.7	0.4
15–24 years	718	128	7.6	0.7	3.7	0.7
25–44 years	1,730	264	18.2	1.1	4.3	0.7
45–64 years	1,014	173	10.7	1.2	3.5	0.6
65–74 years	197	47	2.1	0.5	2.4	0.6
75 years and over	*217	81	*2.3	0.8	*3.7	1.4
Race						
White	7,707	1,075	81.0	2.3	3.4	0.5
Black	1,560	215	16.4	2.1	4.4	0.6
Other	249	58	2.6	0.6	1.8	0.4

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999 (with short-term projection to dates in 2000)" and are available at the Census Bureau Internet site: http://ire.census.gov/popest/archives/national/nat_90s_detail/nat_90s_4.php. Figures have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

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

Table 12. Number and percent distribution of injury-related outpatient department visits with corresponding standard errors, by intent and mechanism of external cause: United States, 2000

Intent and mechanism ¹	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All injury-related visits	9,515	1,191	100.0	...
Unintentional injuries	5,477	699	57.6	
Falls	1,226	184	12.9	1.0
Motor vehicle traffic	699	118	7.3	1.0
Struck against or struck accidentally by objects or persons	636	121	6.7	0.9
Natural and environmental factors	503	105	5.3	0.8
Cutting or piercing instruments or objects	417	88	4.4	0.8
Overexertion and strenuous movements	382	73	4.0	0.6
Fire and flames, hot substance or object, caustic or corrosive material and steam	*137	58	*1.4	0.6
Other and not elsewhere classified ²	675	113	7.1	0.8
Mechanism unspecified	800	128	8.4	1.1
Intentional injuries ³	229	53	2.4	0.5
Injuries of undetermined intent	*	*	*	*
Adverse effects and medical treatment	554	103	5.8	1.0
Blank cause ⁴	3,230	486	34.0	2.2

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹Based on the "Supplementary Classification of External Cause of Injury and Poisoning," *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (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.

²Includes suffocation, poisoning, other transportation, machinery, firearm, drowning/submersion, nontraffic motor vehicle, and pedal cycle.

³Includes assault, self-inflicted, and other causes of violence.

⁴Includes illegible entries and blanks.

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

Table 13. Number and percent of outpatient department visits with corresponding standard errors, by diagnostic and screening services ordered or provided: United States, 2000

Diagnostic and screening services ordered or provided	Number of visits in thousands ¹	Standard error in thousands	Percent of visits	Standard error of percent
All visits	83,289	7,018	...	...
None	18,393	1,965	22.1	1.7
Examinations				
Skin	6,024	793	7.2	0.8
Pelvic	3,687	433	4.4	0.4
Visual	3,402	626	4.1	0.7
Breast	2,824	362	3.4	0.3
Hearing	1,950	449	2.3	0.5
Rectal	1,496	203	1.8	0.2
Glaucoma	194	54	0.2	0.1
Tests				
Blood pressure	43,617	4,526	52.4	2.5
Urinalysis	7,606	892	9.1	0.7
Hematocrit/hemoglobin	4,820	600	5.8	0.6
Cholesterol	2,793	447	3.4	0.5
Pap test	2,225	260	2.7	0.3
EKG ²	1,979	373	2.4	0.4
Strep test	1,370	253	1.6	0.3
Other STD test ³	882	130	1.1	0.1
Pregnancy test	618	98	0.7	0.1
PSA ⁴	476	92	0.6	0.1
Blood lead level	459	106	0.6	0.1
HIV serology ⁵	455	90	0.5	0.1
Other blood test	14,296	1,569	17.2	1.1
Imaging				
X ray	5,803	683	7.0	0.5
Ultrasound	2,341	301	2.8	0.3
Mammography	1,635	293	2.0	0.3
CAT scan/MRI ^{6,7}	1,555	281	1.9	0.3
Other	13,706	1,849	16.5	1.8
Blank	1,015	240	1.2	0.3

... Category not applicable.

¹Total exceeds "All visits" because more than one service may be reported per visit.

²EKG is electrocardiogram.

³STD is sexually transmitted disease.

⁴PSA is prostate-specific antigen.

⁵HIV is human immunodeficiency virus.

⁶CAT is computerized axial tomography.

⁷MRI is magnetic resonance imaging.

Table 14. Number and percent of outpatient department visits with corresponding standard errors, by therapeutic and preventive services ordered or provided: United States, 2000

Therapeutic and preventive services ordered or provided	Number of visits in thousands ¹	Standard error in thousands	Percent of visits	Standard error of percent
All visits	83,289	7,018	...	...
None	54,062	4,958	64.9	1.8
Counseling/education				
Diet/nutrition	9,814	1,098	11.8	0.8
Exercise	4,718	673	5.7	0.6
Injury prevention	2,207	451	2.7	0.5
Prenatal instructions	2,115	348	2.5	0.4
Mental health	2,091	554	2.5	0.6
Growth/development	2,090	348	2.5	0.4
Tobacco use/exposure	1,921	328	2.3	0.3
Family planning/contraception	1,035	157	1.2	0.2
HIV/ ² STD ³ transmission	1,027	215	1.2	0.2
Stress management	968	178	1.2	0.2
Breast self-exam	756	182	0.9	0.2
Skin cancer prevention	*232	84	*0.3	0.1
Other therapy				
Psychotherapy	4,035	865	4.8	1.0
Complementary and alternative medicine	3,463	468	4.2	0.5
Physiotherapy	1,990	276	2.4	0.3
Psycho-pharmacotherapy	797	219	1.0	0.3
Other	4,654	550	5.6	0.5
Blank	2,082	363	2.5	0.4

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹Total exceeds "All visits" because more than one service may be reported per visit.

²HIV is human immunodeficiency virus.

³STD is sexually transmitted diseases.

Table 15. Number and percent distribution of outpatient department visits with corresponding standard errors, by medication therapy and number of medications provided or prescribed: United States, 2000

Medication therapy ¹	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	83,289	7,018	100.0	...
Drug visits ²	53,292	5,061	64.0	1.8
Visits without mention of medication	29,997	2,631	36.0	1.8
Number of medications provided or prescribed				
All visits	83,289	7,018	100.0	...
0	29,997	2,631	36.0	1.8
1	20,960	2,103	25.2	1.0
2	13,364	1,348	16.0	0.6
3	7,078	673	8.5	0.4
4	3,899	406	4.7	0.3
5	2,561	314	3.1	0.3
6	5,430	858	6.5	0.9

... Category not applicable.

¹Includes prescription drugs, over-the-counter preparations, immunizations, and desensitizing agents.

²Visits at which one or more drugs were provided or prescribed.

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

Table 16. Number, percent distribution, and annual rate of drug mentions at outpatient department visits with corresponding standard errors, by therapeutic classification: United States, 2000

Therapeutic classification ¹	Number of drug mentions in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Number of drug mentions per 100 visits ²	Standard error of rate
All drug mentions	129,910	12,980	100.0	. . .	156.0	15.6
Cardiovascular-renal drugs	18,436	2,514	14.2	1.0	22.1	3.0
Drugs used for relief of pain	18,083	1,994	13.9	0.6	21.7	2.4
Antimicrobial agents	12,703	1,386	9.8	0.7	15.3	1.7
Hormones and agents affecting hormonal mechanisms	12,035	1,371	9.3	0.4	14.5	1.6
Respiratory tract drugs	11,868	1,242	9.1	0.5	14.2	1.5
Central nervous system drugs	10,796	1,332	8.3	0.6	13.0	1.6
Metabolic/nutrients	10,004	1,331	7.7	0.5	12.0	1.6
Immunologics	7,261	1,010	5.6	0.6	8.7	1.2
Gastrointestinal agents	6,881	845	5.3	0.3	8.3	1.0
Skin/mucous membrane drugs	4,474	506	3.4	0.2	5.4	0.6
Neurologic drugs	3,551	411	2.7	0.2	4.3	0.5
Hematologic agents	3,000	403	2.3	0.2	3.6	0.5
Anesthetic drugs	1,781	373	1.4	0.3	2.1	0.4
Ophthalmics	1,734	271	1.3	0.2	2.1	0.3
Oncolytics	1,384	260	1.1	0.2	1.7	0.3
Otologics	1,282	188	1.0	0.1	1.5	0.2
Antiparasitics	831	181	0.6	0.1	1.0	0.2
Contrast media/radiopharmaceuticals	*384	58	*0.3	0.1	0.5	0.1
Homeopathic products	182	51	0.1	0.0	*0.2	0.1
Other and unclassified ³	3,238	360	2.5	0.2	3.9	0.3

. . . Category not applicable.

0.0 Quantity more than zero but less than 0.5.

¹Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (13).²Number of drug mentions divided by total number of visits multiplied by 100.³Includes antidotes and unclassified/miscellaneous drugs.

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

Table 17. Number and rate of generic substances for the 20 most frequently occurring generic substances in drug mentions at outpatient department visits with corresponding standard errors: United States, 2000

Generic substance	Number of occurrences in thousands ¹	Standard error in thousands	Number of generic substances per 100 drug mentions ²	Standard error of percent
Acetaminophen	5,836	689	4.5	0.3
Amoxicillin	3,415	453	2.6	0.2
Ibuprofen	3,285	427	2.5	0.2
Hydrochlorothiazide	2,522	378	1.9	0.2
Albuterol	2,281	266	1.8	0.1
Aspirin	2,179	380	1.7	0.2
Multivitamins general	1,862	310	1.4	0.2
Estrogens	1,659	251	1.3	0.1
Prednisone	1,651	325	1.3	0.2
Levothyroxine	1,541	238	1.2	0.1
Atenolol	1,526	246	1.2	0.1
Lisinopril	1,511	249	1.2	0.1
Guaifenesin	1,509	245	1.2	0.1
Furosemide	1,461	246	1.1	0.1
Influenza virus vaccine	1,436	274	1.1	0.2
Amlodipine	1,391	275	1.1	0.1
Insulin	1,333	208	1.0	0.1
Atorvastatin calcium	1,313	203	1.0	0.1
Omeprazole	1,282	243	1.0	0.1
Loratadine	1,212	196	0.9	0.1

¹Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.²Based on an estimated 129,910,000 drug mentions at outpatient department visits in 2000.

Table 18. Number, percent distribution, and therapeutic classification for the 20 drugs most frequently prescribed at outpatient department visits with corresponding standard errors, by entry name of drug: United States, 2000

Entry name of drug ¹	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Therapeutic classification ²
All drug mentions	129,910	12,976	100.0	. . .	. . .
Tylenol	2,952	433	2.3	0.2	Nonnarcotic analgesics
Amoxicillin	1,759	253	1.4	0.2	Penicillins
Prednisone	1,595	324	1.2	0.2	Adrenal corticosteroids
Albuterol sulfate	1,471	202	1.1	0.1	Antiasthmatics/bronchodilators
Influenza virus vaccine	1,426	271	1.1	0.2	Vaccines/antisera
Motrin	1,417	223	1.1	0.1	NSAIDs ³
Ibuprofen	1,332	206	1.0	0.1	NSAIDs ³
Lasix	1,310	211	1.0	0.1	Diuretics
Atenolol	1,253	211	1.0	0.1	Beta blockers
Synthroid	1,253	193	1.0	0.1	Thyroid agents
Norvasc	1,247	262	1.0	0.2	Calcium channel blockers
Claritin	1,210	196	0.9	0.1	Antihistamines
Lipitor	1,206	185	0.9	0.1	Hyperlipidemia
Prilosec	1,192	233	0.9	0.1	Gastric antisecretory agents
Hydrochlorothiazide	1,191	199	0.9	0.1	Diuretics
Aspirin	1,092	268	0.8	0.2	Nonnarcotic analgesics
Celebrex	1,083	185	0.8	0.1	NSAIDs ³
Premarin	1,020	174	0.8	0.1	Estrogens/progestins
Zocor	977	258	0.8	0.2	Hyperlipidemia
Coumadin	940	140	0.7	0.1	Anticoagulants/thrombolytics
All other mentions	102,981	10,002	79.3	0.7	. . .

. . . Category not applicable.

¹The 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.

²Therapeutic classification is based on the *National Drug Code Directory*, 1995 edition (NDC) (13). In cases where a drug had more than one therapeutic use, it was classified under its primary therapeutic use.

³NSAIDs are nonsteroidal anti-inflammatory drugs.

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

Table 19. Number and percent of outpatient department visits with corresponding standard errors, by providers seen: United States, 2000

Type of provider	Number of visits in thousands ¹	Standard error in thousands	Percent of visits	Standard error of percent
All visits	83,289	7,018	. . .	. . .
Physician	65,415	5,761	78.5	2.2
Staff physician	58,416	5,317	70.1	2.3
Resident/intern	13,657	2,189	16.4	2.4
Other physician	2,452	553	2.9	0.7
R.N. ²	29,940	3,431	35.9	3.0
Medical/nursing assistant	12,210	2,463	14.7	2.6
L.P.N. ³	9,963	1,576	12.0	1.7
Nurse practitioner	5,078	728	6.1	0.7
Physician assistant	4,866	1,110	5.8	1.2
Nurse midwife	289	80	0.3	0.1
Other	10,564	1,843	12.7	2.0

. . . Category not applicable.

¹Total exceeds "All visits" because more than one provider may be reported per visit.

²R.N. is registered nurse.

³L.P.N. is licensed practical nurse.

Table 20. Number and percent of outpatient department visits with corresponding standard errors, by visit disposition: United States, 2000

Disposition	Number of visits in thousands ¹	Standard error in thousands	Percent of visits	Standard error of percent
All visits	83,289	7,018	...	...
Return to clinic, appointment.	47,626	4,336	57.2	2.3
Return to clinic, P.R.N. ²	18,633	2,100	22.4	1.6
Referred to other physician/clinic	8,075	1,048	9.7	1.0
No follow-up planned	7,329	1,289	8.8	1.2
Returned to referring physician	2,155	454	2.6	0.5
Telephone follow-up planned.	1,801	411	2.2	0.5
Admitted to hospital	618	95	0.7	0.1
Other disposition	3,620	601	4.3	0.7
Blank	1,727	322	2.1	0.4

... Category not applicable.

¹Total exceeds "All visits" because more than one disposition may be reported per visit.

²P.R.N. is as needed.

Table 21. Number and percent distribution of outpatient department visits with corresponding standard errors, by time spent with physician: United States, 2000

Time spent with physician	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent
All visits	83,289	7,018	100.0	...
Visits at which no physician was seen.	17,866	2,367	21.5	2.2
Visits at which a physician was seen.	65,423	5,762	78.5	2.2
Total.	65,423	5,762	100.0	...
1–5 minutes	1,525	247	2.3	0.3
6–10 minutes	9,724	1,022	14.9	1.0
11–15 minutes	18,413	1,787	28.1	1.1
16–30 minutes	27,202	2,642	41.6	1.4
31–60 minutes	7,277	804	11.1	0.8
61 minutes and over.	1,282	200	2.0	0.3

... Category not applicable.

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

Technical notes

Data collection methods

The outpatient encounter data for the 2000 NHAMCS were collected from 221 responding hospitals with OPDs (OPD participation rate of 88 percent). A total of 908 clinics were selected from these 221 participating OPDs. Of the 908 clinics, 829 provided survey data (an overall OPD patient sampling response rate of 91 percent), for a total of 27,510 completed Patient Record forms. The U.S. Census Bureau, acting as the data collection agent for the survey, provided training to field representatives (FRs) throughout the nation who, in turn, oversaw data collection at the hospital and clinic level. FRs contacted the sampled hospitals for induction into the survey after an advance letter was mailed from NCHS notifying the hospitals of their selection for the survey. In most cases, hospital staff completed the information requested on the Patient Record forms (figure I). However, in 55.2 percent of the hospital OPDs, FRs abstracted the data from medical records or computer printouts. Neither patient's name nor address is collected. Confidentiality of the data collected in the survey is protected under the Privacy Act, Public Health Service Act, and Title 42 of the United States Code, Section 242 m(d).

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 in 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

Table I. Coefficients appropriate for determining approximate relative standard errors, by type of estimate: National Hospital Ambulatory Medical Care Survey, 2000: outpatient departments

Type of estimate	Coefficient for use with estimates in thousands		Lowest reliable estimate in thousands
	A	B	
Visits	0.012680	8.339	108
Drug mentions	0.017042	18.620	255

expected values. A description of the software and the approach it uses has been published (5). Generalized linear models for predicting the relative standard error were not used for OPD data due to the 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. When it is not feasible to use statistical software, such as SUDAAN, for analyzing complex survey data, one may calculate approximate RSEs for aggregate estimates 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.

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

Similarly, RSEs 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.

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

The standard error for a rate may be obtained by multiplying the RSE 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 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; only an asterisk (*) appears in the tables. Estimates based on 30 or more cases include an asterisk only if the RSE of the estimate exceeds 30 percent.

Estimation

Statistics from the NHAMCS are derived by a multistage estimation procedure that produces essentially unbiased estimates. The estimation procedure has three basic components:

- inflation by reciprocals of the sampling selection probabilities
- adjustment for nonresponse
- a population weighting ratio adjustment

NHAMCS data were adjusted separately by department type to account for two types of nonresponse. The first type of nonresponse occurred when a sample hospital refused to provide information about its OPD that was publicly known to exist. In this case, the weight of visits to hospitals similar to the nonrespondent hospitals were inflated to account for visits represented by the nonrespondent hospitals. Hospitals were judged to be similar and grouped together for nonresponse purposes if they had the same ownership control group (voluntary nonprofit versus other) and region. Beginning with 1998 data, formation of groups of similar hospitals also considered the MSA status of the hospital (in an MSA versus not in an MSA) with the following two exceptions: in the West, MSA status was

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 without consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Center for Health Statistics

OMB No. 0920-0278
Expires: 05/31/2001
CDC 64.135

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY 1999–2000 OUTPATIENT DEPARTMENT RECORD

1. PATIENT'S ZIP CODE	4. SEX <input type="checkbox"/> Female <input checked="" type="checkbox"/> Male Is patient pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	5. ETHNICITY <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino 6. RACE – Mark (X) one or more. <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Asian <input type="checkbox"/> Native Hawaiian/Other Pacific Islander <input type="checkbox"/> American Indian/Alaska Native	7. WAS PATIENT REFERRED BY ANOTHER PHYSICIAN OR BY A HEALTH PLAN FOR THIS VISIT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	8. WAS AUTHORIZATION REQUIRED FOR CARE? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	9. ARE YOU THE PATIENT'S PRIMARY CARE PHYSICIAN? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	10. PRIMARY EXPECTED SOURCE OF PAYMENT FOR THIS VISIT – Mark (X) one. <input type="checkbox"/> Private insurance <input type="checkbox"/> Medicare <input type="checkbox"/> Medicaid <input type="checkbox"/> Worker's Compensation <input type="checkbox"/> Self-pay <input type="checkbox"/> No charge <input type="checkbox"/> Other <input type="checkbox"/> Unknown	11. DOES PATIENT BELONG TO AN HMO? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	12. IS THIS A CAPITATED VISIT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	13. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE? <input type="checkbox"/> Yes, established patient <input type="checkbox"/> No, new patient												
2. DATE OF VISIT Month: Day: Year:		3. DATE OF BIRTH Month: Day: Year:		14. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT <i>Use patient's own words</i> 1. Most important: _____ 2. Other: _____ 3. Other: _____			15. MAJOR REASON FOR THIS VISIT <i>Mark (X) one.</i> <input type="checkbox"/> Acute problem <input type="checkbox"/> Chronic problem, routine <input type="checkbox"/> Chronic problem, flareup <input type="checkbox"/> Pre- or post-surgery/ injury followup <input type="checkbox"/> Non-illness care (e.g., routine prenatal, general exam., well baby)		16. IS THIS VISIT RELATED TO INJURY OR POISONING? <i>Refers to all types of injury or poisoning, including adverse drug experiences, medical misadventures, etc.</i> <input type="checkbox"/> Yes (Answer a, b, c, and d.) <input type="checkbox"/> No (Skip to item 17.) a. Place of occurrence – Mark (X) one. <input type="checkbox"/> Residence <input type="checkbox"/> Other public building <input type="checkbox"/> Recreation/sports area <input type="checkbox"/> Industrial places <input type="checkbox"/> Street or highway <input type="checkbox"/> Other <input type="checkbox"/> School <input type="checkbox"/> Unknown b. Is this injury intentional? <input type="checkbox"/> Yes (self-inflicted) <input type="checkbox"/> Yes (assault) <input type="checkbox"/> No, unintentional <input type="checkbox"/> Unknown c. Is this injury work related? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown d. Cause of injury <i>Describe events that preceded injury (e.g. reaction to penicillin, wasp sting, driver in motor vehicle traffic accident involving collision with parked vehicle, shot with a handgun during a brawl, heroin overdose, etc.)</i> _____			17. PHYSICIAN'S DIAGNOSES FOR THIS VISIT <i>As specifically as possible, list diagnoses related to this visit including chronic conditions (e.g. depression, obesity, asthma, etc.)</i> 1. Primary diagnosis: _____ 2. Other: _____ 3. Other: _____									
18. DIAGNOSTIC/SCREENING SERVICES – Mark (X) all ordered or provided at this visit. <input type="checkbox"/> None <table style="width: 100%;"><tr><td>EXAMINATIONS</td><td>TESTS AND MEASUREMENTS</td><td>IMAGING</td></tr><tr><td><input type="checkbox"/> Breast <input type="checkbox"/> Pelvic <input type="checkbox"/> Rectal <input type="checkbox"/> Skin <input type="checkbox"/> Visual acuity <input type="checkbox"/> Glaucoma <input type="checkbox"/> Hearing</td><td><input type="checkbox"/> Blood pressure <input type="checkbox"/> Strep test <input type="checkbox"/> Pap test <input type="checkbox"/> Urinalysis <input type="checkbox"/> Pregnancy test <input type="checkbox"/> PSA <input type="checkbox"/> Blood lead level</td><td><input type="checkbox"/> Cholesterol measure <input type="checkbox"/> HIV serology <input type="checkbox"/> Other STD test <input type="checkbox"/> Hematocrit/hemoglobin <input type="checkbox"/> Other blood test <input type="checkbox"/> EKG</td></tr></table>				EXAMINATIONS	TESTS AND MEASUREMENTS	IMAGING	<input type="checkbox"/> Breast <input type="checkbox"/> Pelvic <input type="checkbox"/> Rectal <input type="checkbox"/> Skin <input type="checkbox"/> Visual acuity <input type="checkbox"/> Glaucoma <input type="checkbox"/> Hearing	<input type="checkbox"/> Blood pressure <input type="checkbox"/> Strep test <input type="checkbox"/> Pap test <input type="checkbox"/> Urinalysis <input type="checkbox"/> Pregnancy test <input type="checkbox"/> PSA <input type="checkbox"/> Blood lead level	<input type="checkbox"/> Cholesterol measure <input type="checkbox"/> HIV serology <input type="checkbox"/> Other STD test <input type="checkbox"/> Hematocrit/hemoglobin <input type="checkbox"/> Other blood test <input type="checkbox"/> EKG	19. THERAPEUTIC AND PREVENTIVE SERVICES <i>Mark (X) all ordered or provided at this visit. Exclude medications.</i> <input type="checkbox"/> None <table style="width: 100%;"><tr><td>COUNSELING/EDUCATION:</td><td>OTHER THERAPY</td></tr><tr><td><input type="checkbox"/> Diet/nutrition <input type="checkbox"/> Exercise <input type="checkbox"/> HIV/STD transmission <input type="checkbox"/> Family planning/contraception <input type="checkbox"/> Prenatal instructions <input type="checkbox"/> Breast self-exam</td><td><input type="checkbox"/> Tobacco use/exposure <input type="checkbox"/> Growth/development <input type="checkbox"/> Mental health <input type="checkbox"/> Stress management <input type="checkbox"/> Skin cancer prevention <input type="checkbox"/> Injury prevention <input type="checkbox"/> Psychotherapy <input type="checkbox"/> Psycho-pharmacotherapy <input type="checkbox"/> Physiotherapy <input type="checkbox"/> Complementary or alternative medicine (CAM) ALL OTHER – Specify <input checked="" type="checkbox"/></td></tr></table>				COUNSELING/EDUCATION:	OTHER THERAPY	<input type="checkbox"/> Diet/nutrition <input type="checkbox"/> Exercise <input type="checkbox"/> HIV/STD transmission <input type="checkbox"/> Family planning/contraception <input type="checkbox"/> Prenatal instructions <input type="checkbox"/> Breast self-exam	<input type="checkbox"/> Tobacco use/exposure <input type="checkbox"/> Growth/development <input type="checkbox"/> Mental health <input type="checkbox"/> Stress management <input type="checkbox"/> Skin cancer prevention <input type="checkbox"/> Injury prevention <input type="checkbox"/> Psychotherapy <input type="checkbox"/> Psycho-pharmacotherapy <input type="checkbox"/> Physiotherapy <input type="checkbox"/> Complementary or alternative medicine (CAM) ALL OTHER – Specify <input checked="" type="checkbox"/>	20. AMBULATORY SURGICAL PROCEDURES <input type="checkbox"/> None <i>List up to 2 surgical procedures actually performed at this visit. Include biopsy.</i> 1. _____ 2. _____			
EXAMINATIONS	TESTS AND MEASUREMENTS	IMAGING																			
<input type="checkbox"/> Breast <input type="checkbox"/> Pelvic <input type="checkbox"/> Rectal <input type="checkbox"/> Skin <input type="checkbox"/> Visual acuity <input type="checkbox"/> Glaucoma <input type="checkbox"/> Hearing	<input type="checkbox"/> Blood pressure <input type="checkbox"/> Strep test <input type="checkbox"/> Pap test <input type="checkbox"/> Urinalysis <input type="checkbox"/> Pregnancy test <input type="checkbox"/> PSA <input type="checkbox"/> Blood lead level	<input type="checkbox"/> Cholesterol measure <input type="checkbox"/> HIV serology <input type="checkbox"/> Other STD test <input type="checkbox"/> Hematocrit/hemoglobin <input type="checkbox"/> Other blood test <input type="checkbox"/> EKG																			
COUNSELING/EDUCATION:	OTHER THERAPY																				
<input type="checkbox"/> Diet/nutrition <input type="checkbox"/> Exercise <input type="checkbox"/> HIV/STD transmission <input type="checkbox"/> Family planning/contraception <input type="checkbox"/> Prenatal instructions <input type="checkbox"/> Breast self-exam	<input type="checkbox"/> Tobacco use/exposure <input type="checkbox"/> Growth/development <input type="checkbox"/> Mental health <input type="checkbox"/> Stress management <input type="checkbox"/> Skin cancer prevention <input type="checkbox"/> Injury prevention <input type="checkbox"/> Psychotherapy <input type="checkbox"/> Psycho-pharmacotherapy <input type="checkbox"/> Physiotherapy <input type="checkbox"/> Complementary or alternative medicine (CAM) ALL OTHER – Specify <input checked="" type="checkbox"/>																				
21. MEDICATIONS/INJECTIONS <i>List names of up to 6 medications that were ordered, supplied, administered or continued during this visit. Include R, and OTC medications, immunizations, allergy shots, and anesthetics.</i> <input type="checkbox"/> None 1. _____ 4. _____ 2. _____ 5. _____ 3. _____ 6. _____				22. PROVIDERS SEEN THIS VISIT <i>Mark (X) all that apply.</i> <input type="checkbox"/> Staff physician <input type="checkbox"/> R.N. <input type="checkbox"/> Resident/intern <input type="checkbox"/> L.P.N. <input type="checkbox"/> Other physician <input type="checkbox"/> Medical/nursing assistant <input type="checkbox"/> Physician assistant <input type="checkbox"/> Other <input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Other <input type="checkbox"/> Nurse midwife				23. VISIT DISPOSITION – Mark (X) all that apply. <input type="checkbox"/> No follow-up planned <input type="checkbox"/> Other – Specify <input checked="" type="checkbox"/> <input type="checkbox"/> Return to clinic PRN <input type="checkbox"/> Return to clinic – appointment <input type="checkbox"/> Telephone follow-up planned <input type="checkbox"/> Referred to other physician/clinic <input type="checkbox"/> Returned to referring physician <input type="checkbox"/> Admitted to hospital				24. TIME SPENT WITH PHYSICIAN <i>If not seen by physician, enter zero</i> _____ Minutes									

FORM NHAMCS-100(OPD) (8-19-98)

Figure I. Patient Record form

not considered; and in non-MSA hospitals in the other three regions, ownership control group (voluntary nonprofit versus other) was not considered.

Beginning with 1997, the population weighting ratio adjustment for OPD estimates was replaced by an adjustment that controls for effects of rotating hospital sample panels into and out of the sample each year. (The full NHAMCS hospital sample is partitioned into 16 panels, which are rotated into the sample over 16 periods of 4 weeks each so that only 13 panels are used in any 1 year.) Also, beginning with 1997 data, the sampling weights of some OPDs were permanently trimmed. Modifications were made if the population-based PSU selection probability was significantly smaller than the selection probability based on visits to the OPDs, the ideal measure of size, and if the OPD would otherwise have accounted for more than 15 percent of the estimated number of OPD visits in its region.

The second type of nonresponse occurred when a sample OPD clinic within a responding hospital failed to provide completed Patient Record forms for a sample of patient visits. The weights of visits from responding OPD clinics were inflated to account for visits to similar nonresponding OPD clinics where OPD clinics were judged to be similar if they were in the same region, clinic type, and ownership control group (voluntary nonprofit versus other). There were six OPD clinic types: (a) general medicine, (b) pediatrics, (c) surgery, (d) obstetrics and gynecology, (e) alcohol and/or substance abuse, and (f) other OPD clinic. Beginning with 1998 data, formation of groups of similar clinics also considered the MSA status of the clinic (in an MSA versus not in an MSA) with the following two exceptions: in the West, MSA status was not considered; and in non-MSA clinics in the other three regions, ownership control group (voluntary nonprofit versus other) was not considered.

Nonsampling errors

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors, as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, these errors were kept to a minimum by procedures built into the operation of the survey. To eliminate ambiguities and encourage uniform reporting, attention was given to the phrasing of questions, terms, and definitions. Also, pretesting of most data items and survey procedures was performed. Quality control procedures and consistency and edit checks reduced errors in data coding and processing. Coding errors ranged from 0.1 to 1.6 percent for various data items.

Adjustments for item nonresponse—Item nonresponse rates in the NHAMCS are generally low (5 percent or less). However, levels of nonresponse can vary considerably in the survey with two items in 2000 (place of occurrence of injury and work-related injury) having a nonresponse rate above 50 percent. Most nonresponse occurs when the needed information is not available in the medical record and/or is unknown to the person filling out the survey instrument. Nonresponse can also result when the information is available, but survey procedures are not followed and the item is left blank. In this report, the tables include a combined entry of unknown/blank to display missing data. For items where combined item nonresponse is between 30–50 percent, percent distributions are not discussed in the text. However, the information is shown in the tables. These data should be interpreted with caution. If nonresponse is random, the observed distribution for the reported item (i.e., excluding cases for which the information is unknown) would be close to the true distribution. However, if nonresponse is not random, the observed distribution could vary significantly from the actual distribution. Researchers must decide how best to treat items with high levels of missing responses. For items with nonresponse greater than 50 percent, data are not presented.

Weighted item nonresponse rates were 5.0 percent or less for all data items with the following exceptions: pregnancy status of patient (females 15–44 years of age) (34.8 percent), ethnicity (23.6 percent), referral status (17.4 percent), authorization required for care (25.1 percent), primary care physician (13.5 percent), HMO status of patient (26.5 percent), capitated visit (38.9 percent), place of occurrence of injury (57.9 percent), intentionality of injury (31.9 percent), work-related status of injury (50.4 percent), and cause of injury (34.0 percent).

For some items, missing values were imputed by randomly assigning a value from Patient Record forms with similar characteristics. Imputations were based on geographic region, OPD volume by clinic type, and three-digit ICD–9–CM codes for primary diagnosis. Imputations were performed for the following variables—birth year (1.6 percent), sex (0.5 percent), race (19.3 percent), and time spent with physician (42.1 percent). This represents a change from previous survey years when imputations were also performed for the following variables—ethnicity, disposition, and providers seen. Beginning in 1997, these latter items were no longer imputed. Blank or otherwise missing responses are so noted in the data.

Tests of significance and rounding

Some figures in this report present 95-percent confidence intervals to indicate the stability of the point estimates relative to their individual stabilities. This permits the reader to assess substantive patterns in the data. However, it should be noted that examination of the amount of overlap between intervals is not equivalent to standard significance testing for differences.

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 “greater than” or “less 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 figures calculated from rounded data.

Race

In 1999 and 2000, the instruction for the race item on the Patient Record form was changed so that more than one race could be recorded. In addition, race categories were made consistent with standards issued by the Office of Management and Budget to promote comparability of data among Federal data sources. Only a small proportion of records had multiple races indicated. Denominators for the population rates by race for the civilian noninstitutional population for the year 2000 were not available at the time this report was written. Consequently, race denominators for the population rates are derived from the postcensal estimates from the 1990 census, adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

Because the 1990 census did not capture multiple race responses, data on the number of multiple race persons in the civilian noninstitutional population are not available from this source. Therefore estimates of visits per 100 persons per year (table 1) are presented for only those visits where one race was reported.

Injury groupings

Table 12 presents data on the intent and mechanism producing the injuries that resulted in visits to OPDs. Cause of injury is collected for each sampled injury visit in the NHAMCS and is coded according to the ICD–9–CM’s “Supplementary Classification of External Causes of Injury and Poisoning.” However for table 12, the first-listed cause-of-injury data were grouped to highlight the interaction between intentionality of the injury and the mechanism that produced the injury. Table II shows the E-code groupings used to produce this table.

Population figures and rate calculation

The figures represent U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2000. Figures are consistent with the downloadable series, *U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999* (with short-term projection to dates in 2000) and are available at the Census Bureau

Internet site http://eire.census.gov/popest/archives/national/nat_90s_detail/nat_90s_4.php. Figures have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix. Regional estimates were provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on Census Bureau estimates of the civilian noninstitutional population of the United States as of July 1, 2000. DHIS estimates differ slightly from monthly postcensal estimates because of differences in the adjustment process.

Definition of terms

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

Clinic—A clinic is 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 included in the NHAMCS: general medicine, surgery, pediatrics, obstetrics and gynecology, substance abuse (excluding methadone maintenance) and others (e.g., psychiatry and neurology). Clinics excluded from the NHAMCS include: ambulatory surgery centers, chemotherapy, employee health service, renal dialysis, methadone maintenance, and radiology.

Drug mention—A drug mention is the health care provider’s entry on the

Table II. Reclassification of external cause-of-injury codes for use with the 2000 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
Struck against or struck accidentally by objects or persons	E916–E917
Natural and environmental factors	E900–E909, E928.0–E928.8
Cutting or piercing instruments or objects	E920
Overexertion and strenuous movements	E927
Fire and flames, hot substance or object, caustic or corrosive material and steam	E890–E899, E924
Other and not elsewhere classified	E830, E832, E846–E848, E910–E915, E918, E921, E923, E925–E926, E928.8, E929.0–E929.5
Mechanism unspecified	E887, E928.9, E929.8, E929.9
Intentional injuries	E950–E959, E960–E969, E970–E978, E990–E999
Injuries of undetermined intent	E980–E989
Adverse effects and medical treatment	E870–E879, E930–E949

¹Based on the “Supplementary Classification of External Causes of Injury and Poisoning,” *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (10).

Patient Record form of a pharmaceutical agent—by any route of administration—for prevention, diagnosis, or treatment. Generic as well as brand-name drugs are included, as are nonprescription and prescription drugs. Along with all new drugs, the physician also records continued medications if the patient was specifically instructed during the visit to continue the medication. Health care providers may report up to six medications per visit.

Drug visit—A drug visit is a visit at which medication was prescribed or provided by the physician.

Emergency department—An emergency department (ED) is a hospital facility for the provision of unscheduled outpatient services to patients whose conditions require immediate care and is staffed 24 hours a day.

Hospital—To be in-scope for the NHAMCS, a hospital must have an average length of stay for all patients of less than 30 days (short-stay) or hospital 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.

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

Injury-related visit—A visit is injury-related if “yes” was checked in response to item 16, “Is this visit related to injury or poisoning?” or if a cause of injury or a nature of injury diagnosis was provided, or if an injury-related reason for visit was reported.

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

Ownership—Hospitals are designated according to the primary owner of the hospital based on the SMG Hospital Database.

Voluntary nonprofit—Voluntary nonprofit hospitals are either church-related, a nonprofit corporation, or have other nonprofit ownership.

Government, non-Federal—

Government, non-Federal hospitals are operated by State, county, city, city-county or hospital district or authority.

Proprietary—Proprietary hospitals are individually owned, partnerships, or corporations.

Visit—A visit is a direct, personal exchange between an ambulatory patient seeking care and a physician or a hospital staff member working under the physician's supervision to render personal health services. Excluded from the NHAMCS are visits where medical care was not provided, such as visits made to drop off specimens, pay bills, make appointments, and walk-outs.

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.

Suggested citation

Ly N, McCaig LF. National Hospital Ambulatory Medical Care Survey: 2000 Outpatient Department Summary. Advance data from vital and health statistics; No. 327. Hyattsville, Maryland: National Center for Health Statistics. 2002.

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

National Center for Health Statistics

Director
Edward J. Sondik, Ph.D.

Deputy Director
Jack R. Anderson

**DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

FIRST CLASS MAIL POSTAGE & FEES PAID CDC/NCHS PERMIT NO. G-284

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-458-4636
E-mail: nchsquery@cdc.gov
Internet: www.cdc.gov/nchs

DHHS Publication No. (PHS) 2002-1250
02-0334 (5/02)