

Advance Data



From Vital and Health Statistics of the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics

National Ambulatory Medical Care Survey: 1996 Summary

by David A. Woodwell, Division of Health Care Statistics

Abstract

Objective—This report describes ambulatory care visits made to physician offices within the United States. Statistics are presented on selected physician, patient, and visit characteristics of ambulatory care visits.

Methods—The data presented in this report were collected from the 1996 National Ambulatory Medical Care Survey (NAMCS). The NAMCS is part of the ambulatory care component of the National Health Care Survey, which measures health care utilization across various types of providers. The NAMCS is a national probability sample survey of visits to office-based physicians in the United States. Sample data are weighted to produce annual estimates.

Results—During 1996, an estimated 734.5 million visits were made to physician offices in the United States, an overall rate of 2.8 visits per person. One quarter of the NAMCS visits were made to general and family physicians, which was significantly higher than the other 13 specialties. Persons 75 years and over had the highest rate of physician office visits, 6.3 visits per person. Females had a significantly higher rate of visits to physician offices than males did overall, as did white persons compared with black persons. Of all visits made to these offices in 1996, 87 percent were covered by some form of insurance, and 8.7 percent were paid “out-of-pocket.” There were an estimated 87.6 million injury-related visits during 1996, or 33.1 visits per 100 persons. Three-quarters of these visits were for unintentional injuries.

Keywords: physicians • diagnoses • injury • ICD-9-CM

Introduction

The National Ambulatory Medical Care Survey (NAMCS) was begun in 1973 to collect data on the utilization of ambulatory medical care services provided by office-based physicians. It was conducted annually until 1981, again in 1985, and resumed an annual schedule in 1989. The NAMCS is complemented by the National Hospital

Ambulatory Medical Care Survey (NHAMCS), which was inaugurated in 1992 to expand the scope of data collection to the medical services provided by hospital outpatient and emergency departments. Together the NAMCS and the NHAMCS data provide an important tool for tracking ambulatory care utilization in the United States. A third survey, the National Survey of Ambulatory Surgery, was

launched in 1994 to focus on the rapidly increasing use of ambulatory surgery centers that are not covered in the NAMCS or the NHAMCS. These surveys are part of the National Health Care Survey, which measures health care utilization across various types of providers. For additional information on the NHAMCS (hospital outpatient and emergency departments), please refer to the 1996 annual summaries (1,2). A separate report combining NAMCS and NHAMCS data provides a comprehensive picture of ambulatory medical care utilization (3). It shows that 82 percent of ambulatory care, as identified by both the NAMCS and the NHAMCS, is provided in office-based practices.

This report presents national annual estimates of physician office visits for 1996. Physician, patient, and visit characteristics are described.

Methods

The data presented in this report are from the 1996 National Ambulatory Medical Care Survey. The NAMCS is a national probability sample survey conducted by the Division of Health Care Statistics of the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention. Survey dates for the NAMCS were



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



Assurance of Confidentiality—All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose.		Department of Health and Human Services Public Health Service Centers for Disease Control and Prevention National Center for Health Statistics		A	
1. DATE OF VISIT Month / Day / Year		2. ZIP CODE Patient's		NATIONAL AMBULATORY MEDICAL CARE SURVEY 1995-96 PATIENT RECORD	
3. DATE OF BIRTH Month / Day / Year		5. SEX 1 <input type="checkbox"/> Female 2 <input type="checkbox"/> Male		9. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT Use patient's own words. Most a. Important: _____ b. Other: _____ c. Other: _____	
4. RACE 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black 3 <input type="checkbox"/> Asian / Pacific Islander 4 <input type="checkbox"/> American Indian / Eskimo / Aleut		6. ETHNICITY 1 <input type="checkbox"/> Hispanic origin 2 <input type="checkbox"/> Not Hispanic		8. EXPECTED SOURCE(S) OF PAYMENT FOR THIS VISIT a. Type of payment Check one: 1 <input type="checkbox"/> Preferred provider option 2 <input type="checkbox"/> Insured, fee-for-service 3 <input type="checkbox"/> HMO / Other prepaid 4 <input type="checkbox"/> Self-pay 5 <input type="checkbox"/> No charge 6 <input type="checkbox"/> Other b. Expected sources of insurance Check all that apply: 1 <input type="checkbox"/> Blue Cross / Blue Shield 2 <input type="checkbox"/> Other private insurance 3 <input type="checkbox"/> Medicare 4 <input type="checkbox"/> Medicaid 5 <input type="checkbox"/> Worker's Compensation 6 <input type="checkbox"/> Other 7 <input type="checkbox"/> Unknown	
7. DOES PATIENT SMOKE CIGARETTES? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown		10. IS THIS VISIT INJURY RELATED? 1 <input type="checkbox"/> Yes (Answer a, b, and c.) 2 <input type="checkbox"/> No (Skip to Item 11.) a. Place of occurrence 1 <input type="checkbox"/> Home 2 <input type="checkbox"/> School 3 <input type="checkbox"/> Sports or athletics area 4 <input type="checkbox"/> Street or highway 5 <input type="checkbox"/> Other: _____ 6 <input type="checkbox"/> Unknown b. Is this injury work related? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown c. Cause of injury Describe events that preceded injury (e.g., reaction to penicillin, wasp sting, driver in motor vehicle traffic accident involving collision with parked vehicle, etc.).		11. PHYSICIAN'S DIAGNOSES As specifically as possible, list up to 3 current diagnoses including those unrelated to this visit. a. Principal diagnosis or problem associated with Item 9a.: _____ b. Other: _____ c. Other: _____	
13. AMBULATORY SURGICAL PROCEDURES <input type="checkbox"/> NONE List up to 2 surgical procedures performed at this visit. 1. _____ 2. _____		14. DIAGNOSTIC / SCREENING SERVICES Check all ordered or provided at this visit. 1 <input type="checkbox"/> NONE EXAMINATIONS: 2 <input type="checkbox"/> Breast 3 <input type="checkbox"/> Pelvic 4 <input type="checkbox"/> Rectal 5 <input type="checkbox"/> Visual acuity 6 <input type="checkbox"/> Mental status 7 <input type="checkbox"/> Other: _____ TESTS: 8 <input type="checkbox"/> Blood pressure 9 <input type="checkbox"/> Urinalysis 10 <input type="checkbox"/> TB skin test 11 <input type="checkbox"/> Blood lead level 12 <input type="checkbox"/> Cholesterol measure 13 <input type="checkbox"/> PSA 14 <input type="checkbox"/> HIV serology 15 <input type="checkbox"/> Other blood test 16 <input type="checkbox"/> Other: _____ IMAGING: 17 <input type="checkbox"/> X-Ray 18 <input type="checkbox"/> CAT scan 19 <input type="checkbox"/> MRI 20 <input type="checkbox"/> Ultrasound 21 <input type="checkbox"/> Other: _____ ALL OTHER: (specify) 22 <input type="checkbox"/> _____		15. THERAPEUTIC AND PREVENTIVE SERVICES Check all ordered or provided at this visit. Exclude medications. 1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> Diet 3 <input type="checkbox"/> Exercise 4 <input type="checkbox"/> Weight reduction 5 <input type="checkbox"/> Cholesterol reduction 6 <input type="checkbox"/> HIV transmission 7 <input type="checkbox"/> Injury prevention 8 <input type="checkbox"/> Tobacco use / exposure 9 <input type="checkbox"/> Growth / development 10 <input type="checkbox"/> Mental health 11 <input type="checkbox"/> Other: _____ OTHER THERAPY: 12 <input type="checkbox"/> Psychotherapy 13 <input type="checkbox"/> Corrective lenses 14 <input type="checkbox"/> Physiotherapy 15 <input type="checkbox"/> Other: _____	
16. MEDICATIONS / INJECTIONS List names of up to 6 medications that were ordered, supplied, or administered during this visit. Include new medications, continuing medications (with or without new orders), Rx and OTC medications, immunizations, allergy shots, and anesthetics. <input type="checkbox"/> NONE 1. _____ 4. _____ 2. _____ 5. _____ 3. _____ 6. _____		17. PROVIDERS SEEN THIS VISIT Check all that apply. 1 <input type="checkbox"/> Physician 2 <input type="checkbox"/> Physician assistant 3 <input type="checkbox"/> Nurse practitioner 4 <input type="checkbox"/> R.N. 5 <input type="checkbox"/> L.P.N. 6 <input type="checkbox"/> Medical assistant 7 <input type="checkbox"/> Other: _____		18. HAVE YOU OR ANYONE IN YOUR PRACTICE SEEN PATIENT BEFORE? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No ↓ If Yes, for condition in Item 11a.? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	
				19. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	
				20. VISIT DISPOSITION Check all that apply. 1 <input type="checkbox"/> No followup planned 2 <input type="checkbox"/> Return if needed, P.R.N. 3 <input type="checkbox"/> Return at specified time 4 <input type="checkbox"/> Admit to hospital 5 <input type="checkbox"/> Other: _____ 21. VISIT DURATION Minutes _____	

Figure 1. Patient Record form

January 1, 1996, through December 29, 1996.

The target universe of the NAMCS includes visits made in the United States to the offices of nonfederally employed physicians (excluding those in the specialties of anesthesiology, radiology, and pathology) who were classified by the American Medical Association (AMA) and the American Osteopathic Association (AOA) as "office-based, patient care." Visits to private, nonhospital-based clinics and health maintenance organizations (HMO's)

were within the scope of the survey, but those that took place in federally operated facilities and hospital-based outpatient departments were not. Telephone contacts and visits made outside the physician's office were also excluded.

The NAMCS utilizes a multistage probability sample design involving samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within physician practices. The PSU's are counties, groups of counties, county

equivalents (such as parishes or independent cities), or towns and townships for some PSU's in New England). Sample physicians were asked to complete Patient Record forms for a systematic random sample of office visits occurring during a randomly assigned 1-week reporting period (figure 1). Of 3,000 physicians selected from the master files of the AMA and the AOA, 2,142 were in scope, or eligible to participate in the survey. The response rate was 70.0 percent, and a total of 29,805 Patient Record forms were submitted.

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

Several medical classification systems were used to code data from the NAMCS. Each Patient Record form contains an item on the patient's expressed reason for the visit. In this item, the respondent was asked to record the patient's "complaint(s), symptom(s), or other reason(s) for this visit in the patient's (or patient surrogate's) own words." Up to three reasons for visit were classified and coded according to the *Reason for Visit Classification for Ambulatory Care (RVC)* (4).

The Patient Record form contains an item on the cause of injury for injury-related visits. Up to three external causes of injury were classified and coded according to the "Supplementary Classification of External Causes of Injury and Poisoning" found in the *International Classification of Diseases, 9th Revision Clinical Modification (ICD-9-CM)* (5). In addition, the form contains an item on diagnosis. The physician was asked to record the principal diagnosis or problem associated with the patient's most important reason for the current visit as well as any other significant current diagnoses. Up to three diagnoses were classified and coded according to the ICD-9-CM (5).

The Patient Record form includes items on ambulatory surgical procedures and diagnostic/screening services. Physicians were asked to record up to two procedures and to write in up to four services in the open-ended "other" categories. These procedures and services were classified and coded according to the ICD-9-CM, volume 3 (5).

In the medication item, respondents were instructed to record all new or continued medications ordered, supplied, or administered at the visit, including prescription and nonprescription preparations, immunization and 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 (6). Therapeutic classification of the drugs mentioned on the Patient Record forms was determined using the *National Drug Code Directory*, 1995 edition (7).

The U.S. Bureau of the Census, Housing Surveys Branch, was responsible for data collection. Data processing operations and medical coding were performed by Analytic Sciences, Inc., Durham, North Carolina. As part of the quality assurance procedure, a 10-percent quality control sample of survey records was independently processed. Coding error rates ranged between 0.1 and 1.9 percent for various survey items.

Several of the tables in this report present data on rates of physician office visits. The population figures used in calculating these rates are U.S. Bureau of the Census estimates of the civilian, noninstitutionalized population of the United States as of July 1, 1996, and have been adjusted for net underenumeration. The population figures have been published (3).

Results

There were an estimated 734.5 million visits to office-based physicians in 1996, representing an overall rate of 2.8 visits per person. This rate did not differ significantly from the overall visit rate in 1995. Annual visit rates have ranged between 2.6 and 3.0 visits per person between 1975 and 1996 (8-15). Selected physician, patient, and visit characteristics for these encounters are described in the following text.

Physician characteristics

The distribution of office visits according to physician specialty for the 13 most visited specialties is presented in [table 1](#). The largest share of visits was made to physicians in general and family practice (25.3 percent). Visit rates to each of the 13 physician specialty groups were not found to differ significantly from 1995 visit rates.

Doctors of osteopathy received 44.0 million visits during 1996, or 6.0 percent of all office visits. Visits to this specialty occurred at a rate of 16.7 per 100 persons, not significantly different from the 1995 visit rate of 15.1 visits per 100 persons.

Visits according to geographic characteristics of the physician's practice are also displayed in [table 1](#). In 1996, the West had a significantly higher visit rate than the other regions with 332.8 visits per 100 persons. The Northeast had a higher visit rate than the Midwest (273.9 versus 234.1 visits per 100 persons, respectively). When compared to 1994, the visit rates significantly increased in the West, while in the Northeast the visit rate significantly decreased.

Patient characteristics

Office visits by patient's age, sex, and race are shown in [table 2](#). Females made 59.2 percent of all office visits during 1996. The visit rate as well as the percent of visits made by females was higher in all age categories except the youngest (under 15 years) and the oldest (65-74 and 75 years and over). Visit rates by sex were not significantly different for the youngest age group (under 15 years) and the two oldest groups (65-74 years and 75 years and over). This pattern was also observed in the 1990-95 National Ambulatory Medical Care Surveys.

Visit rates for males and females were found to increase with age after the age of 24. Persons aged 75 years and over had the highest visit rate of the six age categories analyzed, at 6.3 visits per person. The pattern, however, was found to be slightly different for males and females as shown in [figure 2](#).

The office visit rate for the white population was significantly higher (2.9 visits per person) than the rate for the black population (2.4 visits per person) in 1996. But this difference was mainly the result of a higher visit rate for white children under 15 years compared with black children. No other differences were found in the visit rate by race and age. White persons made 85.2 percent of all office visits, with black persons and Asians/Pacific Islanders accounting for

Table 1. Number, percent distribution, and annual rate of office visits by selected physician practice characteristics: United States, 1996

Physician practice characteristic	Number of visits in thousands	Percent distribution	Number of visits per 100 persons per year ^{1,2}
All visits	734,493	100.0	277.8
Physician specialty			
General and family practice	186,190	25.3	70.4
Internal medicine	102,908	14.0	38.9
Pediatrics	96,821	13.2	36.6
Obstetrics and gynecology	66,144	9.0	³ 25.0
Ophthalmology	40,735	5.5	15.4
Orthopedic surgery	35,848	4.9	13.6
Dermatology	32,937	4.5	12.5
Psychiatry	18,665	2.5	7.1
General surgery	18,346	2.5	6.9
Otolaryngology	20,156	2.7	7.6
Cardiovascular diseases	14,910	2.0	5.6
Urology	14,018	1.9	5.3
Neurology	9,575	1.3	3.6
All other specialties	77,239	10.5	29.2
Professional identity			
Doctor of medicine	690,463	94.0	261.1
Doctor of osteopathy	44,030	6.0	16.7
Geographic region			
Northeast	143,902	19.6	264.4
Midwest	163,930	22.3	269.1
South	236,036	32.1	258.8
West	190,625	26.0	332.2
Metropolitan status			
MSA	604,096	82.2	285.4
Non-MSA	130,397	17.8	249.6

¹Based on U.S. Bureau of the Census monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1996. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990–96) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

²Regional and metropolitan estimates have been provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1, 1996. DHIS estimates are provisional at this time and differ slightly from monthly postcensal estimates because of differences in the adjustment process.

³The visit rate is 48.9 per 100 females.

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

11.1 percent and 3.3 percent, respectively. The visit rate for the black population in 1996 was significantly higher than the 1995 rate (1.8 visits per person). Historically, visit rates for black persons to physician offices tend to be lower than for white persons, but visit rates to hospital settings tend to be higher for black persons compared with white persons (3).

Visit characteristics

Expected sources of payment—Data on expected sources of payment are shown in table 3 and figure 3. This item underwent substantial revision for the 1995–96 NAMCS. The first part of the new item concerns type of payment (for

example, was the visit covered under an insured fee-for-service arrangement, Preferred Provider Option (PPO), or HMO/other prepaid plan). Other options that could be checked were self-pay, no charge, and “other” type of payment. Respondents were asked to check only one type of payment. If any of the first three options were checked, the respondent was then asked to complete part b of the item, expected sources of insurance for the visit. Respondents were asked to check all expected sources of insurance that were applicable.

In general, most visits were expected to be paid for with some type of insurance (87.0 percent). Insured, fee-for-service was the most common

type of expected payment (35.9 percent) followed by HMO/other prepaid plan (26.0 percent). PPO plans accounted for 13.4 percent of physician office visits. Self-pay, which excludes deductibles and co-payments, accounted for 8.7 percent of all visits (table 3).

For patients paying by insurance, slightly less than one-half of the visits cited private insurance (47.0 percent), including Blue Cross/Blue Shield, and about one-third cited Medicaid and/or Medicare (33.9 percent) (figure 3).

Patient’s principal reason for visit—As described earlier, up to three reasons for visit were classified and coded according to the *Reason for Visit Classification for Ambulatory Care (RVC)* (4). The principal reason for visit is the problem, complaint, or reason listed in item 9a.

The RVC is divided into the eight modules or groups of reasons displayed in table 4. More than one-half of all visits were made for reasons classified as symptoms (53.2 percent). Respiratory symptoms accounted for 10.8 percent of all visits, and musculoskeletal symptoms accounted for 9.7 percent.

The 20 most frequently mentioned principal reasons for visit, representing 42.1 percent of all visits, are shown in table 5. General medical examination was the most frequently mentioned reason for visit (6.9 percent of the total), while cough was the most frequently mentioned reason having to do with illness or injury (3.1 percent). All but 1 of the top 20 reasons for office visits in 1996, blood pressure test, were also listed among the 20 most frequently mentioned reasons in 1995, albeit in different order. The proportion of visits for a progress visit, routine prenatal examination, and well baby exam increased significantly from 1995 figures while the proportion of visits for cough, postoperative visit, back symptoms, and earache or ear infection decreased in 1996. It should be noted that estimates that differ in ranked order may not be significantly different from each other.

Injury-related visits—Injury-related office visits are presented in terms of patient’s age, sex, and race in table 6. Visits were considered to be injury related if “yes” was checked in response to question 10 of the Patient

Table 2. Number, percent distribution, and annual rate of office visits by patient's age, sex, and race: United States, 1996

Patient's age, sex, and race	Number of visits in thousands	Percent distribution	Number of visits per person per year ¹
All visits	734,493	100.0	2.8
Age			
Under 15 years	140,851	19.2	2.4
15–24 years	59,086	8.0	1.6
25–44 years	184,449	25.1	2.2
45–64 years	170,229	23.2	3.2
65–74 years	93,879	12.8	5.1
75 years and over	85,999	11.7	6.3
Sex and age			
Female	434,510	59.2	3.2
Under 15 years	67,781	9.2	2.3
15–24 years	38,909	5.3	2.2
25–44 years	123,989	16.9	2.9
45–64 years	99,989	13.6	3.6
65–74 years	53,333	7.3	5.3
75 years and over	50,509	6.9	6.0
Male	299,984	40.8	2.3
Under 15 years	73,071	9.9	2.4
15–24 years	20,177	2.7	1.1
25–44 years	60,459	8.2	1.5
45–64 years	70,240	9.6	2.7
65–74 years	40,547	5.5	5.0
75 years and over	35,490	4.8	6.8
Race and age			
White	625,472	85.2	2.9
Under 15 years	119,125	16.2	2.5
15–24 years	48,300	6.6	1.7
25–44 years	152,072	20.7	2.2
45–64 years	145,121	19.8	3.2
65–74 years	82,993	11.3	5.1
75 years and over	77,861	10.6	6.3
Black	81,813	11.1	2.4
Under 15 years	16,427	2.2	1.7
15–24 years	7,780	1.1	1.4
25–44 years	23,880	3.3	2.3
45–64 years	19,182	2.6	3.5
65–74 years	7,805	1.1	4.9
75 years and over	6,740	0.9	6.5
All other races			
Asian, Pacific Islander	24,033	3.3	2.4
American Indian, Eskimo, Aleut	3,174	0.4	1.4

¹Based on U.S. Bureau of the Census monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1996. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990–96) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

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

made by females, and 35.1 percent were made by persons 25–44 years old. The injury visit rate for females was not significantly higher than the rate for males in 1996 (33.3 visits per 100 females compared with 32.9 visits per 100 males), nor were there any differences noted between males and females by age. [Figure 4](#) displays injury visit rates by patient's age and sex. Among females, injury visit rates were lower for women under age 25 compared with women 25 years of age and over. Males in the age groups 25–44 years and 45–64 years had an injury visit rate that was significantly higher than the rate for those under 15 years of age. No other statistically significant differences were noted by age for males.

The injury visit rate for black persons was 33.7 visits per 100 persons in 1996, not significantly different than the rate of 33.2 injury visits per 100 white persons. Visit rates were not significantly different between white males (32.9 per 100) and white females (33.4 per 100) or between black males (35.1 per 100) and black females (32.4 per 100) (data not shown). The injury visit rate for black persons was significantly higher in 1996 compared with 1995 (33.7 per 100 in 1996 versus 21.0 per 100 in 1995), but this was mainly the result of an increase in the rate for black females (32.4 per 100 in 1996 versus 17.3 per 100 in 1995).

Item 10 on the Patient Record form was also expanded in 1995–96 to capture the place of occurrence, whether the injury was work related, and the external cause of the injury. A work-related injury is defined as an injury that occurred while the patient was engaged in work activities occurring on or off the employer's premises. However, these items had high levels of missing data (percent unknown or blank at 45.6 and 36.7 of the injury-related visits, respectively). More complete reporting could change the distribution. The data available indicated that home was the most frequently reported category (15.9 percent), and that at least one-fifth of the injury visits were work related (20.1 percent) ([table 7](#)). For visits by patients who are between 18 and 64 years of age the percent of work-related

Record form, or if an injury reason for visit or injury diagnosis was recorded, or if a cause of injury was specified. Using the results from any one of those items alone would underestimate the number of injury-related visits. Each of these items measures a unique aspect of injury. Employing this definition, the number of injury-related visits was

6 percent greater compared with using the injury check box alone.

There were an estimated 87.6 million injury-related office visits in 1996, representing 11.9 percent of all office visits. Corresponding figures for 1995 were 81.6 million and 11.7 percent of visits, respectively. About one-half of the injury visits (51.5 percent) were

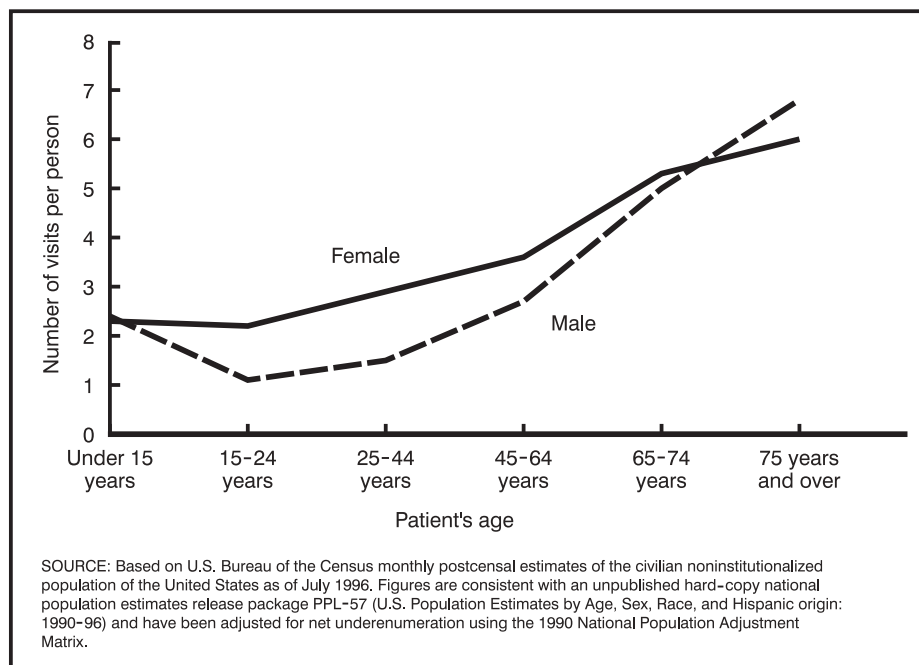


Figure 2. Annual rate of visits to office-based physicians by patient's age and sex: United States, 1996

injuries increases to 28.1 percent (data not shown).

Table 8 shows NAMCS visits by the intent and mechanism of the first-listed external cause of injury as categorized by the ICD-9-CM groupings detailed in the [Technical notes](#). Three-quarters of the injury visits were due to unintentional injuries (76.1 percent). Falls were cited most often, accounting for 16.7 percent of all injury visits. Cause of injury was not recorded for one-fifth of the injury visits.

Physician's principal diagnosis—Item 11 of the Patient Record form asks the physician to record the principal diagnosis or problem associated with the patient's most important reason for the current visit as well as any other significant current diagnoses. Displayed in [table 9](#) are office visits by principal diagnosis using the major disease categories specified by the ICD-9-CM (5). The supplementary classification, used for diagnoses that are not classifiable to injury or illness (for example, general medical examination, routine prenatal examination, and health supervision of an infant or child), accounted for 16.8 percent of all office visits. Diseases of the respiratory system (13.0 percent) and diseases of the nervous system and

sense organs (9.5 percent) were also prominent on the list.

A selection of the most frequently reported principal diagnoses for 1996 are featured in [table 10](#). The categories shown in this table are based on the ICD-9-CM, but have been defined to describe the ambulatory care visit data. The diagnosis groupings in [table 10](#) accounted for 42.7 percent of all the NAMCS visits during the year. The three most frequent illness diagnoses were essential hypertension, acute upper respiratory infections, and malignant neoplasms.

Checklist of medical conditions—In addition to the physician's diagnosis reported in item 11 of the Patient Record form, selected information on chronic health conditions was collected in item 12. Physicians were given a list of common conditions and asked to record whether the patient now has any of them, regardless of what was recorded as the current diagnosis in item 11. Results from item 12 are shown in [table 11](#). This question was modified for the 1995-96 survey to include an additional five conditions. Hypertension was cited at about one-third of the visits by patients 75 years and over. Arthritis was reported at one-third of the visits by those 75 years and over.

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

Pelvic, visual, and breast examinations were either ordered or provided at about 7.0 percent of visits, respectively. Blood pressure (44.0 percent) and urinalysis (13.1 percent) were the leading tests. Imaging was most often in the form of an x ray and was either ordered or performed at 7.3 percent of the visits. More than one-quarter of the visits had no diagnostic or screening services ordered or provided ([table 12](#)).

Procedures—In item 13, up to two ambulatory surgical procedures, performed at this visit, were to be recorded by the physician. Item 14, "Diagnostic and screening services," included four open-ended "other" categories in addition to the checkbox categories. After analyzing the data from these categories and from the ambulatory surgery data reported in question 13, it was discovered that in many instances the same procedure was being recorded in different places by different physicians. [Table 13](#) presents data from both question 13 and the open-ended responses to question 14 as coded to volume 3 of the ICD-9-CM (5). "Other nonoperative measurement and examination" was most frequently mentioned, accounting for 10.5 percent of all office-based visits. "Other local excision or destruction of lesion or tissue or skin and subcutaneous tissue" was the most frequently mentioned invasive procedure accounting for 1.3 percent of the visits.

Therapeutic and preventive services—Data on therapeutic and preventive services ordered or provided at physicians' office visits were collected in item 15 of the Patient Record form. As shown in [table 14](#), these services were recorded at one-third (34.4 percent) of all office visits during 1996. Counseling or education related to diet (13.2 percent), exercise

Table 3. Number and percent distribution of office visits by type of payment and expected sources of insurance for this visit: United States, 1996

Type of payment and expected sources of insurance ¹	Number of visits in thousands	Percent distribution
All visits	734,493	100.0
Insurance ²	639,065	87.0
Insured, fee-for-service	263,878	35.9
Private insurance	151,602	20.6
Medicare	96,477	13.1
Medicaid	37,084	5.0
Worker's compensation	8,319	1.1
Other	16,104	2.2
Unknown	7,336	1.0
HMO/other prepaid ³	190,804	26.0
Private insurance	100,513	13.7
Medicare	18,774	2.6
Medicaid	19,065	2.6
Worker's compensation	808	0.1
Other	36,716	5.0
Unknown	24,647	3.4
Preferred Provider Option	98,318	13.4
Private insurance	69,730	9.5
Medicare	11,885	1.6
Medicaid	4,025	0.5
Worker's compensation	*	*
Other	12,452	1.7
Unknown	6,014	0.8
Unspecified type of payment	86,065	11.7
Private insurance	23,634	3.2
Medicare	33,193	4.5
Medicaid	29,409	4.0
Worker's compensation	4,581	0.6
Other	5,812	0.8
Unknown	2,662	0.4
Self-pay	64,016	8.7
No charge	8,142	1.1
Other	11,233	1.5
No answer ⁴	12,038	1.6

* Figure does not meet standard of reliability or precision.

¹Only one type of payment (preferred provider option, insured fee-for-service, HMO/other prepaid, self-pay, no charge, or other) was coded for each visit. These figures may not always add to totals because of rounding. For payment types of preferred provider option, insured fee-for-service, and HMO/other prepaid, respondents were also asked to check all of the applicable expected sources of insurance. As a result, expected sources of insurance will not add to totals because more than one source could be reported per visit.

²Includes Insured, fee-for-service; HMO/other prepaid; preferred provider option; and unspecified type of payment.

³HMO is health maintenance organization.

⁴Neither type of payment nor source was reported.

(9.5 percent), weight reduction (3.8 percent), and growth/development (3.7 percent) were mentioned most frequently.

Other therapy included physiotherapy, psychotherapy, and corrective lenses accounting for 2.8, 2.2, and 0.7 percent of office visits, respectively.

Medication therapy—Up to six medications, called drug mentions, were coded per drug visit. This represents a minor change from previous years when only five medications could be recorded per visit. As used in the NAMCS, the term “drug” is interchangeable with the term “medication” and the term

“prescribing” is used broadly to mean ordering or providing any medication, whether prescription or over-the-counter. Visits with one or more drugs listed on the Patient Record form are termed “drug visits” in the NAMCS.

Data on medication therapy are shown in tables 15–19. Medication therapy was the most commonly mentioned therapeutic service in 1996, reported at 469.1 million office visits or 63.9 percent of the total (table 15).

There were 983.7 million drugs mentioned at visits to office-based physicians during 1996. This yields an average of 1.3 drug mentions per office visit, or 2.1 drug mentions per drug

visit. Data on number of drug visits and drug mentions by physician specialty are shown in table 16. Three-quarters or more of the visits to internists and cardiologists included at least one drug mention. In contrast, about one-third of the visits to orthopedic surgeons and general surgeons did so.

Drug mentions are displayed by therapeutic class in table 17. This classification is based on the therapeutic categories used in the *National Drug Code Directory*, 1995 edition (NDC) (7). It should be noted that some drugs have more than one therapeutic application. In cases of this type, the drug was classified under its primary therapeutic use. Cardiovascular-renal drugs, (14.7 percent), antimicrobial agents (12.6 percent), and drugs used for pain relief (11.6 percent) were listed most frequently.

The 20 most frequently used generic substances in 1996 are shown in table 18. Drug products containing more than one ingredient (combination products) are included in the data for each ingredient. For example, acetaminophen with codeine is included in both the count for acetaminophen and the count for codeine. Acetaminophen and amoxicillin were the two generic ingredients most frequently used in drugs ordered or provided by the physician at office visits in 1996, occurring in 3.9 percent and 3.4 percent of drug mentions, respectively.

Table 19 presents the 20 medications most frequently mentioned by physicians in the NAMCS, according to the entry name of drug. Entry name refers to the actual designation used by the physician on the Patient Record form and may be a trade name, generic name, or simply a desired therapeutic effect. Amoxicillin accounted for 16.0 million mentions (1.6 percent of the total) and was followed by Tylenol, Amoxil, Lasix, and Premarin. All of these were among the top 10 drug entry names mentioned in 1995.

Providers seen—Item 17, new to the NAMCS Patient Record form in 1995–96, collects data on all providers seen during the sampled visit. Table 20 details providers seen by physician specialty. Overall, 96.2 percent of visits were attended by a physician and

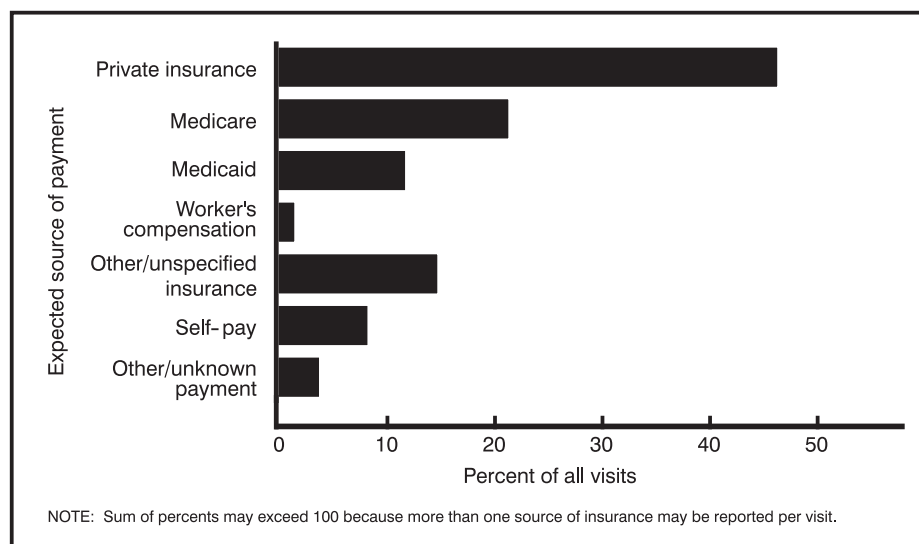


Figure 3. Percent of physician office visits by expected source of payment: United States, 1996

one-quarter by a medical assistant (26.3 percent).

Referral status and prior-visit status—Table 21 shows data on office visits categorized by patient's referral status and prior-visit status. The distribution of visits by referral status and prior-visit status according to physician specialty is shown in table 22.

When referred visits are restricted to those made by new patients and those made by old patients for new problems, their share of total visits is 6.8 percent,

not significantly different than the 1995 NAMCS figure of 6.5 percent.

Also shown in table 21 are office visits by prior-visit status. Eight out of ten office visits (86.0 percent) were made by patients who had seen the physician on a previous occasion, and two-thirds of all visits (66.3 percent) were made by persons who were returning to the physician for care of a previously treated problem. Overall, 14.0 percent of visits were made by new patients.

As expected, the percent of referred visits reported by primary care specialties was relatively low, 5 percent or less of the visits to general and family practitioners, internists, and pediatricians. In contrast, almost 6 out of 10 visits to neurologists (58.9 percent) were reported to be referrals (table 22).

Disposition of visit—Table 23 displays data on disposition of office visits. Almost two-thirds of the office visits (62.5 percent) included a scheduled followup visit in 1996. More than one-quarter (28.6 percent) of office visits included instructions to return if needed. Approximately 1 percent of visits resulted in a hospital admission. These percents have not changed significantly from those of 1995.

Duration of visit—Data on the duration of office visits are presented in table 24. Duration of visit refers to the amount of time spent in face-to-face contact between the physician and the patient. This time is estimated and recorded by the physician and does not include time spent waiting to see the physician, time spent receiving care from someone other than the physician without the presence of the physician, or time spent by the physician in reviewing patient records and/or test results. In

Table 4. Number and percent distribution of office visits by patient's principal reason for visit: United States, 1996

Principal reason for visit and RVC code ¹	Number of visits in thousands	Percent distribution
All visits	734,493	100.0
Symptom module S001–S999	390,413	53.2
General symptoms S001–S099	48,561	6.6
Symptoms referable to psychological/mental disorders S100–S199	20,798	2.8
Symptoms referable to the nervous system (excluding sense organs) S200–S259	19,125	2.6
Symptoms referable to the cardiovascular/lymphatic system S260–S299	3,669	0.5
Symptoms referable to the eyes and ears S300–S399	43,563	5.9
Symptoms referable to the respiratory system S400–S499	79,574	10.8
Symptoms referable to the digestive system S500–S639	33,780	4.6
Symptoms referable to the genitourinary system S640–S829	28,302	3.9
Symptoms referable to the skin, hair, and nails S830–S899	41,960	5.7
Symptoms referable to the musculoskeletal system S900–S999	71,083	9.7
Disease module D001–D999	79,078	10.8
Diagnostic, screening, and preventive module X100–X599	134,541	18.3
Treatment module T100–T899	80,888	11.0
Injuries and adverse effects module J001–J999	20,630	2.8
Test results module R100–R700	11,088	1.5
Administrative module A100–A140	7,807	1.1
Other ²	10,047	1.4

¹Based on *A Reason for Visit Classification for Ambulatory Care (RVC)* (4).

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 5. Number and percent distribution of office visits by the 20 principal reasons most frequently mentioned by patients and patient's sex: United States, 1996

Principal reason for visit and RVC code ¹	Number of visits in thousands	Total	Patient's sex	
			Female ²	Male ³
			Percent distribution	
All visits	734,493	100.0	100.0	100.0
General medical examination X100	50,669	6.9	7.4	6.2
Progress visit, not otherwise specified T800	28,804	3.9	3.6	4.4
Routine prenatal examination X205	23,948	3.3	5.5	...
Cough S440	22,800	3.1	3.0	3.3
Postoperative visit T205	18,663	2.5	2.6	2.4
Symptoms referable to throat S455	17,967	2.4	2.2	2.8
Well baby examination X105	15,236	2.1	1.8	2.4
Skin rash. S860	11,997	1.6	1.6	1.6
Stomach pain, cramps, and spasms S545	11,721	1.6	1.7	1.4
Back symptoms. S905	11,438	1.6	1.5	1.7
Earache or ear infection S355	11,321	1.5	1.5	1.7
Nasal congestion. S400	11,245	1.5	1.4	1.7
Fever S010	10,719	1.5	1.1	2.0
Vision dysfunctions S305	10,410	1.4	1.5	1.4
Knee symptoms S925	9,822	1.3	1.2	1.5
Hypertension D510	9,719	1.3	1.2	1.5
Blood pressure test X320	8,554	1.2	1.0	1.3
Chest pain and related symptoms S050	8,190	1.1	1.0	1.3
Depression S110	8,169	1.1	1.2	1.0
Headache, pain in head S210	8,126	1.1	1.2	0.9
All other reasons	424,975	57.9	56.8	59.5

... Category not applicable.

¹Based on *A Reason for Visit Classification for Ambulatory Care (RVC)* (4).

²Based on 434,510,000 visits made by females.

³Based on 299,984,000 visits made by males.

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

cases where the patient received care from a member of the physician's staff but did not actually see the physician during the visit, duration was to be recorded as "0" minutes.

Two-thirds (66.5 percent) of physicians' office visits had durations of 15 minutes or less in 1996, while one-third (33.4 percent) lasted over 15 minutes. The estimates do not differ statistically from those found in 1995. The mean duration for visits at which the physician was seen was 19.2 minutes.

In 1995, with the addition of the item on providers seen, a new edit was applied to the NAMCS processing. This edit ensured that visits that did not indicate a physician was seen in question 17 also had a duration of zero minutes. With the addition of this item and the resulting edit, it is believed that the data are more accurate than in previous years.

Additional reports that utilize 1996 NAMCS data are in the *Advance Data from Vital and Health Statistics* series. Data from the 1996 NAMCS will be

available in a variety of formats, including public-use data tape, CD-ROM, and as downloadable data files accessed through the NCHS home page on the Internet. The data are currently available. Questions regarding this report, future reports, or the NAMCS may be directed to the Ambulatory Care Statistics Branch by calling (301) 436-7132.

References

1. McCaig LF. National Hospital Ambulatory Medical Care Survey: 1996 outpatient department summary. Advance data from vital and health statistics; no. 294. Hyattsville, Maryland: National Center for Health Statistics. 1997.
2. McCaig LF and Stussman BJ. National Hospital Ambulatory Medical Care Survey: 1996 emergency department summary. Advance data from vital and health statistics; no. 293. Hyattsville, Maryland: National Center for Health Statistics. 1997.

3. Schappert SM. Ambulatory care visits to physician offices, hospital outpatient departments and emergency departments: United States, 1996. National Center for Health Statistics. Vital and Health Stat 13(133). 1997.
4. 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.
5. Public Health Service and Health Care Financing Administration. International Classification of Diseases, 9th Revision, Clinical Modification. Washington: Public Health Service. 1980.
6. Koch H, Campbell W. The collection and processing of drug information. National Ambulatory Medical Care Survey, 1980. National Center for Health Statistics. Vital Health Stat 2(90). 1982.
7. Food and Drug Administration. National Drug Code Directory, 1995 edition. Washington: Public Health Service. 1995.
8. Nelson C, McLemore T. The National Ambulatory Medical Care Survey. United States, 1975-81 and 1985 trends. National Center for Health Statistics. Vital Health Stat 13(93). 1988.
9. Schappert SM. National Ambulatory Medical Care Survey: 1989 summary. National Center for Health Statistics. Vital and Health Stat 13(110). 1992.
10. Schappert SM. National Ambulatory Medical Care Survey: 1990 summary. Advance data from vital and health statistics; no. 213. Hyattsville, Maryland: National Center for Health Statistics. 1992.
11. Schappert SM. National Ambulatory Medical Care Survey: 1991 summary. National Center for Health Statistics. Vital and Health Stat 13(116). 1994.
12. Schappert SM. National Ambulatory Medical Care Survey: 1992 summary. Advance data from vital and health statistics; no. 253. Hyattsville, Maryland: National Center for Health Statistics. 1994.
13. Woodwell DA, Schappert SM. National Ambulatory Medical Care Survey: 1993 summary. Advance data from vital and health statistics; no. 270. Hyattsville, Maryland: National Center for Health Statistics. 1995.

Table 6. Number, percent distribution, and annual rate of injury-related office visits by patient's age, sex and race: United States, 1996

Patient's age, sex, and race	Number of visits in thousands	Percent distribution	Number of visits per 100 persons per year ¹
All injury-related visits	87,582	100.0	33.1
Age			
Under 15 years	11,889	13.6	20.0
15-24 years	9,516	10.9	26.1
25-44 years	30,708	35.1	36.8
45-64 years	21,685	24.8	40.7
65-74 years	7,095	8.1	38.9
75 years and over	6,690	7.6	49.2
Sex and age			
Female	45,108	51.5	33.3
Under 15 years	5,216	6.0	18.0
15-24 years	4,085	4.7	22.7
25-44 years	15,395	17.6	36.3
45-64 years	11,922	13.6	43.4
65-74 years	4,437	5.1	44.1
75 years and over	4,053	4.6	48.2
Male	42,475	48.5	32.9
Under 15 years	6,673	7.6	21.9
15-24 years	5,431	6.2	29.5
25-44 years	15,313	17.5	37.2
45-64 years	9,764	11.1	37.9
65-74 years	2,658	3.0	32.6
75 years and over	2,637	3.0	50.8
Race			
White	72,415	82.7	33.2
Black	11,378	13.0	33.7
Asian, Pacific Islander	3,289	3.8	33.4
American Indian, Eskimo, Aleut	*500	*0.6	*21.4

* Figure does not meet standard of reliability or precision.

¹Based on U.S. Bureau of the Census monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1996. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990-96) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.

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

14. Schappert SM. National Ambulatory Medical Care Survey: 1994 summary. Advance data from vital and health statistics; no. 273. Hyattsville, Maryland: National Center for Health Statistics. 1996.
15. Woodwell, DA. National Ambulatory Medical Care Survey: 1995 summary. Advance data from vital and health statistics; no. 286. Hyattsville, Maryland: National Center for Health Statistics. 1997.
16. Shah BV, Barnwell BG, Bieler GS. SUDAAN User's Manual, Release 7.0. Research Triangle Institute. Research Triangle Park, NC. 1996.

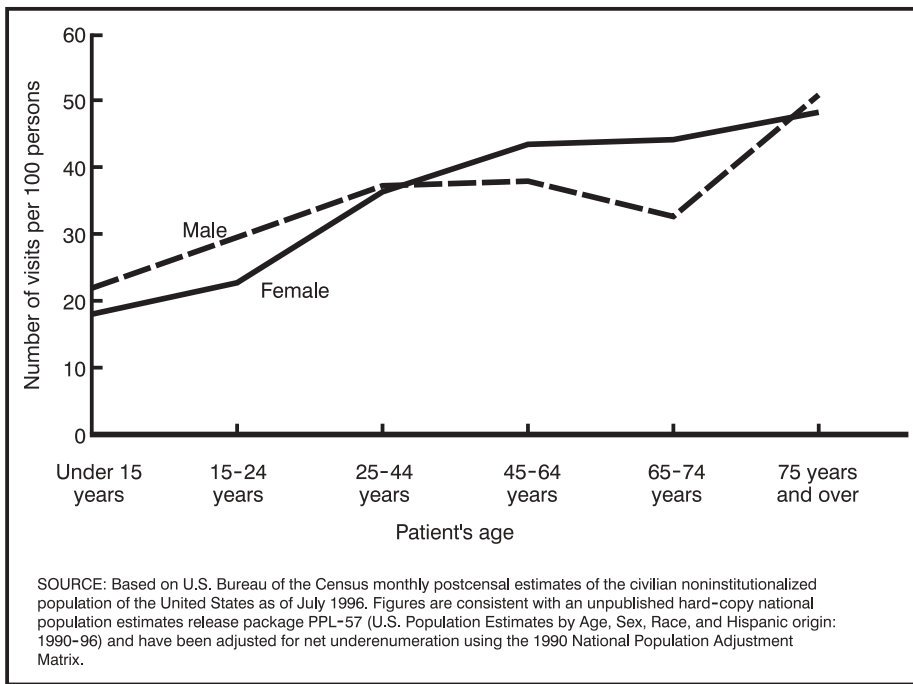


Figure 4. Annual rate of injury-related visits to office-based physicians by patient's age and sex: United States, 1996

Table 7. Number and percent distribution of injury-related office visits by place of occurrence and whether injury is work related: United States, 1996

Visit characteristic	Number of visits in thousands	Percent distribution
All injury-related visits	87,582	100.0
Place of occurrence		
Home	13,923	15.9
Street or highway	11,035	12.6
Sports or athletics area	5,758	6.6
School	1,850	2.1
Other	15,065	17.2
Unknown.	39,952	45.6
Is this injury work related?		
Yes	17,565	20.1
No	37,918	43.3
Unknown.	32,100	36.7

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

Table 8. Number and percent distribution of injury-related office visits according to intent and mechanism of external cause: United States, 1996

Intent and mechanism ^{1,2}	Number of visits in thousands	Percent distribution
All injury visits	87,582	100.0
Unintentional injuries	66,672	76.1
Falls	14,662	16.7
Motor vehicle traffic	8,253	9.4
Overexertion and strenuous movements	6,738	7.7
Struck against or struck accidentally by object or persons	3,948	4.5
Natural and environmental factors	2,069	2.4
Cutting or piercing instruments or objects	1,887	2.2
Other and not elsewhere classified	3,339	3.8
Mechanism unspecified	23,256	26.6
Intentional injuries	1,005	1.1
Assault	841	1.0
Injuries of undetermined intent	*	*
Adverse effects of medical treatment	4,470	5.1
Blank cause	15,412	17.6

* Figure does not meet standard of reliability or precision.

¹Coded from data provided in item 10c of the Patient Record form.

²Based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*, Supplementary Classification of External Causes of Injury and Poisoning (5).

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

Table 9. Number and percent distribution of office visits by physician's principal diagnosis: United States, 1996

Major disease category ICD-9-CM code range ¹	Number of visits in thousands	Percent distribution
All visits	734,493	100.0
Infectious and parasitic diseases 001-139	23,580	3.2
Neoplasms 140-239	28,487	3.9
Endocrine, nutritional and metabolic diseases, and immunity disorders 240-279	29,905	4.1
Mental disorders 290-319	31,805	4.3
Diseases of the nervous system and sense organs 320-389	70,036	9.5
Diseases of the circulatory system 390-459	57,753	7.9
Diseases of the respiratory system 460-519	95,453	13.0
Diseases of the digestive system 520-579	28,219	3.8
Diseases of the genitourinary system 580-629	40,988	5.6
Diseases of the skin and subcutaneous tissue 680-709	43,183	5.9
Diseases of the musculoskeletal system and connective tissue 710-739	48,759	6.6
Symptoms, signs, and ill-defined conditions 780-799	39,808	5.4
Injury and poisoning 800-999	49,902	6.8
Supplementary classification V01-V82	123,169	16.8
All other diagnoses ²	8,371	1.1
Unknown ³	15,076	2.1

¹Based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)* (5).

²Includes diseases of the blood and blood-forming organs (280-289); complications of pregnancy, childbirth, and the puerperium (630-676); congenital anomalies (740-759); and certain conditions originating in the perinatal period (760-779).

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 office visits by selected principal diagnosis groups and patient's sex: United States, 1996

Principal diagnosis group and ICD-9-CM code(s) ¹	Number of visits in thousands	Total	Patient's sex	
			Female ²	Male ³
Percent distribution				
All visits	734,493	100.0	100.0	100.0
Essential hypertension 401	27,690	3.8	3.4	4.3
Acute upper respiratory infections, excluding pharyngitis 460-461,463-4	27,063	3.7	3.3	4.3
Routine infant or child health check V20.2	25,275	3.4	2.9	4.2
Normal pregnancy V22	24,530	3.3	5.6	. . .
Malignant neoplasms 140-208, 230-234	21,431	2.9	2.4	3.7
General medical examination V70	19,708	2.7	3.0	2.3
Otitis media and Eustachian tube disorders 381-382	18,848	2.6	2.0	3.3
Arthropathies and related disorders 710-719	16,243	2.2	2.3	2.0
Diabetes mellitus 250	15,896	2.2	2.0	2.4
Dorsopathies 720-724	14,299	1.9	1.7	2.2
Chronic sinusitis 473	14,295	1.9	1.9	2.0
Rheumatism, excluding back 725-729	14,065	1.9	2.1	1.6
Chronic and unspecified bronchitis 490-491	10,253	1.4	1.2	1.7
Ischemic heart disease 410-414	10,216	1.4	1.0	2.0
Acute pharyngitis 462	10,065	1.4	1.2	1.7
Heart disease, excluding ischemic 391-392.0,393-398,402,404,415-416,420-429	9,861	1.3	1.3	1.4
Asthma 493	9,051	1.2	1.3	1.2
Sprains and strains of neck and back 846-847	8,663	1.2	1.2	1.2
Allergic rhinitis 477	8,376	1.1	1.0	1.3
Potential health hazards related to personal and family history V10-V19	7,793	1.1	1.1	1.1
All other	420,872	57.3	58.1	56.1

. Category not applicable.

¹These groups are based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (5)*. However, certain codes have been combined in this table to form larger categories that better describe the utilization of ambulatory care services.

²Based on 434,510,000 visits made by females.

³Based on 299,984,000 visits made by males.

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

Table 11. Number and percent of office visits by selected medical conditions, according to patient's age and sex: United States, 1996

Medical condition	All ages, both sexes	Patient's age						Patient's sex	
		Under 15 years	15–24 years	25–44 years	45–64 years	65–74 years	75 years and over	Female	Male
Number of visits in thousands ¹									
All visits	734,493	140,851	59,086	184,449	170,229	93,879	85,999	434,509	299,984
Arthritis	77,272	*	*	5,448	20,188	22,154	28,718	50,068	27,204
Atherosclerosis	29,009	*	*	688	5,766	9,269	12,943	13,759	15,250
COPD ²	21,721	*	*	1,326	5,819	7,021	7,291	10,657	11,064
Chronic renal failure	3,975	*	*	*	1,322	874	1,151	1,915	2,060
Depression	40,283	*688	1,488	13,652	15,163	4,837	4,455	27,239	13,044
Diabetes	46,210	*	884	4,958	16,737	13,033	10,005	25,150	21,060
HIV/AIDS ³	1,974	*	*	1,263	*	*	–	*	1,682
Hyperactivity/ADD ⁴	5,449	2,918	*	846	*	*	*	1,686	3,762
Hypertension	120,024	*	*	11,497	41,779	33,701	31,761	69,867	50,158
Obesity	48,837	1,056	2,646	14,848	19,456	6,830	4,002	34,663	14,173
None of the above	479,241	134,889	53,400	141,400	87,270	34,563	27,718	283,434	195,807
Percent of visits									
All visits . . . . .	...	...	...	...	...	...	...	...	...
Arthritis	10.5	*	*	3.0	11.9	23.6	33.4	11.5	9.1
Atherosclerosis	3.9	*	*	0.4	3.4	9.9	15.1	3.2	5.1
COPD ²	3.0	*	*	0.7	3.4	7.5	8.5	2.5	3.7
Chronic renal failure	0.5	*	*	*	0.8	0.9	1.3	0.4	0.7
Depression	5.5	*0.5	2.5	7.4	8.9	5.2	5.2	6.3	4.3
Diabetes	6.3	*	1.5	2.7	9.8	13.9	11.6	5.8	7.0
HIV/AIDS ³	0.3	*	*	0.7	*	*	–	*	0.6
Hyperactivity/ADD ⁴	0.7	2.1	*	0.5	*	*	*	0.4	1.3
Hypertension	16.3	*	*	6.2	24.5	35.9	36.9	16.1	16.7
Obesity	6.6	0.7	4.5	8.0	11.4	7.3	4.7	8.0	4.7
None of the above	65.2	95.8	90.4	76.7	51.3	36.8	32.2	65.2	65.3

–Quantity zero.

... Category not applicable.

* Figure does not meet standard of reliability or precision.

¹Numbers may not add to totals because more than one condition may be reported per visit.²COPD is chronic obstructive pulmonary disease.³HIV is human immunodeficiency virus and AIDS is acquired immunodeficiency syndrome.⁴ADD is attention deficit disorder.

Table 12. Number and percent of office visits by diagnostic and screening services ordered or provided and patient's sex: United States, 1996

Diagnostic and screening services ordered or provided	Number of visits in thousands ¹	Total	Patient's sex	
			Female	Male
Percent of visits				
All visits	734,493	...	...	...
None	209,546	28.5	26.0	32.2
Examinations				
Pelvic	55,975	7.6	12.6	0.4
Visual	49,107	6.7	6.4	7.1
Breast	46,893	6.4	10.5	0.5
Rectal	32,096	4.4	4.6	4.0
Mental	20,049	2.7	2.7	2.7
Other	114,559	15.6	15.3	16.0
Tests				
Blood pressure	323,360	44.0	47.4	39.2
Urinalysis	96,311	13.1	15.3	10.0
Cholesterol	24,624	3.4	3.1	3.7
PSA ²	7,837	1.1	...	2.6
TB skin test ³	5,199	0.7	0.5	1.0
Blood lead level	2,498	0.3	0.2	0.5
HIV serology ⁴	2,220	0.3	0.3	0.3
Other blood test	100,111	13.6	13.8	13.4
Other test	75,889	10.3	11.8	8.1
Imaging				
x ray	53,426	7.3	7.4	7.1
Ultrasound	14,720	2.0	2.6	1.1
MRI ⁵	4,321	0.6	0.6	0.6
CAT scan ⁶	4,559	0.6	0.6	0.7
Other imaging	4,015	0.5	0.6	0.5

... Category not applicable.

¹Numbers may not add to totals because more than one condition may be reported per visit.

²PSA is prostate-specific antigen.

³TB is tuberculin.

⁴HIV is human immunodeficiency virus.

⁵MRI is magnetic resonance imaging.

⁶CAT is computerized axial tomography.

Table 13. Number and percent of office visits by the 20 write-in procedures most often ordered or performed: United States, 1996

Procedures ordered or performed and ICD-9-CM code ¹	Number of visits in thousands	Percent of visits
All visits	734,493	. . .
Other nonoperative measurements and examinations 89.39	77,372	10.5
Pap smear 91.46	15,727	2.1
Electrocardiogram 89.52	12,283	1.7
Other local excision or destruction of lesion or tissue of skin and subcutaneous tissue 86.30	9,551	1.3
General physical examination 89.70	8,068	1.1
Eye examination, not otherwise specified 95.09	7,759	1.1
Culture from ear, nose, throat, and larynx 90.32	6,727	0.9
Tonometry 89.11	5,168	0.7
Neurologic examination 89.13	4,960	0.7
Vital capacity determination 89.37	3,421	0.5
Fetal monitoring, not otherwise specified 75.34	3,227	0.4
Other microscopic examination from lower gastrointestinal tract and of stool 90.99	2,724	0.4
Removal of other therapeutic device 97.89	2,636	0.4
Audiometry 95.41	2,551	0.3
Biopsy of skin and subcutaneous tissue 86.11	2,530	0.3
Hearing examination 95.47	1,871	0.3
Electromyography 93.08	1,845	0.3
Other cardiovascular stress test 89.44	1,845	0.3
Culture of specimen from female genital tract 91.42	1,713	0.2
Fundus photography 95.11	1,250	0.2

. Category not applicable.

¹Based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (5)*.

Table 14. Number and percent of office visits by therapeutic and preventive services ordered or provided and patient's sex: United States, 1996

Therapeutic and preventive services ordered or provided	Number of visits in thousands ¹	Total	Patient's sex	
			Female	Male
Percent of visits				
All visits	734,493	. . .	. . .	. . .
None	481,640	65.6	65.7	65.4
Counseling/education				
Diet	96,745	13.2	13.4	12.8
Exercise	69,418	9.5	9.5	9.3
Weight reduction	28,003	3.8	4.0	3.5
Growth/development	27,431	3.7	3.3	4.4
Mental health	21,946	3.0	2.9	3.1
Tobacco use/exposure	20,272	2.8	2.4	3.3
Injury prevention	18,066	2.5	2.1	3.0
Cholesterol reduction	16,640	2.3	1.9	2.8
HIV transmission ²	2,594	0.4	0.4	0.3
Other	58,623	8.0	8.7	6.9
Other therapy				
Physiotherapy	20,587	2.8	2.6	3.2
Psychotherapy	15,856	2.2	2.1	2.2
Corrective lenses	5,245	0.7	0.7	0.8
Other	12,112	1.6	1.5	1.9

. Category not applicable.

¹Numbers may not add to total because more than one type of therapeutic or preventive service may be reported per visit.²HIV is human immunodeficiency virus.

Table 15. Number and percent distribution of office visits by medication therapy and number of medications provided or prescribed and patient's sex: United States, 1996

Visit characteristic	Number of visits in thousands	Total	Patient's sex	
			Female	Male
Medication therapy ¹		Percent distribution		
All visits	734,493	100.0	100.0	100.0
Drug visits ²	469,134	63.9	63.7	64.2
Visits without mention of medication	265,359	36.1	36.3	35.8
Number of medications provided or prescribed by physician				
All visits	734,493	100.0	100.0	100.0
0	265,359	36.1	36.3	35.8
1	208,128	28.3	28.0	28.8
2	134,182	18.3	17.8	19.0
3	59,599	8.1	8.2	8.0
4	29,903	4.1	4.2	3.9
5	15,118	2.1	2.2	1.8
6	22,205	3.0	3.3	2.7

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

²Visits at which one or more drugs was provided or prescribed by the physician.

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

Table 16. Number and percent distribution of drug visits and drug mentions by physician specialty: United States, 1996

Physician specialty	Drug visits ¹		Drug mentions		Percent of drug visits ²
	Number in thousands	Percent distribution	Number in thousands	Percent distribution	
All specialties	469,134	100.0	983,718	100.0	64.3
General and family practice	133,200	28.4	290,530	29.5	71.5
Internal medicine	79,325	16.9	186,414	18.9	77.1
Pediatrics	67,937	14.5	119,108	12.1	70.2
Obstetrics and gynecology	30,878	6.6	45,722	4.6	46.7
Ophthalmology	21,500	4.6	43,619	4.4	52.8
Dermatology	21,238	4.5	39,797	4.0	64.5
Psychiatry	13,237	2.8	26,221	2.7	70.9
Cardiovascular diseases	12,146	2.6	39,161	4.0	81.5
Orthopedic surgery	11,494	2.5	16,392	1.7	32.1
Otolaryngology	10,960	2.3	17,670	1.8	54.4
Urology	6,619	1.4	9,736	1.0	47.2
General surgery	6,293	1.3	12,515	1.3	34.3
Neurology	5,859	1.2	12,116	1.2	61.2
All other specialties	48,451	10.3	124,716	12.7	62.7

¹Visits at which one or more drugs was provided or prescribed by the physician.

²Number of drug visits divided by number of office visits multiplied by 100.

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

Table 17. Number, percent distribution, and annual rate of drug mentions by therapeutic classification: United States, 1996

Therapeutic classification ¹	Number of drug mentions in thousands	Percent distribution	Number of drug mentions per 100 visits ²
All drug mentions	983,718	100.0	133.9
Cardiovascular-renal drugs	144,445	14.7	19.7
Antimicrobial agents	124,272	12.6	16.9
Drugs used for relief of pain	114,158	11.6	15.5
Respiratory tract drugs	101,571	10.3	13.8
Hormones and agents affecting hormonal mechanisms	92,440	9.4	12.6
Central nervous system	72,455	7.4	9.9
Skin/mucous membrane	62,995	6.4	8.6
Metabolic and nutrient agents	53,407	5.4	7.3
Gastrointestinal agents	44,196	4.5	6.0
Immunologic agents	39,729	4.0	5.4
Ophthalmic drugs	29,732	3.0	4.0
Neurologic drugs	23,433	2.4	3.2
Hematologic agents	17,677	1.8	2.4
Oncolytic agents	10,205	1.0	1.4
Other and unclassified ³	53,002	5.4	7.2

¹Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (7).

²Number of drug mentions divided by total number of visits multiplied by 100.

³Includes anesthetics, antidotes, contrast media/radiopharmaceuticals, otologics, antiparasitics, unclassified/miscellaneous drugs, and homeopathic products.

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

Table 18. Number of generic substances and percent of all drug mentions for the 20 most frequently occurring generic substances in drug mentions at office visits by type of generic substance: United States, 1996

Generic substance	Number of occurrences in thousands ¹	Percent of drug mentions ²
All generic substances	1,187,869	. . .
Acetaminophen	37,884	3.9
Amoxicillin	33,608	3.4
Ibuprofen	18,341	1.9
Aspirin	17,773	1.8
Hydrochlorothiazide	17,131	1.7
Albuterol	15,931	1.6
Estrogens	13,731	1.4
Guaifenesin	12,837	1.3
Furosemide	12,452	1.3
Phenylephrine	11,487	1.2
Levothyroxine	10,407	1.1
Erythromycin	10,263	1.0
Cephalexin	10,256	1.0
Digoxin	10,136	1.0
Triamcinolone	10,113	1.0
Hydrocodone	10,042	1.0
Codeine	9,979	1.0
Pseudoephedrine	9,470	1.0
Estradiol	9,102	0.9
Trimethoprim	9,095	0.9

. Category not applicable.

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

²Based on an estimated 983,718,000 drug mentions in 1996.

Table 19. Number, percent distribution, and therapeutic classification for the 20 drugs most frequently prescribed at office visits, by entry name of drug: United States, 1996

Entry name of drug ¹	Number of drug mentions in thousands	Percent distribution	Therapeutic classification ²
All drug mentions.	983,718	100.0	. . .
Amoxicillin	15,963	1.6	Penicillins
Tylenol	12,690	1.3	Analgesics, nonnarcotic
Amoxil	11,317	1.2	Penicillins
Lasix	11,128	1.1	Diuretics
Premarin	11,040	1.1	Estrogens and progestins
Synthroid.	9,847	1.0	Agents used to treat thyroid disease
A.S.A	9,007	0.9	Analgesics, nonnarcotic
Motrin.	8,250	0.8	Nonsteroidal anti-inflammatory drug (NSAID)
Prednisone	8,250	0.8	Adrenal corticosteroids
Proventil	8,177	0.8	Antiasthmatics/bronchodilators
Claritin	8,028	0.8	Antihistamines
Keflex.	8,014	0.8	Cephalosporins
Lanoxin.	7,684	0.8	Cardiac glycosides
Prenatal vitamins.	7,311	0.7	Vitamins/minerals
Poliomyelitis vaccine.	7,145	0.7	Vaccines/antiserum
Prilosec.	6,821	0.7	Acid/peptic disorders
Prozac	6,613	0.7	Antidepressants
Zantac	6,352	0.6	Acid/peptic disorders
Vasotec.	6,268	0.6	ACE inhibitors ³
Ibuprofen.	6,074	0.6	Nonsteroidal anti-inflammatory drug (NSAID)
All other	807,739	82.1	. . .

. . . Category not applicable.

¹The entry made by the physician on the prescription or other medical records. This may be a trade name, generic name, or desired therapeutic effect.

²Based on the *National Drug Code Directory*, 1995 edition (NDC) (7). In cases where a drug had more than one therapeutic use, it was classified under its primary therapeutic use.

³ACE is angiotensin converting enzyme.

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

Table 20. Number and percent of office visits by physician specialty, according to providers seen: United States, 1996

Physician specialty	Total ¹	Providers seen this visit						
		Physician	Physician assistant	Nurse practitioner	Registered nurse	Licensed practical nurse	Medical assistant	Other provider
		Number of visits in thousands						
All specialties	734,493	706,733	20,233	6,615	102,602	68,181	193,159	32,948
General and family practice	186,190	173,495	8,067	1,790	25,440	23,860	51,610	7,835
Internal medicine	102,908	98,167	2,407	*	10,986	7,814	29,129	2,717
Pediatrics	96,821	93,844	1,482	*	16,639	11,940	25,824	*
Obstetrics and gynecology	66,144	64,385	1,256	1,465	10,517	10,128	20,640	1,490
Ophthalmology	40,735	40,138	2,349	*	1,827	*	16,064	9,228
Orthopedic surgery	35,848	35,607	1,182	*	3,018	2,380	6,346	2,914
Dermatology	32,937	32,486	1,637	*	5,570	1,789	6,454	625
Psychiatry	18,665	18,652	*	*	1,161	*	*	*
General surgery	18,346	18,193	328	*	2,323	1,675	3,723	433
Otolaryngology	20,156	18,807	*	*	1,158	2,166	3,552	1,288
Cardiovascular diseases	14,910	14,717	*	*	1,006	2,760	3,754	789
Urology	14,018	13,827	364	*	1,877	912	2,352	*
Neurology	9,575	9,434	*	—	705	*147	492	348
All other specialties	77,239	74,980	949	799	20,376	2,314	23,005	4,119
		Percent of visits						
All specialties . . . . .	...	96.2	2.8	0.9	14.0	9.3	26.3	4.5
General and family practice . . . . .	...	93.2	4.3	1.0	13.7	12.8	27.7	4.2
Internal medicine . . . . .	...	95.4	2.3	*	10.7	7.6	28.3	2.6
Pediatrics . . . . .	...	96.9	1.5	*	17.2	12.3	26.7	*
Obstetrics and gynecology . . . . .	...	97.3	1.9	2.2	15.9	15.3	31.2	2.3
Ophthalmology . . . . .	...	98.5	5.8	*	4.5	*	39.4	22.7
Orthopedic surgery . . . . .	...	99.3	3.3	*	8.4	6.6	17.7	8.1
Dermatology . . . . .	...	98.6	5.0	*	16.9	5.4	19.6	1.9
Psychiatry . . . . .	...	99.9	*	*	6.2	*	*	*
General surgery . . . . .	...	99.2	1.8	*	12.7	9.1	20.3	2.4
Otolaryngology . . . . .	...	93.3	*	*	5.7	10.7	17.6	6.4
Cardiovascular diseases . . . . .	...	98.7	*	*	6.7	18.5	25.2	5.3
Urology . . . . .	...	98.6	2.6	*	13.4	6.5	16.8	*
Neurology . . . . .	...	98.5	*	—	7.4	*3.5	5.1	3.6
All other specialties . . . . .	...	97.1	1.2	1.0	26.4	3.0	29.8	5.3

* Figure does not meet standard of reliability or precision.

—Quantity zero.

... Category not applicable.

¹Numbers do not add to total because more than one provider may be reported per visit.

Table 21. Number and percent distribution of office visits by patient's referral status, according to prior-visit status: United States, 1996

Referral status	All visits	Prior-visit status		
		New patient	Old patient, new problem	Old patient, old problem
		Number of visits in thousands		
All visits	734,493	102,512	144,855	487,127
Referred for this visit	115,935	41,120	8,916	65,899
Not referred for this visit	618,558	61,392	135,939	421,228
		Percent distribution		
All visits	100.0	100.0	100.0	100.0
Referred for this visit	15.8	40.1	6.2	13.5
Not referred for this visit	84.2	59.9	93.8	86.5

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

Table 22. Number and percent distribution of office visits by physician specialty, according to referral status and prior-visit status: United States, 1996

Physician specialty	Number of visits in thousands	Total	Referred for this visit			Not referred for this visit		
			New patient	Old patient, new problem	Old patient, old problem	New patient	Old patient, new problem	Old patient, old problem
Percent distribution								
All visits	734,493	100.0	5.6	1.2	9.0	8.4	18.5	57.3
General and family practice	186,190	100.0	0.9	0.8	1.7	11.1	25.7	59.8
Internal medicine	102,908	100.0	1.8	0.9	2.6	7.2	22.0	65.5
Pediatrics	96,821	100.0	1.4	*	2.1	7.5	40.7	47.5
Obstetrics and gynecology	66,144	100.0	3.8	1.7	6.9	8.6	13.7	65.5
Ophthalmology	40,735	100.0	6.0	*	10.6	9.4	5.4	67.5
Orthopedic surgery	35,848	100.0	17.5	2.2	21.4	9.4	6.0	43.5
Dermatology	32,937	100.0	11.3	*	11.3	12.0	8.4	55.7
Psychiatry	18,665	100.0	5.2	*	16.1	6.7	*	68.8
General surgery	18,346	100.0	18.7	3.1	20.4	6.2	8.1	43.5
Otolaryngology	20,156	100.0	15.9	*	17.7	9.8	7.1	47.3
Cardiovascular diseases	14,910	100.0	13.5	*	23.8	*	2.8	55.8
Urology	14,018	100.0	11.5	*	29.4	7.5	*	47.9
Neurology	9,575	100.0	25.3	*	33.6	4.4	*	31.7
All other specialties	77,239	100.0	9.8	1.6	21.4	4.1	7.1	56.0

* Figure does not meet standard of reliability or precision.

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

Table 23. Number and percent of office visits by disposition of visit: United States, 1996

Disposition ¹	Number of visits in thousands	Percent of visits
All visits	734,493	...
Return at specified time	459,061	62.5
Return if needed	210,242	28.6
No followup planned	54,520	7.4
Admit to hospital	5,683	0.8
Other	28,390	3.9

... Category not applicable.

¹Numbers do not add to total because more than one disposition may be reported per visit.**Table 24. Number and percent distribution of office visits by duration of visit: United States, 1996**

Duration	Number of visits in thousands	Percent distribution
All visits	734,493	100.0
0 minutes ¹	108,164	14.7
1–5 minutes	30,348	4.1
6–10 minutes	136,690	18.6
11–15 minutes	214,076	29.1
16–30 minutes	194,098	26.4
31–60 minutes	46,223	6.3
61 minutes and over	4,893	0.7

¹Visits in which there was no face-to-face contact between patient and physician.

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

Technical notes

Sampling errors

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

The standard errors used in tests of significance for this report were approximated using generalized linear models for predicting the relative standard error for estimates based on the linear relationship between the actual standard error, as approximated using SUDAAN software, and the size of the estimate. SUDAAN computes standard errors by using a first-order Taylor approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses has been published (16). The relative standard error (RSE) of an estimate is obtained by dividing

Table I. Approximate relative standard errors for estimated numbers of office visits: National Ambulatory Medical Care Survey, 1996

Estimated number of office visits in thousands	Relative standard error in percent
100	78.0
200	55.2
500	35.1
688	30.0
1,000	25.0
2,000	17.9
5,000	11.8
10,000	8.9
20,000	7.0
50,000	5.5
100,000	4.9
200,000	4.6
500,000	4.4
1,000,000	4.4

NOTE: The smallest reliable estimate for visits to aggregated specialties is 688,000 visits. Estimates below this figure have a relative standard error greater than 30 percent and are deemed unreliable by NCHS standards.

Example of use of table: An aggregate estimate of 10 million visits has a relative standard error of 8.9 percent or a standard error of 890,000 visits (8.9 percent of 10 million).

Table II. Approximate relative standard errors for estimated numbers of drug mentions: National Ambulatory Medical Care Survey, 1996

Estimated number of drug mentions in thousands	Relative standard error in percent
100	117.8
200	83.4
500	52.9
1,000	37.6
1,590	30.0
2,000	26.9
5,000	17.5
10,000	13.0
20,000	9.9
50,000	7.6
100,000	6.6
200,000	6.0
500,000	5.7
1,000,000	5.5

NOTE: The smallest reliable estimate of drug mentions for aggregated specialties is 1,590,000 mentions. Estimates below this figure have a relative standard error greater than 30 percent and are deemed unreliable by NCHS standards. Example of use of table: An aggregate estimate of 10 million drug mentions has a relative standard error of 13.0 percent or a standard error of 1,300,000 mentions (13.0 percent of 10 million).

the standard error by the estimate itself. The result is then expressed as a percent of the estimate.

Approximate relative standard errors for estimated numbers of office visits in 1996 are shown in [table I](#); approximate relative standard errors for estimated numbers of drug mentions are presented in [table II](#). Approximate standard errors for estimated percents of visits and drug mentions are displayed in [tables III](#) and [IV](#). Multiplying the estimate by the RSE will provide an estimate of the standard error for the estimate.

Alternatively, relative standard errors for aggregate estimates may be calculated using the following general formula, where x is the aggregate of interest in thousands, and A and B are the appropriate coefficients from [table V](#).

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

Similarly, relative standard errors for percents 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 coefficient from [table V](#).

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

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

Published and flagged estimates

Estimates are not presented unless a reasonable assumption regarding their probability distributions is possible on the basis of the Central Limit Theorem. The Central Limit Theorem states that, given a sufficiently large sample size, the sample estimate approximates the population estimate and, upon repeating 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 are asterisked only if the relative standard error of the estimate exceeds 30 percent. Approximate relative standard errors were computed using a generalized variance curve and the computed curve coefficients as described above.

Adjustments for nonresponse

Estimates from NAMCS data were adjusted to account for sample physicians who were in scope but did not participate in the study. This adjustment was calculated to minimize the impact of response on final estimates by imputing to nonresponding physicians data from visits to similar physicians. For this purpose, physicians were judged similar if they had the same specialty designation and practiced in the same PSU.

Test of significance and rounding

In this report, the determination of statistical inference is based on a 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

Table III. Approximate standard errors of percents of estimated numbers of office visits: National Ambulatory Medical Care Survey, 1996

Base of percent (visits in thousands)	Estimated percent						
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
Standard error in percentage points							
100	7.7	17.0	23.4	31.1	35.7	38.1	38.9
200	5.5	12.0	16.5	22.0	25.2	27.0	27.5
500	3.5	7.6	10.4	13.9	16.0	17.1	17.4
1,000	2.5	5.4	7.4	9.9	11.3	12.1	12.3
2,000	1.7	3.8	5.2	7.0	8.0	8.5	8.7
5,000	1.1	2.4	3.3	4.4	5.0	5.4	5.5
10,000	0.8	1.7	2.3	3.1	3.6	3.8	3.9
20,000	0.6	1.2	1.7	2.2	2.5	2.7	2.8
50,000	0.4	0.8	1.0	1.4	1.6	1.7	1.7
100,000	0.2	0.5	0.7	1.0	1.1	1.2	1.2
200,000	0.2	0.4	0.5	0.7	0.8	0.9	0.9
500,000	0.1	0.2	0.3	0.4	0.5	0.5	0.6
1,000,000	0.1	0.2	0.2	0.3	0.4	0.4	0.4

NOTE: Example of use of table: An estimate of 30 percent based on an aggregate estimate of 10 million visits has a standard error of 3.6 percent or a relative standard error of 12.0 percent (3.6 percent divided by 30 percent).

Table IV. Approximate standard errors of percents of estimated numbers of drug mentions: National Ambulatory Medical Care Survey, 1996

Base of percent (drug mentions in thousands)	Estimated percent						
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
Standard error in percentage points							
100	11.7	25.6	35.3	47.1	53.9	57.6	58.8
200	8.3	18.1	25.0	33.3	38.1	40.8	41.6
500	5.2	11.5	15.8	21.0	24.1	25.8	26.3
1,000	3.7	8.1	11.2	14.9	17.1	18.2	18.6
2,000	2.6	5.7	7.9	10.5	12.1	12.9	13.2
5,000	1.7	3.6	5.0	6.7	7.6	8.2	8.3
10,000	1.2	2.6	3.5	4.7	5.4	5.8	5.9
20,000	0.8	1.8	2.5	3.3	3.8	4.1	4.2
50,000	0.5	1.2	1.6	2.1	2.4	2.6	2.6
100,000	0.4	0.8	1.1	1.5	1.7	1.8	1.9
200,000	0.3	0.6	0.8	1.1	1.2	1.3	1.3
500,000	0.2	0.4	0.5	0.7	0.8	0.8	0.8
1,000,000	0.1	0.3	0.4	0.5	0.5	0.6	0.6

NOTE: Example of use of table: An estimate of 30 percent based on an aggregate estimate of 100 million drug mentions has a standard error of 1.7 percent or a relative standard error of 5.7 percent (1.7 percent divided by 30 percent).

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

Injury groupings

Table 8 of this report presents data on the intent and mechanism producing the injuries that resulted in ambulatory

care visits to physician offices. Cause of injury is collected for each sampled visit in the NAMCS and is coded according to the ICD-9-CM's "Supplementary Classification of External Causes of Injury and Poisoning." For table 8, however, the first-listed cause of injury data were regrouped to highlight the interaction between intentionality of the injury and the mechanism that actually produced the injury. Table VI shows the groupings used to produce this table.

Population figures and rate calculation

The figures represent U.S. Bureau of the Census estimates of the civilian, noninstitutionalized population as of July 1, 1996. Figures are based on

monthly postcensal estimates of this population. Figures are consistent with an unpublished hard-copy national population estimates release package PPL-57 (U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990-96) and have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix (3). Regional and metropolitan estimates have been provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1, 1996. DHIS estimates are provisional at this time and differ slightly from monthly postcensal estimates because of differences in the adjustment process.

Table V. Coefficients appropriate for determining approximate relative standard errors by type of estimate and physician specialty: National Ambulatory Medical Care Survey, 1996

Type of estimate and physician specialty	Coefficient for use with estimates in thousands		Lowest reliable estimate (in thousands)
	A	B	
Visits			
Overall totals	0.001839	60.586	688
General and family practice	0.009331	50.163	739
Internal medicine	0.010970	38.222	489
Pediatrics	0.013278	46.863	611
General surgery	0.013993	11.281	150
Obstetrics and gynecology	0.008410	29.099	362
Orthopedic surgery	0.009513	15.120	192
Cardiovascular diseases	0.021292	12.598	185
Dermatology	0.012669	16.886	193
Urology	0.016301	12.515	157
Psychiatry	0.020025	14.500	207
Neurology	0.033166	8.307	156
Ophthalmology	0.017404	25.615	354
Otolaryngology	0.016463	15.049	210
All other specialties	0.015747	35.879	503
Drug mentions			
Overall totals	0.002934	138.391	1,590
General and family practice	0.013626	73.447	1,281
Internal medicine	0.016660	63.944	882
Pediatrics	0.020170	59.451	856
General surgery	0.053746	12.737	317
Obstetrics and gynecology	0.020568	38.920	586
Orthopedic surgery	0.011535	21.222	276
Cardiovascular diseases	0.033886	23.371	420
Dermatology	0.019808	16.080	235
Urology	0.029436	13.782	214
Psychiatry	0.042132	26.835	717
Neurology	0.072726	9.975	634
Ophthalmology	0.038611	35.292	697
Otolaryngology	0.027013	15.343	250
All other specialties	0.038099	59.072	1,163

NOTE: These coefficients apply to NAMCS data where doctors of osteopathy (D.O.'s) have been aggregated with doctors of medicine (M.D.'s) according to their self-designated practice specialty. For those who wish to conduct a separate analysis on visits to doctors of osteopathy, the A and B coefficients for use with visit estimates in thousands are 0.01811 and 17.809, respectively. The corresponding coefficients for estimates of drug mentions in thousands are 0.028646 and 22.645. To perform analysis of NAMCS data on visits to MD's excluding all DO's, please contact the Ambulatory Care Statistics Branch for additional information.

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.

Drug mention—A drug mention is the physician's entry on the 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. Physicians 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.

Office—An office is the space identified by a physician as a location for his or her ambulatory practice. Offices customarily include consultation, examination, or treatment spaces that patients associate with the particular physician.

Physician—A physician is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) who is currently in office-based practice and who spends some time caring for ambulatory patients. Excluded from the

NAMCS are physicians who are hospital-based; who specialize in anesthesiology, pathology, or radiology; who are federally employed; who treat only institutionalized patients; or who are employed full time by an institution and spend no time seeing ambulatory patients.

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

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

Intent and mechanism of injury	Cause of injury code ¹
Unintentional injuries	E800–E869,E880–E929
Falls	E880.0–E886.9,E888
Motor vehicle traffic	E810–E819
Striking against or struck accidentally by objects or persons	E916–E917
Overexertion and strenuous movements	E927
Cutting or piercing instruments or objects	E920
Natural and environmental factors	E900–E909,E928.0–E928.2
Poisoning by drugs, medicinal substances, biologicals, other solid and liquid substances, gases, and vapors	E850–E869
Fire and flames, hot substance or object, caustic or corrosive material, and steam	E890–E899,E924
Machinery	E919
Pedal cycle, nontraffic and other	E800–E807(.3),E820–E825(.6),E826.1,E826.9
Motor vehicle, nontraffic	E820–E825 (.0,.5,.7,.9)
Other transportation	E800–807(.0–.2,.8–.9), E826 (.0,.2–.8),E827–E829,E831,E833–E845
Firearm missile	E922
Other and not elsewhere classified	E846–E848,E911–E915,E918,E921,E923,E925–E926,E929.0–E929.5,E928.8
Mechanism unspecified	E887,E928.9,E929.8,E929.9
Intentional injuries	E950–E959,E960–E969,E970–E978,E990–E999
Assault	E960–E969
Self-inflicted	E950–E959
Other causes of violence	E970–E978,E990–E999
Injuries of undetermined intent	E980–E989
Adverse effects of medical treatment	E870–E879,E930–E949

¹Based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD–9–CM)*, Supplementary Classification of External Causes of Injury and Poisoning (5).

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

Woodwell DA. National Ambulatory Medical Care Survey: 1996 Summary. Advance data from vital and health statistics; no. 295. Hyattsville, Maryland: National Center for Health Statistics. 1997.

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
PHS/NCHS
PERMIT NO. G-281

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-436-8500
E-mail: nchsquery@cdc.gov
Internet: <http://www.cdc.gov/nchswwww/nchshome.htm>

DHHS Publication No. (PHS) 98-1250
8-0087 (12/97)