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# National Ambulatory Medical Care Survey: 2002 Summary 

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#### Abstract

Objective-This report describes ambulatory care visits made to physician offices in the United States. Statistics are presented on selected characteristics of the physician's practice, the patient, and the visit. This report also highlights visits to primary care specialties.

Methods-The data presented in this report were collected from the 2002 National Ambulatory Medical Care Survey (NAMCS). NAMCS is a part of the ambulatory care component of the National Health Care Survey that measures health care utilization across various types of providers. NAMCS is a national probability sample survey of visits to office-based physicians in the United States. Sample data are weighted to produce annual national estimates. Selected trends from 1992, 1993, 1995, and 1997 are also presented.

Results—During 2002, an estimated 890 million visits were made to physician offices in the United States, an overall rate of 314.4 visits per 100 persons. From 1992 through 2002, the visit rate for persons 45 years of age and over increased by $14 \%$, from 407.3 to 465.8 visits per 100 persons. The visit rate to physician offices in metropolitan statistical areas (MSAs) ( 337.3 visits per 100 persons) was significantly larger than the rate in non-MSAs ( 221.9 visits per 100 persons). For one-half of all office visits, regardless of specialty, physicians indicated they were the patient's primary care physician (PCP). Of the visits to physicians other than the patient's PCP, about one-third ( 31.1 percent) were referrals. New patients, representing 12.1 percent of the visits in 2002 , are down $18 \%$ since 1992 . Primary care specialists provided 90 percent of all preventive care visits. Essential hypertension, acute upper respiratory infection, diabetes mellitus, and arthropathies were the leading illness-related primary diagnoses. There were an estimated 104.0 million injury-related visits in 2002, or 36.7 visits per 100 persons. On average, 2.3 medications were ordered or provided at each office visit with any mention of a medication. The leading therapeutic class for drugs mentioned at office visits included nonsteroidal anti-inflammatory drugs (NSAIDs) (4.9 mentions per 100 visits) and antidepressants ( 4.5 mentions per 100 visits). Of primary care specialists, 25.8 percent reported not accepting new patients who are Medicaid enrollees.


Keywords: ambulatory care • physician office care • diagnoses • injury • medications • ICD-9-CM • primary care

## Introduction

The National Ambulatory Medical Care Survey (NAMCS), which began in 1973, collects 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, NAMCS and NHAMCS data provide an important tool for tracking ambulatory health care utilization in the United States. The NAMCS and NHAMCS are part of the National Health Care Survey (NHCS), which measures health care utilization across various types of providers. More information about the NHCS can be found at the National Center for Health Statistics (NCHS) Web site: www.cdc.gov/nchs/nhcs.htm. More information on the 2002 NHAMCS annual summaries (hospital outpatient and emergency departments) is available (1,2). A separate report combining NAMCS and NHAMCS data provides a comprehensive picture of ambulatory health care utilization (3). It shows that 80 percent of ambulatory
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care delivered by non-Federal physicians is provided in office-based practices. Hospital ambulatory patients are known to differ from office patients in certain demographic and medical characteristics.

This report presents national annual estimates of physician office visits for 2002. Physician practice, patient, and visit characteristics are described. A special section is presented this year on visits to primary care specialists, and additional information is also presented throughout the report.

## Data Highlights

## Office visit estimates

- In 2002, 890.0 million visits were made to physician offices, or about 314.4 visits per 100 persons. Of these visits, 62.7 percent were made to primary care specialists, 19.9 percent to surgical specialists, and the remaining 17.3 percent to medical specialists.
- From 1992 through 2002, the visit rate for persons 45 years of age and over increased by $14 \%$, from 407.3 to 465.8 visits per 100 persons.
- The visit rate for white persons (334.6 visits per 100 persons) was higher than for black or AfricanAmerican persons (252.9 visits per 100 persons) or Asians (229.3 visits per 100 persons).
- Private insurance was the most frequently expected source of payment, accounting for 59.0 percent of all visits, and government sources combined (Medicare and Medicaid and/or State Children's Health Insurance Program (SCHIP)) accounted for 28.6 percent of visits.
- From 1992 through 2002, the percent of visits by patients with private insurance increased by $79 \%$, and the percent of visits where there was no third-party payer decreased by $77 \%$.
- Of visits made to office-based physicians, 13.9 percent were referred for the current visit.
- There were 104 million injury visits to office-based physicians in 2002. The visit rate for injuries increased with patient age, resulting in a rate of 63.3 visits per 100 persons for
patients 65 years of age and over. White persons had a significantly greater rate of injury visits than did black or African-American persons ( 39.6 versus 25.1 visits per 100 persons). Fifty percent were to primary care specialists.


## Services provided

- Although the rate of preventive care visits was higher for females than for males, there were no race differences observed. Ten percent of preventive care visits were made to specialists.
- Diagnostic and screening services were ordered or provided at 84.9 percent of visits, counseling and/or education and/or therapeutic services were ordered or provided at 44.7 percent of visits, and surgical procedures were ordered or provided at 9.1 percent of visits. An estimated 69.8 million surgical procedures were ordered, scheduled, or performed during office visits. Approximately 45 percent of the surgical procedures mentioned at visits were performed in the office.
- About 1.3 billion drugs were prescribed or provided at 64.8 percent of office visits. Although the percent of visits with any drug mention did not change, the average drug mention rate increased by $25 \%$ from 1992 to 2002. This was driven by a $41 \%$ increase in visits with multiple drugs prescribed since 1992.
- Overall, the drug mention rate in 2002 was similar to 2001, but varied by physician specialty ( 60.7 versus 307.8 mentions per 100 visits). The drug mention rate for obstetrics/ gynecology (Ob/Gyn) physicians increased 48\% from 2001, driven mostly by increases in contraceptives and vitamins.
- The top three therapeutic classes, NSAIDs, antidepressants, and antihistamines, increased significantly from 1995. Antidepressants increased $48 \%$ during this period due to the increases in the drug mention rate for all ages. From 1995 through 2002, the drug mention rate at visits by children under 18 years of age rose $124 \%$.
- A physician was seen during most office visits ( 95.1 percent). During approximately 25 percent of the visits a medical/nursing assistant was seen.


## Visits to primary care specialists

- The majority of the 890 million office visits were to primary care specialists (62.7 percent) and of these visits most were to the patient's PCP (76.2 percent).
- Approximately 40 percent of the visits to primary care specialists were for acute problems, followed by 30 percent for chronic conditions. Ten percent were injury-related visits.
- Of the 558 million visits to primary care specialists in 2002, 70.6 percent included at least one medication ordered, supplied, administered, or continued. Vaccines accounted for almost 6 percent of the drug mentions.
- Half of the primary care visits resulted in a disposition to return for an appointment.


## Physician-level estimates

- In 2002, office-based physicians reported an average of 77 office visits, 14 hospital visits, 14 telephone consultations, 1.3 house calls, and 0.4 e-mail consultations during their last full week of practice.
- Approximately three-fourths of office-based physicians own or are part owner of their practice (72.7 percent). A greater percent of primary care specialists were employees compared with surgical or medical specialists ( 28.2 percent versus 16.2 and 17.0 percent, respectively). Two-thirds of primary care specialists work in group practices.
- Of primary care specialists, 71.8 percent reported that they would accept new Medicare patients, a significantly lower percent than surgical specialists ( 96.4 percent). Similarly, 67.4 percent of primary care specialists reported that they would accept new Medicaid patients,
significantly lower than for surgical specialists (80.0 percent).


## Methods

The data presented in this report are from the 2002 NAMCS, a national probability sample survey conducted by the Centers for Disease Control and Prevention's Division of Health Care Statistics of the National Center for Health Statistics. The survey was conducted from December 31, 2001, through December 30, 2002. The target universe of the NAMCS includes visits made in the United States to the offices of non-federally 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 (HMOs) were within the scope of the survey, but those that occurred 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 (PSUs), physician practices within PSUs, and patient visits within physician practices. The PSUs are counties, groups of counties, county equivalents (such as parishes or independent cities), or towns and townships for some PSUs in New England. A sample of physicians was selected from the master files of the AMA and the AOA; 2,095 were in scope (eligible to participate in the survey). Sample physicians were asked to complete Patient Record forms (see figure I) for a systematic random sample of approximately 30 office visits occurring during a randomly assigned 1-week reporting period. The weighted response rate for in-scope physicians was 71.1 percent, and a total of 28,738 Patient Record forms were completed. The "Technical Notes" at the end of
this report provide more information on characteristics of nonresponding physicians.

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" include an explanation of the sampling errors with guidelines for judging the precision of the estimates and information on physician and item nonresponse. The standard errors are calculated using Taylor series approximations in SUDAAN, which take into account the complex sample design of the NAMCS (4). Data on physician office utilization rates from 1992 through 2002 and selected trends by patient age are also presented. A weighted least-squares regression analysis was used to determine the significance of trends at the 0.05 level.

The U.S. Census Bureau was responsible for data collection. Data processing operations and medical coding were performed by Constella Group, 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 1.1 percent for various survey items.

Several of the tables in this report present rates of physician office visits per population. The population figures used in calculating these rates are based on the U.S. Census Bureau's monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2002. These population estimates are based on postcensal estimates from Census 2000 and are available from the Census Bureau. See the "Technical Notes" for more information about the effects of the change from 1990-based to 2000based denominators on trends in population rates. Estimates presented in the tables and figures for specific race categories reflect visits where only a single race was reported. See "Technical Notes" for more detail on race estimates.

## Results

Results are presented separately for office visit estimates and physician practice estimates.


Figure 1. Trends in rate of visits to physician offices by persons 45 years of age and over: United States, 1995-2002

## Office visit estimates

There were an estimated 890.0 million visits to office-based physicians in 2002, about 314.4 visits per 100 persons. Although the population of the United States increased by $13 \%$ since 1992, the number of visits to physician offices increased by $17 \%$ (5). Visit rates for age groups 45 years and over increased by $20 \%$ since 1995 (figure 1). Selected characteristics of the encounter pertaining to the physician's practice, the patient, and the visit are described later in this report. Estimates of physician practices and associated
characteristics based on the induction interview are presented at the end of the report.

Office practice characteristics-The distribution of office visits according to physician specialty is presented in table 1 and figure 2. About one-quarter of all visits were to general and family practice physicians with an additional 39.0 percent of visits to physicians specializing in internal medicine, pediatrics, and $\mathrm{Ob} / \mathrm{Gyn}$. Of all the office visits made in 2002, about 6 out of every 10 were to physicians in primary care specialties ( 62.7 percent) as defined in table IV of the "Technical Notes." Throughout this report, the terms "visits to primary care specialists/specialties"


Figure 2. Percent distribution of office visits by physician specialty: United States, 2002


Figure 3. Annual rate of visits to office-based physicians by patient's age and sex: United States, 2002
and "primary care visits" will be used interchangeably. Surgical and medical specialties accounted for 19.9 and 17.3 percent of visits, respectively. Table 1 also shows that doctors of osteopathy received 65.4 million visits during 2002, or 7.3 percent of all office visits. Visits to osteopathic physicians occurred at a rate of 23.1 visits per 100 persons. Visits according to geographic region and metropolitan status are also displayed in table 1. The visit rates were similar for each of the geographic regions, except the visit rate for the Northeast region (385.2 visits per 100 persons) was significantly higher than the rate in the West ( 289.4 visits per 100 persons). The visit rate to physician offices located in MSAs (337.3 visits per 100 persons) was significantly larger than the rate observed in non-MSAs (221.9 visits per 100 persons).

Additional information on the physician's practice has been collected annually in the NAMCS through the Physician Induction Interview (PII) form. The PII is used to obtain basic information on the practice, establish the visit sampling rate, and record the final disposition of the interview. In 2002, selected survey items on the physician and physician's practice, including employment status, ownership, practice size, and office type, were weighted and edited to produce national estimates of office visits by these characteristics. These data demonstrate the type of practices to which visits are being made and are displayed in table 2. Overall, 86.2 percent of the visits were to physicians who owned the practice themselves or owned it with a group of other physicians. The majority of office visits ( 64.7 percent) were made to physicians engaged in group practice. More than one-half of all visits were to physicians in practices with 2-9 physicians ( 53.0 percent) compared with 11.3 percent of visits to large practices with 10 or more physicians.
Significantly more visits to group practices were characterized as singlespecialty practices (41.2 percent) compared with multispecialty practices (23.5 percent).

Patient characteristics-Office visits by patient's age, sex, and race are shown in table 3. As in previous years,


Figure 4. Annual rate of visits to office-based physicians by patient's age and race: United States, 2002
females made the majority of office visits during 2002. The percent of visits was higher for females compared with males across all age groups except for persons under 15 years of age. Sex differences were also observed for visit rates between 15 and 64 years of age. For those patients 15 years of age and over, as age increased, the number of patient visits rose. The positive effect of age on physician office utilization is shown in figures 3 and 4.

White persons represented 81 percent of the U.S. civilian noninstitutional population in 2002, but made 86.1 percent of all physician office visits. Overall, the visit rate for white persons ( 334.6 visits per 100 persons) was significantly higher than for black or African-American persons (252.9 visits per 100 persons), Asians (229.3 visits per 100 persons), and American Indian or Alaska Native (82.9 visits per 100 persons). Historically, visit rates for black or African-American persons to physician offices tend to be lower than those for white persons. However, differences in visit rates by race can vary by type of health care setting utilized. Data presented in the 2002 NHAMCS outpatient department summary indicate that the visit rate for black or African-American persons (52.8 visits per 100 persons) was higher than for white persons (26.8 visits per 100
persons) (1). Visits made by patients identified as Asian accounted for 3.0 percent of all physician office visits, and patients who were Native Hawaiian or other Pacific Islander and American Indian or Alaska Native each accounted for about 1 percent of the office visits. Patients who claimed multiple race categories also accounted for 1 percent of office visits.

Continuity of care—Continuity of care is a goal of health care achieved through an interdisciplinary process involving patients, families, health care professionals, and providers in the management of a coordinated plan of care. It may involve multiple professionals from many different disciplines within multiple systems. The NAMCS collects information on aspects of care (e.g., whether the physician was the patient's primary care physician (PCP), whether the visit was a referral, and the number of visits within the past 12 months) that can help describe where the visit fits within the continuum of care for the patient.

In 2002, 50.4 percent of physician office visits were to the patient's PCP; 44.0 percent were to physicians other than the patient's PCP, and at 5.6 percent of visits it was unknown if the physician was the patients PCP (table 4). Visits by new patients were more likely
to be referrals than visits made by established patients ( 46.3 percent versus 9.3 percent).

Table 5 describes visits to PCPs and non-PCPs in terms of referral status and physician specialty. It should be noted that not all visits to the patient's PCP were to physicians who specialize in primary care. Among visits to the patients' PCP, 5.1 percent were to physicians specializing in either surgical or medical specialties (data not shown). Among visits to non-PCPs, the specialties with visits most frequently referred by other physicians are neurology ( 55.2 percent), urology ( 50.9 percent), and orthopedic surgery ( 45.5 percent). More than one-half of visits to $\mathrm{Ob} / \mathrm{Gyns}$, ophthalmologists, dermatologists, and psychiatrists were self referrals.

Table 6 shows the prior visit status, whether the care for the patient was shared by other physicians, and the episode of care. As shown, established patients accounted for 86.7 percent of office visits. Three-quarters of office visits ( 75.6 percent) were made by established patients who had at least one previous visit in the last 12 months and more specifically, 22.7 percent had six or more visits in the previous 12 months. New patients accounted for 12.1 percent of visits representing an $18 \%$ decrease from 1992. Medical and surgical care specialists were more likely to share care with other physicians ( 28.4 percent and 31.6 percent, respectively) compared with primary care specialists (18.4 percent).

## Primary expected source of

 payment-Private insurance was cited most frequently as the primary expected source of payment ( 59.0 percent of visits). Government sources combined (Medicare and Medicaid and/or SCHIP accounted for 28.6 percent of office visits, most of which were Medicare (table 7). From 1992 through 2002, private insurance increased $79 \%$ (from 32.9 percent to 59.0 percent) and visits with no third-party payer (as defined by self-pay and no charge/charity) decreased by $77 \%$ (from 20.7 to 4.7 percent) (data not shown). Primary care specialists saw a significantly greater percent of visits that were paid

Figure 5. Percent distribution of office visits by primary expected source of payment, according to patient age: United States, 2002
where private insurance ( 63.3 percent) was the primary expected source of payment than did surgical specialtists (52.4 percent) or medical specialtists (51.4 percent). Visits that had a primary expected source of payment of either Medicare or Medicaid/SCHIP represented a significantly greater percent of visits to surgical specialists compared with primary care specialists (34.5 percent versus 26.3 percent) (data not shown).

As expected, source of payment varied by patient age (figure 5). Private insurance was the primary expected source of payment at a majority of visits by patients under age 65 years and only represented 17.8 percent of visits by persons 65 years of age and over. Three-quarters of visits by elderly patients listed Medicare as the primary source of payment at office visits (74.2 percent). Private insurance accounted for a larger share of visits in MSAs as opposed to non-MSAs (60.8 versus 48.3 percent, respectively) (data not shown). Medicare and Medicaid accounted for a greater share of visits in non-MSAs as opposed to MSAs (27.5 and 13.4 percent in non-MSAs versus 20.1 and 6.6 percent in MSAs).

Patient's principal reason for visit-The principal reason for visit is the main complaint, symptom, or reason
listed for why the patient came to the physician's office. Up to three reasons for visit were coded according to $A$ Reason for Visit Classification for Ambulatory Care (RVC) (6). The RVC is a classification scheme developed by NCHS that has been used for over 20 years to code patients' complaints or reasons for seeking care. It is divided into eight modules or groups of reasons as shown in table 8 and includes all the reasons for which patients see their physicians. This includes symptoms, followup 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 three- or four-digit classification code (e.g., S845"Symptoms of skin mole" is further detailed to S845.1- "Change in size and color" and S845.2- "Bleeding mole").

In 2002, one-half of all visits were made for reasons classified as symptoms. Some of the more prominent symptoms included respiratory (10.5 percent), musculoskeletal
(10.0 percent), and symptoms referable to the eyes and ears, which accounted for 5.5 percent of all visits (table 8).

The 20 most frequently mentioned principal reasons for visit, representing 42.5 percent of all visits, are shown in table 9. General medical examination was the most frequently mentioned reason for visit at 7.3 percent of all office visits, and cough was the most frequently mentioned reason regarding an illness or injury ( 3.2 percent). All but two of the reasons for office visits in 2002 were listed in the 20 most frequently mentioned reasons in 2001, albeit in a different order. It should be noted that estimates differing in ranked order may not be significantly different from each other.

The major reason for this visit provides a better picture of the general nature of the office visit-whether for an acute problem; routine visit for a chronic problem; visit for a flare-up of a chronic problem; pre- or post-surgery visit; or for preventive care, including routine prenatal examinations, general medical examinations, well-baby examinations, screening, and examinations for insurance purposes. The major reason for visit item differs from the principal reason for visit item in that the former represents the physician's rather than the patient's perspective of the major reason why the patient sought care. Acute problems comprised 36.4 percent of the visits, and routine chronic problems accounted for 29.7 percent (table 10). Approximately 16.3 percent of all visits were for preventive care. A higher percent of visits by females were for preventive care compared with visits by males. The percent of visits for acute and preventive care declined with patient age, whereas the percent of visits for chronic conditions increased with patient age.

Table 11 describes the frequency of preventive care visits by patient, visit, and physician characteristics. The female visit rate for preventive care was significantly greater than the rate for males ( 66.9 visits per 100 females versus 34.6 visits per 100 males). These sex differences reflect, in part, the fact that preventive care includes prenatal examinations that usually include
multiple visits within 1 year. In 2002, 18.1 percent of the preventive visits made by females also included a visit made for normal pregnancy (any diagnosis coded V22) (data not shown). However, even after removing visits for normal pregnancy, females still had a higher visit rate ( 54.8 visits per 100 females) compared with males (34.6 visits per 100 males) (data not shown). There was no difference in visit rates for preventive care by sex among children under 15 years of age or among the elderly ( 65 years old and over). Uninsured persons (as measured by self-pay and charity visits) had a much lower preventive care visit rate compared with persons with private or public health insurance, placing them at a potential disadvantage for disease prevention and early diagnosis.

Primary diagnosis—Physicians 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 International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (7). Table 12 shows office visits by the physician's primary diagnosis using the major disease categories specified in the ICD-9-CM. 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 16.4 percent of all office visits. Diseases of the respiratory system (12.6 percent), diseases of the circulatory system ( 9.0 percent), and diseases of the nervous system and sense organs ( 8.9 percent) were also prominent categories on the list.

The 20 most frequently reported primary diagnoses for 2002, accounting for 42.8 percent of all physician office visits, are shown in table 13. The categories in this table are also based on the ICD-9-CM. The leading illness diagnoses include essential hypertension, acute upper respiratory infections (excluding pharyngitis), diabetes mellitus, arthropathies and related disorders, and spinal disorders.

Injury-related visits—Although there is a separate item or checkbox on the Patient Record form to indicate whether the visit was for an injury, poisoning, or adverse medical treatment, 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 injury checkbox is coded "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 ICD-9-CM. 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 is documented elsewhere (8).

There were an estimated 104.0 million injury- or poisoning-related office visits in 2002, representing 11.7 percent of all visits and yielding a rate of 36.7 visits per 100 persons (table 14). The injury-related visit rate increased significantly with patient age. The rate for patients aged 75 years and over ( 63.3 visits per 100 persons) was approximately double that of the three age groups under 45 years of age. The injury-related visit rate for females was not significantly different from the rate for males nor were there differences between the female and male rates when compared by each of the specific age groups. The overall injury-related visit rate for white persons ( 39.6 visits per 100 persons) was higher than the injury-related rate for black or AfricanAmerican persons ( 25.1 visits per 100 persons) and persons of "other" race (23.6 visits per 100 persons). Small sample sizes preclude analysis by age within some race groups. Half of the injury visits were to primary care specialists ( 50.5 percent) with no significant difference between white and black or African-American persons (data not shown). Further information on injury visits to physician offices is available on the public-use file, including external cause-of-injury codes (E-codes) and a narrative of the cause of injury.

Office visits by intent and mechanism of the first-listed E-codes
are shown in table 15. Up to three external causes of injury were coded according to the "Supplementary Classification of External Causes of Injury and Poisoning" in the ICD-9CM (7). Cause of injury was not recorded for 38.0 percent of injuryrelated visits, so the observed distribution could change with more complete reporting. For a detailed description of the cause-of-injury codes, refer to table III in the "Technical Notes."

Diagnostic and screening services-Table 16 displays examinations and diagnostic and screening services ordered or provided by physicians during office visits. At least one such service was ordered or provided at 84.9 percent of office visits, resulting in approximately 204 services per 100 visits. Information on diagnostic services was missing for 0.9 percent of visits.

The most frequently occurring diagnostic service was a general medical examination; one-half of all visits (49.7 percent) included a general medical examination. Some of the most frequent laboratory tests ordered included urinalysis ( 9.6 percent), complete blood count ( 8.8 percent), and cholesterol ( 5.2 percent) (table 16). Imaging was ordered or provided at 10.9 percent of visits; the majority of imaging services were x-rays. Visits by females were more likely to have imaging performed compared with visits by males, a difference due mostly to mammographies. The percent of visits that had any imaging ordered or provided increased significantly from 3.9 percent in 1993 to 4.5 percent in 2002 (data not shown).

Counseling/education and therapeutic services-Therapeutic and preventive services (not including medication therapy, which was reported separately) were ordered or provided at 44.7 percent of all office visits during 2002, resulting in approximately 68 services per 100 visits. The most frequent counseling or education provided at office visits related to diet and/or nutrition (14.3 percent) and exercise ( 10.0 percent) (table 17). Females were just as likely as males to have any one of the 10 listed
counseling, education, or therapeutic services ordered or provided at an office visit. Information regarding therapeutic services was missing for 2.1 percent of visits.

Procedures-In item 8 of the Patient Record form, physicians were instructed to record up to two surgical procedures ordered, scheduled, or performed at the visit. Item 6, "Diagnostic and screening services," included two open-ended "other" categories in addition to the checkbox categories. After analyzing data from the "other" categories and the surgery checkbox (item 8), it was discovered that the same procedure was being recorded in different places on different records. Table 18 presents data from item 8 and the open-ended responses to item 6 as coded to ICD-9-CM volume 3 in the range of 01-86 (7). During 2002, there were an estimated 69.8 million surgical procedures ordered or performed during visits to office-based physicians resulting in approximately 10 surgical procedures per 100 visits. About 9.1 percent of visits had such procedures ordered or performed (up by $72 \%$ since 1992) (data not shown). About

45 percent of surgical procedures were performed in the office.

## Medication therapy-NAMCS

respondents 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 according to a classification system developed at NCHS. A report describing the method and instruments used to collect and process drug information is available (9). 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 drug mentions are termed "drug visits" in the NAMCS. Data on medication therapy are in tables 19-23.

Medication therapy was reported at 577.1 million office visits, accounting


Figure 6. Trends in drug mention rates for NSAIDs, antidepressants, and antihistamines at physician office visits: United States, 1995-2002
for 64.8 percent of all office visits (table 19). During 2002, there were about 1.3 billion drugs mentioned, resulting in an overall drug mention rate of 151.4 mentions per 100 visits. Data on drug visits and drug mentions by physician specialty are shown in table 20. The percent of visits with at least one drug mention ranged from 82.6 percent for psychiatrists to 28.1 percent for general surgeons. The overall drug mention rate was similar to last year's; however, the drug mention rate for $\mathrm{Ob} / \mathrm{Gyn}$ physicians increased $48 \%$ from 55.5 mentions per 100 visits in 2001 to 82.4 mentions per 100 visits in 2002 (data not shown). Increases in $\mathrm{Ob} / \mathrm{Gyn}$ drug mention rates were driven by a $24 \%$ increase in the percent of visits with any mention of drugs (from 39.6 to 48.9 percent) and a $60 \%$ increase in the mention of contraceptives and vitamins. The drug mention rate for other physician specialties was not significantly different from 2002.

Table 21 presents the 20 most frequent therapeutic classes of drug mentions by four-digit therapeutic classification codes used in the National Drug Code (NDC) Directory, 1995 edition. Drugs may have more than one therapeutic application, and up to three therapeutic drug classes are recorded for each drug (10). Prior to 2002, a drug was classified under its primary
therapeutic use and data were presented for two-digit therapeutic classification codes. Beginning in 2002, drug data are shown for up to three therapeutic subclassifications at the four-digit level. In 2002, the leading drug subclasses were NSAIDs (4.9 percent), followed by antidepressants (4.5 percent), antihistamines ( 4.3 percent), antiasthmatics or bronchodilators (4.0 percent), and vaccines or antisera (4.0 percent).

Examining the top three therapeutic drug classes further, figure 6 shows that between 1995 and 2002 the drug mention rates per 100 visits for NSAIDs, antidepressants, and antihistamines have all increased significantly ( $10 \%, 48 \%$, and $35 \%$, respectively). Increases in drug mention rates by therapeutic class can be driven by numerous factors including how new drugs are classified by the Food and Drug Administration (FDA) and the level of marketing these drugs receive. For example, increases in NSAIDs are directly attributed to the new subclass of drugs called COX-2 inhibitors. Sales of Celebrex and Vioxx have grown briskly since their approval as priority new molecular entities (NMEs) and from intensive marketing aimed at both consumers and physicians (11). Since 1999, the number of NAMCS drug mentions for Celebrex increased $44 \%$ and since 2000 Vioxx mentions


NOTE: Trends shown are significant ( $p<0.05$ ).
Figure 7. Trends in antidepressant drug mention rates at physician office visits by patient's age: United States, 1995-2002
increased 17\%. Direct-to-consumer (DTC) marketing, along with the creation of nonsedating second- and third-generation drugs, represent two major reasons for the rise in the antihistamine mention rate since 1995 $(12,13)$. The leading antihistamine mentioned in 2002 was Zyrtec, which was approved by the FDA in 1996. Other leading antihistamines include Allegra and Claritin.

Many factors have also been attributed to the rise in antidepressant drug mention rates. Figure 7 shows trends from 1995 through 2002 among four age groups: under 18 years, 18-44 years, 45-64 years, and 65 years and over. The rate of visits with antidepressants mentioned significantly increased for all age groups, with visits by younger patients showing the largest rate increase from 1995. For patients under 18 years of age, the number of


Figure 8. Trends in the drug mention rates for antidepressants by subclass at physician office visits: United States, 1992-2002
mentions per 100 visits increased $124 \%$; for patients aged 18-44 years, the rate increased $57 \%$; the rate increased $39 \%$ for patients aged 45-64 years; and increased $29 \%$ for seniors aged 65 years of age and over. Observed increases in NAMCS antidepressant mention rates were not surprising given the fact that from 1987 through 1997, more individuals were being treated for depression. Treatments typically involved more psychotropic medications and comparatively less psychotherapy, and physicians became more involved in the treatment of depression versus other mental health professionals (14).
Research has suggested that an increase in antidepressant prescribing has been directly related to the introduction of the new subclass of antidepressants called selective serotonin reuptake inhibitors (SSRIs) (15). Compared with all other classes of antidepressants, SSRIs now represent the preferred class of drugs used by physicians in treating patients with major depression. These drugs are especially attractive alternatives to older, once popular, tricyclic antidepressants (TCAs) because they typically possess fewer adverse side effects, have a reduced risk of suicide-related deaths, involve simpler dosing patterns, and have equivalent antidepressant effectiveness as TCAs (16). Figure 8 demonstrates this increase in SSRIs and decrease of TCAs. Since 1992, SSRIs have increased from 0.7 drug mentions per 100 visits to 4.1 drug mentions per 100 visits in 2002, an increase of approximately $500 \%$. TCAs declined from 1.5 drug mentions per 100 visits in 1992 to 0.8 drug mentions per 100 visits in 2002, a decrease of approximately $47 \%$.

The 20 most frequently used generic substances for 2002 are shown in table 22. 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. Compared with the 19 other generic substances and consistent with previous years, acetaminophen was most frequently used in drugs ordered or provided by the physician at office visits, occurring
in 3.4 percent of drug mentions. This was followed by amoxicillin, hydrochlorothiazide, albuterol, and aspirin.

Table 23 presents the 20 medications most frequently mentioned by physicians in the NAMCS according to the name written on the Patient Record form. This could be a brand name, generic name, or therapeutic effect. Lipitor accounted for 18.8 million mentions ( 1.4 percent of the total) and was followed by albuterol, amoxicillin, Synthroid, and Lasix. Fifteen of these drugs were among the top 20 drug entry names mentioned in 2001.

Providers seen-In this item, staff were asked to check all of the providers seen during the visit. Overall, 95.1 percent of visits were attended by a physician (table 24). Medical and/or nursing assistants were seen at 27.3 percent of office visits. Midlevel providers, such as physician assistants,
nurse practitioners, and/or midwives, were seen at 3.1 percent of physician office visits.

Visit disposition—Staff were asked to record all visit dispositions and instructed that multiple responses could be coded for this item. For 6 out of 10 visits ( 60.4 percent), patients were told to return to the office by appointment (table 25). "Return if needed" and "no followup planned" were indicated at 27.4 and 8.5 percent of visits, respectively. Patients were referred to other physicians at 7.3 percent of visits.

Time spent with physician-Data on the duration of office visits are presented in tables 26 and 27 . Time spent in face-to-face contact between the physician and the patient is estimated and recorded by the physician. 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


Figure 9. Characteristics of visits to office-based physicians, by specialty: United States, 2002
reviewing patient records and/or test results. In cases where the patient received care from a nonphysician member of the physician's staff, but did not actually see the physician during the visit, the duration was recorded as " 0 " minutes.

In 2002, 88.3 percent of office visits with face-to-face contact between the physician and patient had a duration between 6 and 30 minutes (table 26). At 43.8 million visits, or 4.9 percent, there was no face-to-face contact between the physician and patient. Table 27 shows the mean duration for all visits at which a physician was seen as well as the mean duration at each quartile by physician specialty. Overall, the mean time spent with a physician was 18.4 minutes. The visit duration for psychiatrists had the largest variability (a difference of 28.4 minutes between the third and first quartiles).

Visits to primary care specialists-In 2002, the NAMCS sampled an additional 150 primary care specialty physicians in order to provide more analytical power for understanding primary care. Detailed information on the sample and definitions of primary care physicians can be found in the "Technical Notes." This section highlights visits to primary care specialists.

Visits to primary care specialties accounted for 62.7 percent of the 890 million visits to office-based physicians in 2002 (table 1). Approximately three-fourths of these visits were to the patient's designated PCP. Approximately 8 percent of visits to primary care specialties were by new patients, and most established patients had seen their physician in the last 12 months ( 79.5 percent) (table 6). The percent of visits made to primary care specialists where the patient was responsible for the payment was significantly less than at visits made to medical specialists (3.8 percent versus 8.0 percent) (Data not shown). The role of preventive care in primary care specialists can be seen from the last two columns in table 11. Approximately 9 out of 10 preventive care visits were to primary care specialists; however, receipt of preventive care from primary care specialists decreases with age.

## Characteristics of visits to primary care specialists:

- Accounted for 62.7 percent of all visits in 2002 , with 75 percent to the patient's designated primary care provider.
- Major reason for visit to primary care specialists:
o Acute conditions- 41.5 percent
o Chronic conditions-29.6 percent
o Preventive care- 23.3 percent
- Top five illness-related diagnoses are:
o Hypertension-7.8 percent
o Acute upper respiratory infections (excluding pharyngitis)—5.1 percent
o Diabetes mellitus-3.1 percent
o Otitis media- 2.4 percent
o Arthropathies- 2.1 percent
- Injury visits accounted for 9.4 percent of all visits to primary care specialists.
- Common services ordered or provided:
o General medical examination- 60.8 percent
o Blood pressure check- 60.1 percent
o Urinalysis- 12.8 percent
o Complete blood count (CBC)— 10.9 percent
o Diet/nutrition counseling-19.3 percent
o Exercise counseling- 12.2 percent
- Top therapeutic drug classes were:
o Vaccines/antisera- 5.7 percent of drug mentions
o NSAIDs- 5.5 percent of drug mentions
o Antihistamines-4.8 percent of drug mentions
o Antidepressants- 4.0 percent of drug mentions
o Antihypertensives- 3.9 percent of drug mentions
o Antiasthmatics- 3.8 percent of drug mentions
- Disposition of visit:
o Return for an appointment- 53.4 percent
o Return if needed- 33.4 percent
o Referred to another physician- 8.0 percent
- Average face-to-face duration-17.4 minutes.

Figure 9 summarizes characteristics of office visits by physician specialty type and contrasts primary care with surgical and medical specialties. Primary care specialists managed 165 problems per 100 visits. They ordered or provided 235 diagnostic and screening services, 165 medications, 76 counseling/ education services, and 5 surgical procedures per 100 visits. Acute conditions accounted for 41.5 percent of visits to primary care specialties followed by 29.6 percent for chronic conditions and 23.3 percent for preventive care (see textbox).

The leading illness-related primary diagnoses at primary care specialty visits included essential hypertension
(7.8 percent), acute upper respiratory infection (excluding pharyngitis) (5.1 percent), diabetes mellitus (3.1 percent), otitis media ( 2.4 percent), and arthropathies (2.1 percent). Normal pregnancy visits accounted for 3.1 percent of primary diagnoses at these visits.

About 1 in 10 visits were for an injury. Six of ten visits to primary care specialists ( 60.8 percent) had a general medical examination, a significantly higher percentage than for visits to surgical specialists ( 23.4 percent) and medical specialists ( 39.8 percent). Overall, a blood pressure check occurred at 48.1 percent of all visits (table 16); however, blood pressure checks varied
by physician specialty. Although primary care specialists indicated that they checked the patient's blood pressure at three-fifths of visits, medical specialists reported blood pressure checks at two-fifths of visits, and surgical specialists performed such checks at one-fifth of visits (data not shown).

Drugs were prescribed at 70.6 percent of the visits to primary care physicians. The leading therapeutic classes prescribed include vaccines (5.7 percent of drug mentions), NSAIDs (5.5 percent), antihistamines (4.8 percent), antidepressants ( 4.0 percent), antihypertensives ( 3.9 percent), and antiasthmatics ( 3.8 percent).

Patients at primary care visits were told to return for an appointment at 53.4 percent of visits, told to return if needed at 33.4 percent of visits, and referred to another physician at 8.0 percent of visits. The average duration of primary care visits was 17.4 minutes.

## Physician-level estimates

The NAMCS provides information on characteristics of physician offices as well as information about the frequency of office visits, the characteristics of patients, diagnoses rendered, and services provided at the visit. In the Physician Induction Interview (PII), participating physicians were asked several questions about their practice such as other kinds of patient encounters (e.g., telephone, e-mail), involvement with managed care contracts, and willingness to accept new patients. The data were weighted to provide annual estimates for all non-Federal, officebased physicians primarily engaged in patient care. Table 28 provides national estimates for office-based physicians in 2002. There were an estimated 308,023 office-based physicians in practice in any given week in the United States ( $\mathrm{SE}=8,149$ ). This estimate excludes physicians in the specialties of radiology, anesthesiology, or pathology. One-half of these physicians ( 50.2 percent) were in primary care specialties, 25.5 percent were in surgical specialties, and 24.3 percent in medical specialties.

Although similar to the visit level data shown in table 1, table 28 shows
that about one-third of the physicians were in solo practices with the remaining in either single- or multispecialty-group practices (41.0 and 24.7 percent, respectively). The majority of physicians were the owners or part owners of their practices ( 72.7 percent). Primary care specialists were employees a greater percent of the time compared with surgical or medical specialists ( 28.2 percent versus 16.2 and 17.0 percent, respectively).

Another practice characteristic collected in the PII is the number of encounters the physician makes during his/her last full week of practice. These include: office visits, home visits, hospital visits, telephone consultations, and internet/e-mail consultations. Table 28 presents the percent of physicians who had at least one of each of the various encounters during their last full week of practice and, for those physicians with at least one, the mean number for each of the encounters. For example, 19.1 percent of primary care specialists reported having at least one home visit during their last full week of practice. Of these physicians the mean number of reported home visits was 11.7. Primary care specialists reported more telephone contacts (26.3) than surgical specialists (11.5) or medical specialists (15.7). Medical specialists made more hospital visits (34.1) than did surgical (17.6) or primary care specialists (17.0). Not shown in table 28 is the mean number of each of the weekly encounters for all physicians: 77 office visits, 14 hospital visits, 14 telephone contacts, 1.3 house calls, and 0.4 internet/e-mail consults.

The NAMCS PII asks physicians about their willingness to accept new patients. Ninety-five percent of the physicians said they would accept new patients, (table 28). Figure 10 shows the percent of physicians who said they would not accept new patients by payment source. Approximately 37.7 percent of office-based physicians did not accept new charity cases (as defined by the no charge check box), 23.5 percent did not accept new Medicaid cases, and 13.8 percent did not accept new Medicare cases. Primary care specialists were more likely to refuse new Medicare cases


Figure 10. Percent of office-based physicians who do not accept new patients who use selected payment methods: United States, 2002
(21.1 percent) compared with either surgical specialists ( 2.0 percent) or medical specialists (12.0 percent) and more likely to refuse Medicaid cases (25.8 percent) compared with surgical specialists (17.6 percent) (data not shown).

A greater percent of physician practices used electronic billing records than electronic medical records (74.4 percent versus 17.3 percent) due to the requirement by Medicare and Medicaid.

Additional information about physician office 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 2002 NAMCS 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 NAMCS data may be sent to NCHS via nchsquery@cdc.gov.

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Table 1. Number, percent distribution, and annual rate of office visits with corresponding standard errors, by selected physician practice characteristics: United States, 2002

| Physician practice 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 | 889,980 | 28,110 | 100.0 | . . | 314.4 | 9.9 |
| Physician specialty |  |  |  |  |  |  |
| General and family practice | 215,466 | 13,117 | 24.2 | 1.2 | 76.1 | 4.6 |
| Internal medicine. | 156,692 | 14,734 | 17.6 | 1.4 | 55.4 | 5.2 |
| Pediatrics | 120,018 | 8,213 | 13.5 | 0.9 | ${ }^{3} 198.1$ | 13.6 |
| Obstetrics and gynecology . | 70,324 | 6,410 | 7.9 | 0.7 | ${ }^{4} 60.9$ | 5.6 |
| Ophthalmology | 49,937 | 5,568 | 5.6 | 0.6 | 17.6 | 2.0 |
| Orthopedic surgery. | 38,028 | 5,027 | 4.3 | 0.6 | 13.4 | 1.8 |
| Dermatology. | 32,227 | 3,819 | 3.6 | 0.4 | 11.4 | 1.3 |
| Psychiatry . | 21,659 | 2,979 | 2.4 | 0.3 | 7.7 | 1.1 |
| Cardiovascular diseases | 20,822 | 2,554 | 2.3 | 0.3 | 7.4 | 0.9 |
| Urology . | 17,133 | 1,891 | 1.9 | 0.2 | 6.1 | 0.7 |
| Otolaryngology | 17,080 | 1,954 | 1.9 | 0.2 | 6.0 | 0.7 |
| General surgery | 17,000 | 2,154 | 1.9 | 0.2 | 6.0 | 0.8 |
| Neurology | 9,622 | 900 | 1.1 | 0.1 | 3.4 | 0.3 |
| All other specialties | 103,974 | 9,200 | 11.7 | 1.0 | 36.7 | 3.2 |
| Professional identity |  |  |  |  |  |  |
| Doctor of medicine. | 824,595 | 27,653 | 92.7 | 0.7 | 291.3 | 9.8 |
| Doctor of osteopathy | 65,385 | 6,636 | 7.3 | 0.7 | 23.1 | 2.3 |
| Specialty type ${ }^{5}$ |  |  |  |  |  |  |
| Primary care | 558,402 | 22,198 | 62.7 | 1.3 | 197.3 | 7.8 |
| Surgical | 177,397 | 10,576 | 19.9 | 1.0 | 62.7 | 3.7 |
| Medical. | 154,181 | 10,895 | 17.3 | 1.2 | 54.5 | 3.8 |
| Geographic region |  |  |  |  |  |  |
| Northeast | 205,668 | 14,023 | 23.1 | 1.4 | 385.2 | 26.3 |
| Midwest | 196,749 | 11,632 | 22.1 | 1.2 | 307.0 | 18.1 |
| South. | 300,665 | 19,173 | 33.8 | 1.6 | 297.7 | 19.0 |
| West | 186,898 | 9,744 | 21.0 | 1.1 | 289.4 | 15.1 |
| Metropolitan status |  |  |  |  |  |  |
| MSA ${ }^{6}$ | 765,191 | 27,191 | 86.0 | 1.5 | 338.4 | 12.0 |
| Non-MSA ${ }^{6}$. | 124,790 | 13,689 | 14.0 | 1.5 | 222.6 | 24.4 |

[^0]Table 2. Number and percent distribution of office visits with corresponding standard errors, by selected physician practice characteristics: United States, 2002

| Physician office characteristics | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All visits | 889,980 | 28,110 | 100.0 | ... |
| Employment status |  |  |  |  |
| Owner | 664,121 | 29,206 | 74.6 | 1.9 |
| Employee | 189,987 | 16,404 | 21.3 | 1.8 |
| Contractor | 35,873 | 6,758 | 4.0 | 0.8 |
| Ownership |  |  |  |  |
| Physician/group. | 767,468 | 27,423 | 86.2 | 1.6 |
| Other health care corporation | 42,497 | 7,606 | 4.8 | 0.8 |
| Other hospital. | 33,188 | 6,504 | 3.7 | 0.7 |
| Medical/academic health center. . | *19,794 | 6,632 | *2.2 | 0.7 |
| HMO ${ }^{1}$. | 14,885 | 4,024 | 1.7 | 0.5 |
| Other ${ }^{2}$ | 12,149 | 3,566 | 1.4 | 0.4 |
| Practice size |  |  |  |  |
| Solo. | 313,795 | 20,044 | 35.3 | 1.9 |
| 2-4 | 290,632 | 18,256 | 32.7 | 1.8 |
| 5-9 | 180,825 | 15,433 | 20.3 | 1.5 |
| 10-39. | 80,796 | 10,825 | 9.1 | 1.2 |
| 40 or more. | *19,505 | 6,579 | *2.2 | 0.7 |
| Blank | *4,428 | 1,833 | *0.5 | 0.2 |
| Type of practice |  |  |  |  |
| Single-specialty group. | 366,676 | 19,869 | 41.2 | 2.0 |
| Multispecialty group . | 209,510 | 18,294 | 23.5 | 1.8 |
| Solo. . | 313,795 | 20,044 | 35.3 | 1.9 |
| Office type |  |  |  |  |
| Private practice. . | 817,154 | 28,662 | 91.8 | 1.2 |
| Clinic/urgicenter | 46,380 | 9,827 | 5.2 | 1.1 |
| Other ${ }^{3}$. . . . . | 26,447 | 4,739 | 3.0 | 0.5 |

. . Category not applicable.

* Figure does not meet standard of reliability or precision.
${ }^{1}$ HMO is health maintenance organization.
${ }^{2}$ Other includes owners such as local government (State, county, or city) and charitable organizations.
${ }^{3}$ Other includes the following office types: HMO, non-Federal government clinic, mental health center, federally qualified health center, and facility practice plan. NOTE: Numbers may not add to totals because of rounding.

Table 3. Number, percent distribution, and annual rate of office visits with corresponding standard errors, by patient's age, sex, and race: United States, 2002

| 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 visits | 889,980 | 28,110 | 100.0 | $\ldots$ | 314.4 | 9.9 |
| Age |  |  |  |  |  |  |
| Under 15 years. | 159,235 | 8,449 | 17.9 | 0.8 | 262.8 | 13.9 |
| 15-24 years | 71,865 | 3,605 | 8.1 | 0.4 | 181.9 | 9.1 |
| 25-44 years | 192,359 | 7,978 | 21.6 | 0.6 | 232.2 | 9.6 |
| 45-64 years | 242,142 | 9,915 | 27.2 | 0.6 | 365.8 | 15.0 |
| 65-74 years | 109,331 | 5,361 | 12.3 | 0.4 | 606.4 | 29.7 |
| 75 years and over. | 115,049 | 6,066 | 12.9 | 0.5 | 722.2 | 38.1 |
| Sex and age |  |  |  |  |  |  |
| Female . | 529,075 | 17,025 | 59.4 | 0.6 | 364.9 | 11.7 |
| Under 15 years | 76,382 | 4,287 | 8.6 | 0.4 | 258.1 | 14.5 |
| 15-24 years | 44,909 | 2,494 | 5.0 | 0.3 | 228.8 | 12.7 |
| 25-44 years | 128,743 | 5,836 | 14.5 | 0.5 | 306.3 | 13.9 |
| 45-64 years | 144,205 | 6,164 | 16.2 | 0.4 | 422.7 | 18.1 |
| 65-74 years | 61,819 | 3,254 | 6.9 | 0.3 | 628.1 | 33.1 |
| 75 years and over. | 73,017 | 4,305 | 8.2 | 0.4 | 745.7 | 44.0 |
| Male | 360,905 | 13,295 | 40.6 | 0.6 | 261.4 | 9.6 |
| Under 15 years | 82,853 | 4,556 | 9.3 | 0.5 | 267.2 | 14.7 |
| 15-24 years | 26,956 | 1,989 | 3.0 | 0.2 | 135.6 | 10.0 |
| 25-44 years | 63,616 | 3,650 | 7.1 | 0.3 | 155.9 | 8.9 |
| 45-64 years | 97,937 | 4,811 | 11.0 | 0.4 | 305.3 | 15.0 |
| 65-74 years | 47,512 | 2,686 | 5.3 | 0.2 | 580.2 | 32.8 |
| 75 years and over. | 42,032 | 2,353 | 4.7 | 0.2 | 684.6 | 38.3 |
| Race and age ${ }^{2}$ |  |  |  |  |  |  |
| White | 766,096 | 26,574 | 86.1 | 1.0 | 334.6 | 11.6 |
| Under 15 years | 131,023 | 7,208 | 14.7 | 0.7 | 282.9 | 15.6 |
| 15-24 years | 61,012 | 3,297 | 6.9 | 0.3 | 197.5 | 10.7 |
| 25-44 years | 164,890 | 7,534 | 18.5 | 0.6 | 248.3 | 11.3 |
| 45-64 years | 211,162 | 9,145 | 23.7 | 0.6 | 380.7 | 16.5 |
| 65-74 years | 95,465 | 5,311 | 10.7 | 0.5 | 611.4 | 34.0 |
| 75 years and over. | 102,544 | 5,504 | 11.5 | 0.5 | 720.1 | 38.7 |
| Black or African American | 89,455 | 8,108 | 10.1 | 0.9 | 252.9 | 22.9 |
| Under 15 years | 19,867 | 2,695 | 2.2 | 0.3 | 209.4 | 28.4 |
| 15-24 years | 8,071 | 985 | 0.9 | 0.1 | 142.0 | 17.3 |
| 25-44 years | 18,750 | 1,862 | 2.1 | 0.2 | 181.2 | 18.0 |
| 45-64 years | 22,496 | 2,592 | 2.5 | 0.3 | 319.2 | 36.8 |
| 65-74 years | 10,733 | 2,659 | 1.2 | 0.3 | 658.8 | 163.2 |
| 75 years and over. | 9,538 | 2,595 | 1.1 | 0.3 | 811.7 | 220.8 |
| All other races ${ }^{2}$ |  |  |  |  |  |  |
| Asian | 26,341 | 3,851 | 3.0 | 0.4 | 229.3 | 33.5 |
| Native Hawaiian or other Pacific Islander . | 3,430 | 708 | 0.4 | 0.1 | 721.7 | 148.9 |
| American Indian or Alaska Native. | 2,237 | 473 | 0.3 | 0.1 | 82.9 | 17.5 |
| Multiple races . . . . . . . . . . . . . . . . | *2,421 | 749 | *0.3 | 0.1 | *58.6 | 18.1 |

[^1]Table 4. Number and percent distribution of office visits with corresponding standard errors, by selected visit characterstics, according to prior-visit status: United States, 2002

| Primary care physician and referral status | All visits | Prior-visit status |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Established patient | New patient | Unknown/ blank |
|  | Number of visits in thousands |  |  |  |
| All visits | 889,980 | 771,679 | 108,049 | 10,252 |
| Visit to PCP ${ }^{1}$ | 448,679 | 427,647 | 19,030 | 2,002 |
| Visit to non-PCP ${ }^{1}$ | 391,742 | 308,530 | 81,124 | 2,089 |
| Referred by other physician. | 122,011 | 71,517 | 50,070 | 424 |
| Not referred by other physician. . | 212,410 | 189,294 | 22,330 | 786 |
| Unknown if referred. . . . | 57,320 | 47,718 | 8,724 | *879 |
| Unknown if $\mathrm{PCP}{ }^{1}$ visit. | 49,559 | 35,503 | 7,895 | *6,161 |
|  | Standard error in thousands |  |  |  |
| All visits | 28,110 | 24,906 | 5,929 | 2,965 |
| Visit to $\mathrm{PCP}^{1}$ | 20,737 | 19,745 | 1,898 | 415 |
| Visit to non-PCP ${ }^{1}$ | 17,135 | 13,771 | 5,289 | 509 |
| Referred by other physician. | 7,312 | 4,710 | 3,452 | 108 |
| Not referred by other physician. | 12,968 | 11,290 | 3,289 | 202 |
| Unknown if referred . . . . . . . . | 5,989 | 5,606 | 1,104 | 392 |
| Unknown if PCP ${ }^{1}$ visit. | 7,547 | 5,931 | 1,299 | 2,893 |
|  | Percent distribution |  |  |  |
| All visits | 100.0 | 100.0 | 100.0 | 100.0 |
| Visit to PCP ${ }^{1}$ | 50.4 | 55.4 | 17.6 | *19.5 |
| Visit to non-PCP ${ }^{1}$ | 44.0 | 40.0 | 75.1 | *20.4 |
| Referred by other physician. | 13.7 | 9.3 | 46.3 | *4.1 |
| Not referred by other physician. | 23.9 | 24.5 | 20.7 | *7.7 |
| Unknown if referred. . . . . . . | 6.4 | 6.2 | 8.1 | *8.6 |
| Unknown if $\mathrm{PCP}{ }^{1}$ visit. | 5.6 | 4.6 | 7.3 | 60.1 |
|  | Standard error of percent |  |  |  |
| All visits |  | ... | $\ldots$ | $\ldots$ |
| Visit to PCP ${ }^{1}$ | 1.5 | 1.5 | 1.6 | 6.6 |
| Visit to non-PCP ${ }^{1}$ | 1.5 | 1.5 | 2.0 | 7.0 |
| Referred by other physician. | 0.7 | 0.6 | 2.4 | 1.5 |
| Not referred by other physician. | 1.3 | 1.3 | 2.5 | 2.8 |
| Unknown if referred . . . . . . . | 0.7 | 0.7 | 0.9 | 4.2 |
| Unknown if PCP ${ }^{1}$ visit. | 0.8 | 0.8 | 1.2 | 11.8 |

[^2]Table 5. Percent distribution of office visits with corresponding standard errors by physician specialty, according to primary care physician and referral status: United States 2002

| Physican specialty | Total | Visit to PCP ${ }^{1}$ | Visit to non-PCP ${ }^{2}$ |  |  | Unknown if PCP ${ }^{1}$ visit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Referred by other physician | Not referred by other physician | Unknown if referred |  |
|  | Percent distribution |  |  |  |  |  |
| All visits | 100.0 | 50.4 | 13.7 | 23.9 | 6.4 | 5.6 |
| General and family practice | 100.0 | 84.1 | *2.8 | 6.5 | 1.2 | 5.5 |
| Internal medicine. | 100.0 | 82.3 | 2.9 | *6.0 | *1.9 | *7.0 |
| Pediatrics | 100.0 | 88.2 | 2.0 | 5.5 | 2.5 | 1.9 |
| Obstetrics and gynecology . | 100.0 | 15.3 | 10.0 | 54.0 | 6.5 | 14.1 |
| Ophthalmology | 100.0 | *2.0 | 20.7 | 61.7 | 11.9 | *3.7 |
| Orthopedic surgery. | 100.0 | *5.3 | 45.5 | 36.9 | 9.8 | * |
| Dermatology. | 100.0 | * | 18.9 | 58.7 | 18.6 | *3.7 |
| Cardiovascular diseases | 100.0 | * | 15.9 | 64.6 | 14.3 | *4.7 |
| Psychiatry . | 100.0 | 13.4 | 40.2 | 40.6 | 4.9 | * |
| General surgery | 100.0 | *8.1 | 41.0 | 40.2 | 9.0 | * |
| Otolaryngology | 100.0 | * | 39.8 | 42.4 | 13.9 | 3.3 |
| Urology . | 100.0 | *3.8 | 50.9 | 33.9 | 10.2 | * |
| Neurology | 100.0 | *2.6 | 55.2 | 29.6 | 10.3 | 2.2 |
| All other specialties | 100.0 | 13.1 | 27.7 | 34.2 | 17.1 | *7.9 |
|  | Standard error of percent |  |  |  |  |  |
| All visits |  | 1.5 | 0.7 | 1.3 | 0.7 | 0.8 |
| General and family practice | $\ldots$ | 2.2 | 0.9 | 1.4 | 0.3 | 1.1 |
| Internal medicine. |  | 3.8 | 0.8 | 2.2 | 1.0 | 2.5 |
| Pediatrics | $\ldots$ | 1.8 | 0.6 | 1.3 | 0.7 | 0.4 |
| Obstetrics and gynecology. | $\ldots$ | 3.3 | 2.2 | 5.1 | 1.9 | 3.7 |
| Ophthalmology |  | 1.0 | 4.1 | 5.0 | 2.8 | 1.8 |
| Orthopedic surgery. |  | 2.0 | 5.1 | 4.9 | 2.2 |  |
| Dermatology. | $\ldots$ | $\ldots$ | 3.1 | 5.4 | 5.0 | 1.8 |
| Cardiovascular diseases | ... | $\ldots$ | 4.3 | 6.0 | 3.6 | 1.7 |
| Psychiatry | $\ldots$ | 4.0 | 5.8 | 5.6 | 1.0 | $\ldots$ |
| General surgery | $\ldots$ | 3.0 | 5.1 | 4.6 | 2.2 | $\cdots$ |
| Otolaryngology | . | . $\cdot$ | 3.9 | 4.5 | 2.7 | 1.0 |
| Urology. | $\ldots$ | 2.6 | 4.5 | 4.4 | 3.0 | . . |
| Neurology | $\ldots$ | 0.9 | 3.8 | 3.6 | 2.5 | 0.5 |
| All other specialties |  | 3.1 | 3.8 | 4.2 | 4.2 | 3.9 |

* Figure does not meet standard of reliability or precision.

Category not applicable.
${ }^{1} \mathrm{PCP}$ is patient's primary care physician or provider.
${ }^{2}$ Referral status only asked for visits to nonprimary care physicians or providers.
NOTE: Numbers may not add to totals because of rounding.

Table 6. Number and percent distribution of office visits with corresponding standard errors, by continuity-of-care visit characteristics according to specialty type: United States, 2002

| Continuity-of-care visit characteristics | All specialties | Specialty type |  |  | All specialties | Specialty type |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Primary care | Surgical | Medical |  | Primary care | Surgical | Medical |
|  | Number of visits in thousands |  |  |  | Standard error in thousands |  |  |  |
| All visits | 889,980 | 558,402 | 177,397 | 154,181 | 28,110 | 22,198 | 10,576 | 10,895 |
| Prior-visit status and number of visits in last 12 months |  |  |  |  |  |  |  |  |
| Established patient. | 771,679 | 508,721 | 139,308 | 123,651 | 24,906 | 20,557 | 8,546 | 9,262 |
| None . | 56,080 | 33,204 | 13,640 | 9,236 | 3,797 | 3,225 | 1,320 | 1,103 |
| 1-2 visits | 245,048 | 151,762 | 57,049 | 36,237 | 10,461 | 8,043 | 3,958 | 3,510 |
| 3-5 visits | 225,822 | 155,650 | 37,519 | 32,654 | 9,944 | 8,643 | 2,781 | 3,232 |
| 6 or more visits | 201,998 | 136,529 | 24,844 | 40,625 | 10,909 | 8,578 | 2,356 | 5,939 |
| Unknown | 42,731 | 31,576 | 6,255 | *4,898 | 5,138 | 4,672 | 1,197 | 1,695 |
| New patient | 108,049 | 42,481 | 36,507 | 29,061 | 5,929 | 3,940 | 2,882 | 2,795 |
| Unknown if patient previously seen. | 10,252 | *7,200 | 1,582 | 1,470 | 2,965 | 2,926 | 278 | 404 |
| Do other physicians share care for this problem? |  |  |  |  |  |  |  |  |
| Yes | 202,393 | 102,662 | 55,996 | 43,736 | 11,317 | 8,019 | 5,298 | 4,721 |
| No. | 570,326 | 384,892 | 104,432 | 81,002 | 22,255 | 18,556 | 7,939 | 8,133 |
| Unknown/blank | 117,261 | 70,848 | 16,969 | 29,444 | 12,155 | 9,626 | 2,106 | 6,778 |
| Episode of care |  |  |  |  |  |  |  |  |
| Initial visit for problem. | 273,910 | 189,092 | 47,167 | 37,651 | 10,771 | 9,294 | 3,384 | 3,494 |
| Followup visits for problem. | 401,767 | 196,012 | 103,529 | 102,227 | 17,117 | 12,353 | 6,580 | 8,131 |
| Unknown/blank | 69,452 | 43,046 | 17,384 | 9,022 | 5,318 | 4,491 | 2,237 | 1,196 |
| Not applicable (preventive care visit) ${ }^{1}$ | 144,851 | 130,253 | 9,316 | 5,282 | 8,045 | 7,988 | 1,254 | 1,056 |
|  | Percent distribution |  |  |  | Standard error of percent |  |  |  |
| All visits | 100.0 | 100.0 | 100.0 | 100.0 | $\ldots$ | $\cdots$ | $\ldots$ | $\ldots$ |
| Prior-visit status and number of visits in last 12 months |  |  |  |  |  |  |  |  |
| Established patient. | 86.7 | 91.1 | 78.5 | 80.2 | 0.6 | 0.8 | 1.1 | 1.4 |
| None . | 6.3 | 5.9 | 7.7 | 6.0 | 0.4 | 0.6 | 0.6 | 0.6 |
| 1-2 visits | 27.5 | 27.2 | 32.2 | 23.5 | 0.8 | 1.0 | 1.0 | 1.7 |
| $3-5$ visits | 25.4 | 27.9 | 21.1 | 21.2 | 0.7 | 0.9 | 0.9 | 1.6 |
| 6 or more visits | 22.7 | 24.4 | 14.0 | 26.3 | 1.0 | 1.2 | 1.1 | 3.0 |
| Unknown | 4.8 | 5.7 | 3.5 | *3.2 | 0.6 | 0.8 | 0.7 | 1.1 |
| New patient. | 12.1 | 7.6 | 20.6 | 18.8 | 0.5 | 0.6 | 1.1 | 1.4 |
| Unknown if patient previously seen. | 1.2 | *1.3 | 0.9 | 1.0 | 0.3 | 0.5 | 0.2 | 0.3 |
| Do other physicians share care for this problem? |  |  |  |  |  |  |  |  |
| Yes | 22.7 | 18.4 | 31.6 | 28.4 | 1.1 | 1.3 | 2.4 | 2.8 |
| No. | 64.1 | 68.9 | 58.9 | 52.5 | 1.4 | 1.8 | 2.5 | 3.8 |
| Unknown/blank | 13.2 | 12.7 | 9.6 | 19.1 | 1.3 | 1.6 | 1.1 | 4.0 |
| Episode of care |  |  |  |  |  |  |  |  |
| Initial visit for problem. . | 30.8 | 33.9 | 26.6 | 24.4 | 0.7 | 1.1 | 1.1 | 1.6 |
| Followup visits for problem. | 45.1 | 35.1 | 58.4 | 66.3 | 1.1 | 1.5 | 1.4 | 1.8 |
| Unknown/blank . | 7.8 | 7.7 | 9.8 | 5.9 | 0.6 | 0.8 | 1.1 | 0.7 |
| Not applicable (preventive care visit) ${ }^{1}$ | 16.3 | 23.3 | 5.3 | 3.4 | 0.8 | 1.1 | 0.6 | 0.6 |

[^3]Table 7. Number and percent distribution of office visits with corresponding standard errors, by primary expected source of payment: United States, 2002

| Primary expected source of payment | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All visits | 889,980 | 28,110 | 100.0 |  |
| Private insurance. | 525,520 | 19,927 | 59.0 | 1.1 |
| Medicare . | 188,207 | 9,642 | 21.1 | 0.8 |
| Medicaid/SCHIP ${ }^{1}$. | 67,110 | 5,168 | 7.5 | 0.6 |
| Self-pay | 39,526 | 4,111 | 4.4 | 0.4 |
| Workers' compensation . | 14,658 | 2,561 | 1.6 | 0.3 |
| No charge/charity | 2,485 | 526 | 0.3 | 0.1 |
| Other | 21,456 | 4,258 | 2.4 | 0.5 |
| Unknown/blank | 31,018 | 4,254 | 3.5 | 0.5 |

. . Category not applicable.
${ }^{1}$ SCHIP is State Children's Health Insurance Program.
NOTE: Numbers may not add to totals because of rounding.

Table 8. Number and percent distribution of office visits with corresponding standard errors, by patient's principal reason for visit: United States, 2002

| 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 |  | 889,980 | 28,110 | 100.0 |  |
| Symptom module. | S001-S999 | 452,280 | 16,678 | 50.8 | 1.0 |
| General symptoms | S001-S099 | 58,080 | 4,831 | 6.5 | 0.5 |
| Symptoms referable to psychological/mental disorders | S100-S199 | 26,279 | 2,009 | 3.0 | 0.2 |
| Symptoms referable to the nervous system (excluding sense organs) | S200-S259 | 22,687 | 1,496 | 2.5 | 0.1 |
| Symptoms referable to the cardiovascular/lymphatic system. | S260-S299 | 4,476 | 661 | 0.5 | 0.1 |
| Symptoms referable to the eyes and ears | S300-S399 | 48,703 | 3,311 | 5.5 | 0.3 |
| Symptoms referable to the respiratory system | S400-S499 | 93,529 | 5,654 | 10.5 | 0.5 |
| Symptoms referable to the digestive systems. | S500-S639 | 35,136 | 2,354 | 3.9 | 0.2 |
| Symptoms referable to the genitourinary system | S640-S829 | 30,769 | 1,797 | 3.5 | 0.2 |
| Symptoms referable to the skin, hair, and nails. | S830-S899 | 43,690 | 3,000 | 4.9 | 0.3 |
| Symptoms referable to the musculoskeletal system | S900-S999 | 88,933 | 6,360 | 10.0 | 0.6 |
| Disease module | D001-D999 | 100,526 | 5,838 | 11.3 | 0.6 |
| Diagnostic/screening and preventive module. | X100-X599 | 164,643 | 8,994 | 18.5 | 0.8 |
| Treatment module | .T100-T899 | 112,807 | 8,930 | 12.7 | 0.9 |
| Injuries and adverse effects module | J001-J999 | 22,445 | 1,788 | 2.5 | 0.2 |
| Test results module | R100-R700 | 22,078 | 2,106 | 2.5 | 0.2 |
| Administrative module. | A100-A140 | 6,845 | 1,395 | 0.8 | 0.2 |
| Other ${ }^{2}$ | U990-U999 | 8,357 | 1,147 | 0.9 | 0.1 |

[^4]Table 9. Number and percent distribution of office visits with corresponding standard errors, by the 20 principal reasons for visit most frequently mentioned by patients, according to patient's sex: United States, 2002

| Principal reason for visit and RVC code ${ }^{1}$ | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent | Patient's sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Female ${ }^{2}$ |  | Male ${ }^{3}$ |  |
|  |  |  |  |  | Percent distribution | Standard error of percent | Percent distribution | Standard error of percent |
| All visits | 889,980 | 28,110 | 100.0 | $\ldots$ | 100.0 | $\ldots$ | 100.0 | $\ldots$ |
| General medical examination . . . . . . . . . . . . . . . . . . . . . . . . . . X100 | 64,726 | 4,667 | 7.3 | 0.4 | 6.8 | 0.5 | 7.9 | 0.5 |
| Progress visit, not otherwise specified . . . . . . . . . . . . . . . . . . . . . T800 | 40,983 | 5,414 | 4.6 | 0.6 | 3.9 | 0.5 | 5.6 | 0.7 |
| Cough . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S440 | 28,469 | 2,086 | 3.2 | 0.2 | 3.1 | 0.2 | 3.4 | 0.3 |
| Postoperative visit . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . T205 | 22,083 | 1,648 | 2.5 | 0.2 | 2.4 | 0.2 | 2.6 | 0.2 |
| Prenatal examination, routine . . . . . . . . . . . . . . . . . . . . . . . X205 | 19,582 | 2,552 | 2.2 | 0.3 | 3.7 | 0.5 | ... | ... |
| Symptoms referable to throat . . . . . . . . . . . . . . . . . . . . . . . . . . S455 | 18,515 | 1,535 | 2.1 | 0.2 | 2.2 | 0.2 | 2.0 | 0.2 |
| Hypertension . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . D510 | 17,195 | 2,315 | 1.9 | 0.3 | 2.0 | 0.4 | 1.8 | 0.2 |
| Knee symptoms . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ${ }^{\text {S925 }}$ | 14,803 | 1,611 | 1.7 | 0.2 | 1.7 | 0.2 | 1.7 | 0.2 |
| Well baby examination . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . X105 | 14,293 | 1,440 | 1.6 | 0.2 | 1.4 | 0.2 | 1.9 | 0.2 |
| Medication, other and unspecified kinds. . . . . . . . . . . . . . . . . . . . T115 | 14,076 | 1,638 | 1.6 | 0.2 | 1.6 | 0.2 | 1.6 | 0.2 |
| Stomach pain, cramps, and spasms . . . . . . . . . . . . . . . . . . . . . . S545 | 13,547 | 1,406 | 1.5 | 0.2 | 1.7 | 0.2 | 1.2 | 0.2 |
| Earache, or ear infection . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S355 | 13,160 | 1,127 | 1.5 | 0.1 | 1.4 | 0.1 | 1.5 | 0.2 |
| Back symptoms. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ${ }^{\text {S905 }}$ | 12,902 | 1,298 | 1.4 | 0.1 | 1.4 | 0.1 | 1.6 | 0.2 |
| Vision dysfunctions . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S305 | 12,897 | 1,663 | 1.4 | 0.2 | 1.4 | 0.2 | 1.5 | 0.2 |
| Blood pressure test . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . X320 | 12,630 | 2,096 | 1.4 | 0.2 | 1.5 | 0.3 | 1.3 | 0.2 |
| Fever . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S010 $^{\text {a }}$ | 12,258 | 1,248 | 1.4 | 0.1 | 1.2 | 0.1 | 1.7 | 0.2 |
| Nasal congestion. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S400 | 12,149 | 1,570 | 1.4 | 0.2 | 1.2 | 0.2 | 1.5 | 0.2 |
| Skin rash. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S860 | 11,887 | 1,061 | 1.3 | 0.1 | 1.2 | 0.1 | 1.6 | 0.2 |
| Chest pain and related symptoms (not referable to body system) . . . . S050 | *11,189 | 3,546 | *1.3 | 0.4 | *1.4 | 0.5 | 1.1 | 0.3 |
| Diabetes mellitus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . D205 | 11,189 | 1,378 | 1.3 | 0.1 | 1.0 | 0.1 | 1.6 | 0.2 |
| All other reasons . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 511,446 | 17,420 | 57.5 | 0.8 | 57.8 | 0.9 | 57.0 | 1.0 |

[^5]Table 10. Number and percent distribution of office visits with corresponding standard errors by major reason for this visit, according to patient's age, sex, and race: United States, 2002


See footnotes at end of table.

Table 10. Number and percent distribution of office visits with corresponding standard errors by major reason for this visit, according to patient's age, sex, and race: United States, 2002-Con.

| Patient's age, sex, and race |  | Major reason for visit |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Acute problem | Chronic problem, routine | Chronic problem, flare-up | Pre- or post-surgery | Preventive care ${ }^{1}$ | Unknown/ blank |
|  | Standard error of percent |  |  |  |  |  |  |
| All visits | $\ldots$ | 0.8 | 1.1 | 0.5 | 0.3 | 0.8 | 0.6 |
| Age |  |  |  |  |  |  |  |
| Under 15 years . | $\ldots$ | 1.9 | 1.2 | 0.6 | 0.3 | 1.4 | 0.7 |
| 15-24 years. | $\ldots$ | 2.2 | 2.0 | 0.9 | 0.5 | 1.9 | 0.9 |
| 25-44 years. | $\ldots$ | 1.3 | 1.4 | 0.7 | 0.5 | 1.5 | 0.6 |
| 45-64 years. . | $\ldots$ | 0.9 | 1.4 | 0.9 | 0.4 | 0.9 | 0.7 |
| 65-74 years. | $\ldots$ | 1.2 | 2.0 | 0.9 | 0.7 | 1.3 | 1.0 |
| 75 years and over | $\ldots$ | 1.4 | 1.8 | 0.8 | 0.8 | 0.9 | 0.7 |
| Sex |  |  |  |  |  |  |  |
| Female | $\ldots$ | 0.9 | 1.3 | 0.6 | 0.3 | 0.9 | 0.6 |
| Male | $\ldots$ | 1.0 | 1.2 | 0.6 | 0.4 | 0.8 | 0.5 |
| Race ${ }^{2}$ |  |  |  |  |  |  |  |
| White | $\ldots$ | 0.9 | 1.1 | 0.6 | 0.3 | 0.8 | 0.6 |
| Black |  | 2.6 | 3.2 | 0.8 | 0.6 | 1.9 | 0.9 |
| Other ${ }^{2}$ |  | 3.2 | 3.6 | 1.4 | 0.6 | 2.5 | 1.9 |

* Figure does not meet standard of reliability or precision.

Category not applicable
${ }^{1}$ Preventive care includes prenatal, general medical, well-baby, and screening or insurance examinations.
${ }^{2}$ Other race includes visits by Asians, Native Hawaiians or other Pacific Islanders, American Indians or Alaska Natives, and multiple races. All race categories include visits by persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to 1997 Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. However, the percent of visit records with multiple races indicated is small and lower than what is typically found for self-reported race. See "Technical Notes" for more details.
NOTE: Numbers may not add to totals because of rounding.

Table 11. Number, percent distribution, and annual rate of preventive care office visits and percent of visits to primary care specialists with corresponding standard errors, by selected patient and visit characteristics: United States, 2002

| Patient and visit characteristics | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent | Number of visits per 100 persons per year ${ }^{1}$ | Standard error of rate | Percent of preventive care visits made to primary care specialists | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All preventive care visits ${ }^{2}$. | 144,851 | 8,045 | 100.0 | $\ldots$ | 51.2 | 2.8 | 89.9 | 1.2 |
| Age |  |  |  |  |  |  |  |  |
| Under 15 years. | 43,557 | 3,208 | 30.1 | 2.0 | 71.9 | 5.3 | 95.8 | 1.6 |
| 15-24 years. | 15,872 | 1,664 | 11.0 | 1.0 | 40.2 | 4.2 | 96.0 | 1.1 |
| 25-44 years. | 39,865 | 3,414 | 27.5 | 1.6 | 48.1 | 4.1 | 94.2 | 1.1 |
| 45-64 years. | 27,316 | 2,446 | 18.9 | 1.2 | 41.3 | 3.7 | 82.7 | 2.6 |
| 65-74 years. | 10,642 | 1,586 | 7.3 | 0.9 | 59.0 | 8.8 | 74.3 | 4.8 |
| 75 years and over | 7,598 | 1,084 | 5.2 | 0.7 | 47.7 | 6.8 | 69.0 | 5.5 |
| Sex and age |  |  |  |  |  |  |  |  |
| Female . | 97,008 | 5,879 | 67.0 | 1.7 | 66.9 | 4.1 | 91.6 | 1.2 |
| Under 15 years | 21,106 | 1,618 | 14.6 | 1.0 | 71.3 | 5.5 | 95.2 | 1.9 |
| 15-24 years | 12,606 | 1,494 | 8.7 | 0.9 | 64.2 | 7.6 | 96.5 | 1.2 |
| 25-44 years | 34,003 | 3,133 | 23.5 | 1.6 | 80.9 | 7.5 | 95.6 | 1.2 |
| 45-64 years | 18,471 | 1,886 | 12.8 | 1.0 | 54.1 | 5.5 | 86.1 | 2.6 |
| 65-74 years | 5,853 | 735 | 4.0 | 0.4 | 59.5 | 7.5 | 77.7 | 4.2 |
| 75 years and over. | 4,968 | 890 | 3.4 | 0.6 | 50.7 | 9.1 | 72.9 | 6.0 |
| Male | 47,843 | 3,601 | 33.0 | 1.7 | 34.6 | 2.6 | 86.5 | 1.8 |
| Under 15 years | 22,451 | 1,865 | 15.5 | 1.2 | 72.4 | 6.0 | 96.3 | 1.5 |
| 15-24 years. | 3,266 | 427 | 2.3 | 0.3 | 16.4 | 2.1 | 94.0 | 2.4 |
| 25-44 years | 5,862 | 1,000 | 4.0 | 0.6 | 14.4 | 2.5 | 86.2 | 3.6 |
| 45-64 years | 8,844 | 1,140 | 6.1 | 0.7 | 27.6 | 3.6 | 75.6 | 4.6 |
| 65-74 years | 4,789 | 1,065 | 3.3 | 0.7 | 58.5 | 13.0 | 70.1 | 7.5 |
| 75 years and over. . . | 2,630 | 467 | 1.8 | 0.3 | 42.8 | 7.6 | 61.5 | 8.1 |
| Race |  |  |  |  |  |  |  |  |
| White | 120,074 | 7,096 | 82.9 | 1.8 | 52.5 | 3.1 | 89.2 | 1.2 |
| Black/African American | 17,502 | 2,450 | 12.1 | 1.5 | 49.5 | 6.9 | 93.4 | 3.2 |
| Other ${ }^{3}$ | 7,275 | 1,575 | 5.0 | 1.1 | 38.7 | 8.4 | 93.6 | 2.1 |
| Primary expected source of payment |  |  |  |  |  |  |  |  |
| Private insurance. | 97,348 | 6,385 | 67.2 | 1.9 | 48.9 | 3.2 | 92.2 | 1.2 |
| Medicaid/SCHIP ${ }^{4}$. | 17,872 | 1,809 | 12.3 | 1.2 | 53.8 | 5.4 | 94.6 | 1.7 |
| Medicare . | 14,712 | 1,657 | 10.2 | 1.0 | 38.3 | 4.3 | 73.0 | 4.1 |
| Self-pay/charity/no charge | 5,834 | 1,186 | 4.0 | 0.8 | 13.4 | 2.7 | 85.6 | 4.3 |
| Other ${ }^{5}$. . . . . . . . . . | 9,085 | 1,782 | 6.3 | 1.2 | . . | . . | 86.1 | 5.3 |

[^6]Table 12. Number and percent distribution of office visits with corresponding standard errors, by physician's primary diagnosis: United States, 2002

| Major disease category and ICD-9-CM code range ${ }^{1}$ |
| :--- |

[^7]Table 13. Number and percent distribution of office visits with corresponding standard errors, by selected primary diagnosis groups, according to patient's sex: United States, 2002

| Primary diagnosis group and ICD-9-CM codes ${ }^{1}$ | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent | Patient's sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Female ${ }^{2}$ |  | Male ${ }^{3}$ |  |
|  |  |  |  |  | Percent distribution | Standard error of percent | Percent distribution | Standard error of percent |
| All visits | 889,980 | 28,110 | 100.0 | $\ldots$ | 100.0 | $\ldots$ | 100.0 | $\ldots$ |
| Essential hypertension . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 401 | 48,180 | 4,658 | 5.4 | 0.5 | 5.4 | 0.5 | 5.4 | 0.6 |
| Routine infant or child health check . . . . . . . . . . . . . . . . . . . . . . . . . . . .V20.2 | 35,935 | 3,015 | 4.0 | 0.3 | 3.2 | 0.3 | 5.2 | 0.5 |
| Acute upper respiratory infections, excluding pharyngitis . . . . . . . 460-461,463-466 | 30,141 | 2,240 | 3.4 | 0.2 | 3.1 | 0.3 | 3.7 | 0.3 |
| Diabetes mellitus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 250 | 24,877 | 2,670 | 2.8 | 0.3 | 2.3 | 0.2 | 3.5 | 0.4 |
| Arthropathies and related disorders . . . . . . . . . . . . . . . . . . . . . . . . . . 710-719 | 23,725 | 2,205 | 2.7 | 0.2 | 2.8 | 0.3 | 2.4 | 0.2 |
| General medical examination . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V70 | 22,362 | 3,226 | 2.5 | 0.3 | 2.5 | 0.4 | 2.6 | 0.5 |
| Spinal disorders . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 720-724 | 20,444 | 2,717 | 2.3 | 0.3 | 2.3 | 0.3 | 2.3 | 0.3 |
| Rheumatism, excluding back . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 725-729 | 17,766 | 1,792 | 2.0 | 0.2 | 1.9 | 0.2 | 2.1 | 0.3 |
| Normal pregnancy . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V22 | 17,585 | 2,354 | 2.0 | 0.3 | 3.3 | 0.4 | * | . |
| Otitis media and Eustachian tube disorders . . . . . . . . . . . . . . . . . . . . . 381-382 | 16,702 | 1,509 | 1.9 | 0.2 | 1.6 | 0.2 | 2.2 | 0.2 |
| Malignant neoplasms . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 140-208,230-234 | 15,651 | 2,158 | 1.8 | 0.2 | 1.5 | 0.3 | 2.1 | 0.2 |
| Chronic sinusitis . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 473 | 14,197 | 1,170 | 1.6 | 0.1 | 1.6 | 0.2 | 1.6 | 0.2 |
| Allergic rhinitis . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 477 | 14,101 | 3,673 | 1.6 | 0.4 | 1.7 | 0.4 | 1.4 | 0.4 |
| Asthma. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 493 | 12,692 | 1,906 | 1.4 | 0.2 | 1.5 | 0.3 | 1.3 | 0.2 |
| Gynecological examination. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .V72.3 | 11,883 | 1,507 | 1.3 | 0.2 | 2.2 | 0.3 | * | . |
| Disorder of lipoid metabolism . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 272 | 11,767 | 1,436 | 1.3 | 0.2 | 1.1 | 0.2 | 1.6 | 0.3 |
| Heart disease, excluding ischemic . . . 391-392.0,393-398,402,404,415-416,420-429 | 11,670 | 1,135 | 1.3 | 0.1 | 1.2 | 0.1 | 1.5 | 0.2 |
| Ischemic heart disease . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .410-414.9 | 10,970 | 1,275 | 1.2 | 0.1 | 0.8 | 0.1 | 1.9 | 0.2 |
| Acute pharyngitis . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 462 | 10,090 | 1,066 | 1.1 | 0.1 | 1.1 | 0.1 | 1.2 | 0.2 |
| Followup examination . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . V67 | 9,995 | 1,421 | 1.1 | 0.2 | 1.0 | 0.2 | 1.2 | 0.2 |
| All other diagnoses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 509,248 | 17,582 | 57.2 | 0.9 | 57.7 | 0.9 | 56.5 | 1.0 |

[^8]Table 14. Number, percent distribution, and annual rate of injury-related office visits with corresponding standard errors, by patient's age, sex, and race: United States, 2002

| 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 . | 104,028 | 5,656 | 100.0 | $\ldots$ | 36.7 | 2.0 |
| Age |  |  |  |  |  |  |
| Under 15 years . | 17,021 | 1,187 | 16.4 | 1.1 | 28.1 | 2.0 |
| 15-24. | 11,327 | 1,203 | 10.9 | 0.9 | 28.7 | 3.0 |
| 25-44. | 27,111 | 2,068 | 26.1 | 1.1 | 32.7 | 2.5 |
| 45-64. | 29,304 | 2,063 | 28.2 | 1.2 | 44.3 | 3.1 |
| 65-74. | 9,186 | 865 | 8.8 | 0.7 | 50.9 | 4.8 |
| 75 years and over | 10,080 | 1,009 | 9.7 | 0.9 | 63.3 | 6.3 |
| Sex and age |  |  |  |  |  |  |
| Female . | 52,036 | 2,941 | 50.0 | 1.1 | 35.9 | 2.0 |
| Under 15 years | 7,306 | 640 | 7.0 | 0.6 | 24.7 | 2.2 |
| 15-24 | 5,154 | 622 | 5.0 | 0.5 | 26.3 | 3.2 |
| 25-44 | 13,408 | 1,159 | 12.9 | 0.9 | 31.9 | 2.8 |
| 45-64 | 14,898 | 1,244 | 14.3 | 0.8 | 43.7 | 3.6 |
| 65-74 | 5,073 | 605 | 4.9 | 0.5 | 51.6 | 6.1 |
| 75 years and over. | 6,196 | 711 | 6.0 | 0.6 | 63.3 | 7.3 |
| Male | 51,992 | 3,169 | 50.0 | 1.1 | 37.7 | 2.3 |
| Under 15 years | 9,714 | 798 | 9.3 | 0.7 | 31.3 | 2.6 |
| 15-24 | 6,173 | 783 | 5.9 | 0.6 | 31.1 | 3.9 |
| 25-44 | 13,703 | 1,364 | 13.2 | 0.9 | 33.6 | 3.3 |
| 45-64 | 14,406 | 1,189 | 13.8 | 0.9 | 44.9 | 3.7 |
| 65-74 | 4,112 | 524 | 4.0 | 0.4 | 50.2 | 6.4 |
| 75 years and over. | 3,884 | 512 | 3.7 | 0.5 | 63.3 | 8.3 |
| Race ${ }^{2}$ |  |  |  |  |  |  |
| White | 90,717 | 5,194 | 87.2 | 1.0 | 39.6 | 2.3 |
| Black | 8,870 | 934 | 8.5 | 0.8 | 25.1 | 2.6 |
| Other | 4,441 | 641 | 4.3 | 0.6 | 23.6 | 3.4 |

[^9]Table 15. Number and percent distribution of injury-related office visits with corresponding standard errors, by intent and mechanism of external cause: United States, 2002

| Intent and mechanism ${ }^{1}$ | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All injury-related visits . | 104,028 | 5,656 | 100.0 | $\ldots$ |
| Unintentional injuries | 58,720 | 4,181 | 56.4 | 1.8 |
| Falls | 13,319 | 1,459 | 12.8 | 1.1 |
| Struck against or struck accidentally by objects or persons | 8,421 | 1,119 | 8.1 | 0.9 |
| Overexertion and strenuous movements | 7,120 | 1,016 | 6.8 | 0.9 |
| Motor vehicle traffic | 6,323 | 948 | 6.1 | 0.8 |
| Natural and environmental factors | 3,317 | 448 | 3.2 | 0.4 |
| Cutting or piercing instruments or objects | 2,050 | 360 | 2.0 | 0.3 |
| Other and not elsewhere classified ${ }^{2}$. | 13,207 | 1,307 | 12.7 | 1.1 |
| Mechanism unspecified | 4,964 | 735 | 4.8 | 0.6 |
| Intentional injuries ${ }^{3}$. | *957 | 342 | *0.9 | 0.3 |
| Injuries of undetermined intent | * | . . . | * | ... |
| Adverse effects of medical treatment. | 4,784 | 537 | 4.6 | 0.5 |
| Blank cause ${ }^{4}$ | 39,512 | 2,559 | 38.0 | 1.8 |

[^10]Table 16. Number and percent of office visits with corresponding standard errors, by diagnostic and screening services ordered or provided, according to patient's sex: United States, 2002

| Diagnostic and screening services ordered or provided | Number of visits in thousands ${ }^{1}$ | Standard error in thousands | Percent of visits | Standard error of percent | Patient's sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Female ${ }^{2}$ |  | Male ${ }^{3}$ |  |
|  |  |  |  |  | Percent of visits | Standard error of percent | Percent of visits | Standard error of percent |
| All visits | 889,980 | 28,110 | $\ldots$ | $\ldots$ | $\ldots$ | ... | $\ldots$ | ... |
| None | 126,218 | 8,955 | 14.2 | 1.0 | 13.5 | 1.0 | 15.3 | 1.1 |
| Examinations |  |  |  |  |  |  |  |  |
| General medical examination | 442,299 | 20,837 | 49.7 | 1.7 | 48.9 | 1.8 | 50.8 | 1.7 |
| Other examination | 206,336 | 13,261 | 23.2 | 1.2 | 25.2 | 1.2 | 20.3 | 1.3 |
| Diagnostic tests |  |  |  |  |  |  |  |  |
| Blood pressure | 428,011 | 21,114 | 48.1 | 1.5 | 51.5 | 1.7 | 43.1 | 1.6 |
| EKG ${ }^{4}$ | 31,790 | 5,694 | 3.6 | 0.6 | 3.5 | 0.8 | 3.7 | 0.5 |
| Any scope procedure | 18,882 | 1,978 | 2.1 | 0.2 | 2.1 | 0.2 | 2.2 | 0.3 |
| Sigmoidoscopy/colonoscopy | 9,772 | 1,527 | 1.1 | 0.2 | 1.0 | 0.2 | 1.2 | 0.2 |
| Endoscopy | 6,387 | 791 | 0.7 | 0.1 | 0.8 | 0.1 | 0.6 | 0.1 |
| Cystoscopy . | 1,874 | 256 | 0.2 | 0.0 | 0.1 | 0.0 | 0.3 | 0.0 |
| Cardiac stress test. | 3,740 | 662 | 0.4 | 0.1 | 0.3 | 0.1 | 0.6 | 0.1 |
| Audiometry | 3,706 | 832 | 0.4 | 0.1 | 0.3 | 0.1 | 0.5 | 0.2 |
| Tuberculin skin test | 2,839 | 647 | 0.3 | 0.1 | 0.3 | 0.1 | 0.3 | 0.1 |
| EEG ${ }^{5}$ | 825 | 150 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 |
| Fetal monitoring | *1,526 | 502 | *0.2 | 0.1 | *0.3 | 0.1 | . . . | . . . |
| Laboratory tests |  |  |  |  |  |  |  |  |
| CBC ${ }^{6}$ | 78,118 | 6,319 | 8.8 | 0.7 | 8.8 | 0.7 | 8.8 | 0.7 |
| Urinalysis | 85,723 | 7,013 | 9.6 | 0.7 | 11.3 | 1.0 | 7.2 | 0.6 |
| Cholesterol | 46,260 | 4,684 | 5.2 | 0.5 | 4.7 | 0.5 | 6.0 | 0.7 |
| PSA ${ }^{7}$ | 14,870 | 1,585 | 1.7 | 0.2 | . . | . . | 4.1 | 0.4 |
| Hematocrit/hemoglobin | 28,321 | 4,641 | 3.2 | 0.5 | 3.7 | 0.7 | 2.4 | 0.4 |
| Pap test | 36,341 | 2,981 | 4.1 | 0.3 | 6.9 | 0.5 | . $\cdot$ | . . |
| Cultures |  |  |  |  |  |  |  |  |
| Any culture | 31,331 | 2,601 | 3.5 | 0.3 | 3.7 | 0.3 | 3.2 | 0.3 |
| Throat/rapid strep test | 15,036 | 1,728 | 1.7 | 0.2 | 1.6 | 0.2 | 1.8 | 0.3 |
| Urine | 6,066 | 1,028 | 0.7 | 0.1 | 0.7 | 0.1 | 0.6 | 0.2 |
| Stool | 1,886 | 456 | 0.2 | 0.1 | * | . . | * | . . . |
| Cervical/urethral | 3,933 | 582 | 0.4 | 0.1 | 0.7 | 0.1 | $\ldots$ | ... |
| Imaging |  |  |  |  |  |  |  |  |
| Any imaging. | 96,781 | 5,969 | 10.9 | 0.6 | 12.0 | 0.7 | 9.2 | 0.7 |
| X ray . | 53,458 | 4,842 | 6.0 | 0.5 | 5.7 | 0.6 | 6.4 | 0.6 |
| Ultrasound | 8,578 | 1,047 | 1.0 | 0.1 | 1.2 | 0.2 | 0.7 | 0.1 |
| Mammography . | 17,560 | 1,916 | 2.0 | 0.2 | 3.3 | 0.3 | $\ldots$ | . . . |
| Other imaging | 32,298 | 2,062 | 3.6 | 0.2 | 3.9 | 0.3 | 3.3 | 0.3 |
| Blank | *8,331 | 3,016 | *0.9 | 0.3 | *0.9 | 0.4 | *1.0 | 0.3 |

[^11]Table 17. Number and percent of office visits with corresponding standard errors, by counseling, education, or therapeutic services ordered or provided, according to patient's sex: United States, 2002

| Counseling, education, or therapeutic services ordered or provided | Number of visits in thousands ${ }^{1}$ | Standard error in thousands | Percent of visits | Standard error of percent | Patient's sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Female ${ }^{2}$ |  | Male ${ }^{3}$ |  |
|  |  |  |  |  | Percent of visits | Standard error of percent | Percent of visits | Standard error of percent |
| All visits | 889,980 | 28,110 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |  |
| None | 473,435 | 17,926 | 53.2 | 1.5 | 52.0 | 1.6 | 55.0 | 1.5 |
| Counseling/education |  |  |  |  |  |  |  |  |
| Diet/nutrition. | 127,699 | 7,954 | 14.3 | 0.8 | 15.0 | 0.9 | 13.4 | 0.8 |
| Exercise | 89,087 | 7,191 | 10.0 | 0.7 | 10.5 | 0.8 | 9.3 | 0.8 |
| Mental health/stress management | 40,764 | 4,062 | 4.6 | 0.4 | 4.9 | 0.5 | 4.2 | 0.5 |
| Weight reduction . | 32,050 | 3,397 | 3.6 | 0.4 | 3.9 | 0.5 | 3.1 | 0.3 |
| Growth/development. | 29,100 | 3,037 | 3.3 | 0.3 | 3.0 | 0.3 | 3.6 | 0.4 |
| Tobacco use/exposure | 23,674 | 2,033 | 2.7 | 0.2 | 2.5 | 0.2 | 2.9 | 0.3 |
| Physiotherapy. | 22,531 | 4,710 | 2.5 | 0.5 | 2.4 | 0.5 | 2.8 | 0.5 |
| Asthma education | 18,339 | 2,811 | 2.1 | 0.3 | 2.0 | 0.4 | 2.1 | 0.3 |
| Psychotherapy | 18,231 | 2,648 | 2.0 | 0.3 | 1.8 | 0.2 | 2.3 | 0.5 |
| Other | 190,849 | 13,299 | 21.4 | 1.2 | 22.4 | 1.3 | 20.0 | 1.2 |
| Blank | 18,498 | 3,567 | 2.1 | 0.4 | 2.3 | 0.5 | 1.8 | 0.3 |

[^12]Table 18. Number and percent distribution of write-in surgical procedures ordered or performed with corresponding standard errors, by procedure category: United States, 2002

| Procedure/operation category ${ }^{1}$ | ICD-9-CM codes | Number of procedures in thousands | Standard error in thousands | Percent distribution | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All write-in surgical procedures |  | 69,796 | 4,114 | 100.0 | $\ldots$ |
| Nervous system | 01-05 | 1,830 | 385 | 2.6 | 0.5 |
| Eye | 08-16 | 6,782 | 1,083 | 9.7 | 1.4 |
| Ear | 18-20 | 1,458 | 288 | 2.1 | 0.4 |
| Nose, mouth, and pharynx | 21-29 | 2,777 | 459 | 4.0 | 0.6 |
| Cardiovascular system | 35-39 | 3,393 | 800 | 4.9 | 1.1 |
| Digestive system. | 42-54 | 5,481 | 849 | 7.9 | 1.2 |
| Urinary system | 55-59 | 1,171 | 216 | 1.7 | 0.3 |
| Male genital organs | 60-64 | 1,830 | 324 | 2.6 | 0.4 |
| Female genital organs. | 65-71 | 3,927 | 613 | 5.6 | 0.9 |
| Obstetrical procedures | 72-75 | 2,032 | 534 | 2.9 | 0.7 |
| Musculoskeletal system. | 76-84 | 8,820 | 1,084 | 12.6 | 1.6 |
| Integumentary system. | 85-86 | 29,469 | 2,705 | 42.2 | 2.4 |
| Other procedures ${ }^{2}$ |  | 826 | 178 | 1.2 | 0.3 |

[^13]Table 19. Number and percent distribution of office visits with corresponding standard errors, by medication therapy and number of medications provided or prescribed, according to patient's sex: United States, 2002

| Visit characteristic | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent | Patient's sex |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Female ${ }^{1}$ |  | Male ${ }^{2}$ |  |
|  |  |  |  |  | Percent distribution | Standard error of percent | Percent distribution | Standard error of percent |
| Medication therapy ${ }^{3}$ |  |  |  |  |  |  |  |  |
| All visits | 889,980 | 28,110 | 100.0 | $\ldots$ | 100.0 | $\ldots$ | 100.0 | $\ldots$ |
| Drug visits ${ }^{4}$ | 577,075 | 20,898 | 64.8 | 1.1 | 65.5 | 1.2 | 63.9 | 1.3 |
| Visits without mention of medication | 312,906 | 13,755 | 35.2 | 1.1 | 34.5 | 1.2 | 36.1 | 1.3 |
| Number of medications provided or prescribed by a physician |  |  |  |  |  |  |  |  |
| All visits | 889,980 | 28,110 | 100.0 | $\ldots$ | 100.0 | . | 100.0 | $\ldots$ |
| 0 . | 312,906 | 13,755 | 35.2 | 1.1 | 34.5 | 1.2 | 36.1 | 1.3 |
| 1. | 239,750 | 9,396 | 26.9 | 0.6 | 26.9 | 0.7 | 27.0 | 0.7 |
| 2. | 146,236 | 6,619 | 16.4 | 0.5 | 16.6 | 0.6 | 16.2 | 0.6 |
| 3. | 76,317 | 4,382 | 8.6 | 0.4 | 8.8 | 0.5 | 8.3 | 0.4 |
| 4. | 39,594 | 2,699 | 4.4 | 0.3 | 4.4 | 0.3 | 4.5 | 0.3 |
| 5. | 23,309 | 1,839 | 2.6 | 0.2 | 2.8 | 0.3 | 2.3 | 0.2 |
| 6........ . . . . . . . . . . | 51,871 | 4,727 | 5.8 | 0.5 | 6.0 | 0.5 | 5.5 | 0.5 |

. Category not applicable.

[^14]Table 20. Number and percent distribution of drug visits, and percent drug visits, drug mentions, and drug mention rates per 100 visits with corresponding standard errors, by physician specialty: United States, 2002

| Physician specialty | Drug visits |  |  |  | Drug mentions |  |  |  | Percent drug visits |  | Drug mention rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number in thousands ${ }^{1}$ | Standard error in thousands | Percent distribution | Standard error of percent | Number in thousands ${ }^{2}$ | Standard error in thousands | Percent distribution | Standard error of percent | Percent drug visits ${ }^{3}$ | Standard error of percent | Number of drug mentions per 100 visits ${ }^{4}$ | Standard error of rate |
| All specialties | 577,075 | 20,898 | 100.0 | $\ldots$ | 1,347,312 | 58,464 | 100.0 | $\ldots$ | 64.8 | 1.1 | 151.4 | 4.7 |
| General and family practice | 165,371 | 10,394 | 28.7 | 1.5 | 402,067 | 29,010 | 29.8 | 1.8 | 76.8 | 1.3 | 186.6 | 8.1 |
| Internal medicine. | 115,219 | 12,442 | 20.0 | 1.8 | 310,006 | 38,979 | 23.0 | 2.3 | 73.5 | 3.5 | 197.8 | 15.3 |
| Pediatrics | 80,814 | 6,033 | 14.0 | 1.0 | 149,572 | 12,208 | 11.1 | 0.9 | 67.3 | 1.5 | 124.6 | 4.8 |
| Obstetrics and gynecology | 34,355 | 4,024 | 6.0 | 0.7 | 57,937 | 8,608 | 4.3 | 0.6 | 48.9 | 3.5 | 82.4 | 9.1 |
| Ophthalmology | 25,066 | 3,227 | 4.3 | 0.5 | 54,150 | 9,142 | 4.0 | 0.7 | 50.2 | 3.0 | 108.4 | 13.0 |
| Dermatology. | 21,292 | 2,581 | 3.7 | 0.4 | 39,180 | 4,989 | 2.9 | 0.4 | 66.1 | 2.6 | 121.6 | 6.8 |
| Psychiatry | 17,901 | 2,759 | 3.1 | 0.5 | 39,735 | 6,098 | 2.9 | 0.5 | 82.6 | 2.7 | 183.5 | 9.3 |
| Cardiovascular diseases | 15,889 | 2,337 | 2.8 | 0.4 | 64,088 | 10,851 | 4.8 | 0.8 | 76.3 | 4.8 | 307.8 | 30.4 |
| Orthopedic surgery. | 14,293 | 2,319 | 2.5 | 0.4 | 23,214 | 3,901 | 1.7 | 0.3 | 37.6 | 3.9 | 61.0 | 7.7 |
| Urology . . . . | 8,352 | 1,078 | 1.4 | 0.2 | 11,760 | 1,591 | 0.9 | 0.1 | 48.8 | 3.0 | 68.6 | 5.2 |
| Otolaryngology | 8,033 | 1,133 | 1.4 | 0.2 | 14,329 | 2,518 | 1.1 | 0.2 | 47.0 | 3.3 | 83.9 | 10.0 |
| Neurology . . | 5,799 | 587 | 1.0 | 0.1 | 12,368 | 1,586 | 0.9 | 0.1 | 60.3 | 3.9 | 128.5 | 12.1 |
| General surgery | 4,773 | 1,205 | 0.8 | 0.2 | *10,314 | 3,313 | *0.8 | 0.2 | 28.1 | 4.9 | 60.7 | 15.4 |
| All other specialties | 59,919 | 6,792 | 10.4 | 1.1 | 158,593 | 19,293 | 11.8 | 1.4 | 57.6 | 4.5 | 152.5 | 15.2 |

[^15]${ }^{2}$ Number of drugs mentioned at visits (up to six per visit).
${ }^{3}$ Percent of visits that included one or more drug mentions (number of drug visits divided by number of office visits multiplied by 100).
${ }^{4}$ Average number of drugs that were mentioned per 100 visits (number of drug mentions divided by total number of visits multiplied by 100)
NOTE: Numbers may not add to totals because of rounding.

Table 21. Number and percent of drug mentions for the $\mathbf{2 0}$ most frequently occurring therapeutic classes at office visits with corresponding standard errors: United States, 2002

| Therapeutic classfication ${ }^{1}$ | Number of occurrences in thousands | Standard error in thousands | Percent of drug mentions ${ }^{2}$ | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| NSAIDs ${ }^{3}$ | 66,328 | 4,718 | 4.9 | 0.2 |
| Antidepressants | 60,367 | 3,714 | 4.5 | 0.2 |
| Antihistamines | 58,060 | 4,473 | 4.3 | 0.3 |
| Antiasthmatics/bronchodilators | 54,562 | 5,893 | 4.0 | 0.4 |
| Vaccines/antisera. | 53,785 | 4,942 | 4.0 | 0.4 |
| Antihypertensive agents | 49,298 | 4,364 | 3.7 | 0.3 |
| Hyperlipidemia | 44,065 | 3,290 | 3.3 | 0.2 |
| Blood glucose regulators | 41,865 | 4,302 | 3.1 | 0.3 |
| $\mathrm{ACE}^{4}$ inhibitors | 40,927 | 3,026 | 3.0 | 0.2 |
| Disorders, acid/peptic | 40,812 | 2,695 | 3.0 | 0.1 |
| Analgesics, non-narcotic | 39,753 | 3,247 | 3.0 | 0.2 |
| Penicillins | 38,075 | 2,540 | 2.8 | 0.2 |
| Diuretics | 35,942 | 3,121 | 2.7 | 0.2 |
| Antipyretics | 34,784 | 3,047 | 2.6 | 0.2 |
| Analgesics, narcotic | 34,739 | 2,931 | 2.6 | 0.2 |
| Beta blockers | 33,090 | 2,727 | 2.5 | 0.2 |
| Calcium channel blockers | 31,998 | 2,768 | 2.4 | 0.2 |
| Vitamins/minerals | 30,154 | 3,297 | 2.2 | 0.2 |
| Antiarthritics . | 28,955 | 2,408 | 2.1 | 0.1 |
| Estrogens/progestins | 28,359 | 2,433 | 2.1 | 0.2 |

${ }^{1}$ Based on the standard four-digit drug classification used in the National Drug Code (NDC) Directory, 1995 edition (10).
${ }^{2}$ Based on an estimated 1,347,312,000 drug mentions at office visits in 2002.
${ }^{3}$ NSAIDs are nonsteroidal anti-inflammatory drugs.
${ }^{4} \mathrm{ACE}$ is angiotensin-converting enzyme.

Table 22. Number and rate of generic substances for the 20 most frequently occurring generic substances in drug mentions at office visits with corresponding standard errors: United States, 2002

| Generic substance | Number of occurrences in thousands ${ }^{1}$ | Standard error in thousands | Number of generic substances per 100 drug mentions ${ }^{2}$ | Standard error of rate |
| :---: | :---: | :---: | :---: | :---: |
| Acetaminophen . | 45,381 | 3,694 | 3.4 | 0.2 |
| Amoxicillin . | 35,791 | 2,444 | 2.7 | 0.2 |
| Hydrochlorothiazide | 28,406 | 2,812 | 2.1 | 0.2 |
| Albuterol | 25,174 | 2,694 | 1.9 | 0.2 |
| Aspirin | 23,409 | 2,145 | 1.7 | 0.1 |
| Hydrocodone | 21,643 | 2,206 | 1.6 | 0.1 |
| Fluticasone propionate | 20,626 | 2,394 | 1.5 | 0.2 |
| Levothyroxine . | 19,248 | 1,992 | 1.4 | 0.1 |
| Atorvastatin calcium . | 19,062 | 1,585 | 1.4 | 0.1 |
| Ibuprofen. | 17,651 | 1,397 | 1.3 | 0.1 |
| Lisinopril | 17,320 | 1,590 | 1.3 | 0.1 |
| Pseudoephedrine. | 16,770 | 1,928 | 1.2 | 0.1 |
| Furosemide | 16,507 | 1,599 | 1.2 | 0.1 |
| Guaifenesin | 15,822 | 1,793 | 1.2 | 0.1 |
| Metoprolol | 15,767 | 1,485 | 1.2 | 0.1 |
| Amlodipine. | 15,643 | 1,451 | 1.2 | 0.1 |
| Azithromycin | 14,125 | 1,351 | 1.0 | 0.1 |
| Estrogens | 13,973 | 1,474 | 1.0 | 0.1 |
| Celecoxib | 13,763 | 1,641 | 1.0 | 0.1 |
| Triamcinolone. | 13,039 | 1,610 | 1.0 | 0.1 |

[^16]Table 23. Number, percent distribution, and therapeutic classification for the 20 drugs most frequently prescribed at office visits with corresponding standard errors, by entry name of drug: United States, 2002

| Entry name of drug ${ }^{1}$ | Number of drug mentions in thousands | Standard error in thousands | Percent distribution | Standard error of percent | Therapeutic classification ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All drug mentions. . . . . | 1,347,312 | 58,464 | 100.0 | $\ldots$ | $\ldots$ |
| Lipitor. | 18,842 | 1,577 | 1.4 | 0.1 | Hyperlipidemia |
| Albuterol | 15,442 | 1,860 | 1.1 | 0.1 | Antiasthmatics/bronchodilators |
| Amoxicillin . | 14,690 | 1,423 | 1.1 | 0.1 | Penicillins |
| Synthroid. | 14,525 | 1,708 | 1.1 | 0.1 | Thyroid/antithyroid |
| Lasix | 14,004 | 1,454 | 1.0 | 0.1 | Diuretics |
| Celebrex | 13,763 | 1,641 | 1.0 | 0.1 | NSAIDs ${ }^{3}$ |
| Tylenol | 12,919 | 2,368 | 1.0 | 0.2 | Nonnarcotic analgesics; antipyretics |
| Vioxx | 12,650 | 1,724 | 0.9 | 0.1 | NSAIDs ${ }^{3}$ |
| Augmentin. | 11,995 | 1,156 | 0.9 | 0.1 | Penicillins |
| Norvasc | 11,853 | 1,172 | 0.9 | 0.1 | Calcium channel blockers |
| Zyrtec. | 11,573 | 1,377 | 0.9 | 0.1 | Antihistamines |
| Zocor | 11,429 | 1,171 | 0.8 | 0.1 | Hyperlipidemia |
| A.S.A. ${ }^{4}$ | 10,670 | 1,345 | 0.8 | 0.1 | Nonnarcotic analgesics; antiarthritics; antipyretics |
| Prednisone | 10,422 | 1,171 | 0.8 | 0.1 | Adrenal corticosteroids |
| Allegra | 10,420 | 1,315 | 0.8 | 0.1 | Antihistamines |
| Coumadin | 10,090 | 1,273 | 0.7 | 0.1 | Anticoagulants/thrombolytics |
| Atenolol | 9,694 | 1,186 | 0.7 | 0.1 | Beta blockers |
| Claritin | 9,208 | 1,179 | 0.7 | 0.1 | Antihistamines |
| Paxil | 9,118 | 924 | 0.7 | 0.1 | Antidepressants |
| Prevacid | 8,981 | 901 | 0.7 | 0.1 | Acid/peptic disorders |
| All other | 1,105,025 | 46,612 | 82.0 | 0.5 | . . . |

[^17]Table 24. Number and percent of office visits with corresponding standard errors, by providers seen: United States, 2002

| Type of provider | Number of visits in thousands ${ }^{1}$ | Standard error in thousands | Percent of visits | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All visits | 889,980 | 28,110 | $\ldots$ | ... |
| Physician. | 846,167 | 27,573 | 95.1 | 0.6 |
| Medical/nursing assistant. | 243,082 | 19,551 | 27.3 | 1.9 |
| R.N. ${ }^{2}$ | 146,513 | 15,495 | 16.5 | 1.6 |
| L.P.N. ${ }^{3}$ | 88,902 | 13,202 | 10.0 | 1.4 |
| Medical technician/technologist | 54,983 | 6,969 | 6.2 | 0.7 |
| Physician assistant. | 16,264 | 3,525 | 1.8 | 0.4 |
| Nurse practitioner/midwife | *11,176 | 3,656 | *1.3 | 0.4 |
| Other | 31,784 | 8,038 | 3.6 | 0.9 |

[^18]Table 25. Number and percent of office visits with corresponding standard errors, by visit disposition: United States, 2002

| Disposition | Number of visits in thousands ${ }^{1}$ | Standard error in thousands | Percent of visits | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All visits | 889,980 | 28,110 | $\ldots$ | $\ldots$ |
| Return at specified time. | 537,891 | 20,764 | 60.4 | 1.2 |
| Return if needed, P.R.N ${ }^{2}$ | 243,944 | 14,152 | 27.4 | 1.1 |
| No followup planned. | 75,206 | 4,923 | 8.5 | 0.5 |
| Referred to other physician | 65,323 | 5,689 | 7.3 | 0.6 |
| Telephone followup planned | 24,387 | 4,711 | 2.7 | 0.5 |
| Admitted to hospital | 4,011 | 587 | 0.5 | 0.1 |
| Other disposition. | 18,454 | 4,348 | 2.1 | 0.5 |
| Blank | 20,275 | 3,629 | 2.3 | 0.4 |

[^19]Table 26. Number and percent distribution of office visits with corresponding standard errors, by time spent with physician: United States, 2002

| Time spent with physician | Number of visits in thousands | Standard error in thousands | Percent distribution | Standard error of percent |
| :---: | :---: | :---: | :---: | :---: |
| All visits | 889,980 | 28,110 | 100.0 |  |
| Visits at which no physician was seen. | 43,813 | 5,140 | 4.9 | 0.6 |
| Visits at which a physician was seen. | 846,167 | 27,573 | 95.1 | 0.6 |
| Total. | 846,167 | 27,573 | 100.0 | . . |
| 1-5 minutes | 38,393 | 5,412 | 4.5 | 0.6 |
| 6-10 minutes. | 181,078 | 11,403 | 21.4 | 1.1 |
| 11-15 minutes | 290,573 | 12,660 | 34.3 | 1.0 |
| 16-30 minutes. | 275,653 | 13,529 | 32.6 | 1.3 |
| 31-60 minutes. | 57,693 | 5,996 | 6.8 | 0.6 |
| 61 minutes and over | 2,777 | 637 | 0.3 | 0.1 |

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

Table 27. Mean time spent with physician with corresponding standard errors, by physician specialty: United States, 2002

| Physician specialty | Mean time in minutes spent with physician ${ }^{1}$ | Standard error of mean | $\begin{aligned} & \text { 25th } \\ & \text { percentile } \end{aligned}$ | Median | 75th percentile |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All visits | 18.4 | 0.3 | 9.9 | 14.7 | 19.8 |
| Psychiatry | 35.2 | 1.7 | 19.8 | 29.6 | 48.2 |
| Neurology | 27.9 | 1.1 | 14.7 | 24.1 | 38.0 |
| Cardiovascular diseases | 21.4 | 1.2 | 13.6 | 18.0 | 28.2 |
| Internal medicine. | 20.0 | 1.2 | 13.4 | 17.1 | 24.2 |
| General surgery | 19.6 | 1.0 | 9.9 | 14.5 | 24.4 |
| Urology. | 18.2 | 0.8 | 14.1 | 14.8 | 19.6 |
| Obstetrics and gynecology | 18.1 | 0.9 | 9.8 | 14.7 | 19.8 |
| Ophthalmology | 17.3 | 1.1 | 9.5 | 14.4 | 19.6 |
| Orthopedic surgery. | 17.1 | 0.5 | 13.2 | 14.3 | 18.8 |
| General and family practice | 16.1 | 0.3 | 9.8 | 14.5 | 19.3 |
| Pediatrics | 16.1 | 0.5 | 9.7 | 14.5 | 19.3 |
| Dermatology. | 15.2 | 1.0 | 9.2 | 14.1 | 14.9 |
| Otolaryngology | 15.1 | 0.7 | 9.5 | 14.3 | 19.1 |
| All other specialties | 21.3 | 1.0 | 14.1 | 15.0 | 25.7 |

[^20]Table 28. Office-based physician-level estimates with corresponding standard errors, by selected practice characteristics according to specialty type: United States, 2002

| Practice characteristics | All specialties | Specialty type |  |  | All specialties | Specialty type |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Primary care | Surgical | Medical |  | Primary care | Surgical | Medical |
|  | Number of physicians |  |  |  | Standard error |  |  |  |
| All office-based physicians . | 308,023 | 154,725 | 78,430 | 74,868 | 8,149 | 4,674 | 3,438 | 3,793 |
|  | Percent distribution |  |  |  |  |  |  |  |
| Total sample. | 100.0 | 100.0 | 100.0 | 100.0 | ... | $\ldots$ | $\ldots$ | $\ldots$ |
| Number of in-scope office locations |  |  |  |  |  |  |  |  |
| One . | 86.1 | 88.1 | 82.6 | 85.6 | 1.3 | 1.9 | 2.1 | 2.4 |
| More than one | 13.9 | 11.9 | 17.4 | 14.4 | 1.3 | 1.9 | 2.1 | 2.4 |
| Number of days practicing during random NAMCS week |  |  |  |  |  |  |  |  |
| 0. | 17.7 | 15.2 | 19.5 | 20.9 | 1.3 | 1.7 | 2.0 | 2.5 |
| 1-2 | 17.7 | 10.9 | 27.7 | 21.4 | 1.2 | 1.3 | 2.2 | 3.0 |
| 3-4 | 39.0 | 40.6 | 38.4 | 36.1 | 1.8 | 2.4 | 2.5 | 3.2 |
| 5 or more | 25.7 | 33.3 | 14.4 | 21.7 | 1.4 | 2.3 | 1.8 | 2.5 |
| Type of practice |  |  |  |  |  |  |  |  |
| Solo. | 34.3 | 33.7 | 32.3 | 37.8 | 1.7 | 2.5 | 2.8 | 3.5 |
| Single-specialty group. | 41.0 | 38.4 | 47.5 | 39.7 | 1.9 | 2.6 | 2.9 | 3.8 |
| Multispecialty group . | 24.7 | 28.0 | 20.2 | 22.5 | 1.8 | 2.4 | 2.6 | 3.4 |
| Employment status |  |  |  |  |  |  |  |  |
| Owner | 72.7 | 66.6 | 81.2 | 76.8 | 1.8 | 2.6 | 2.2 | 2.8 |
| Employee | 22.4 | 28.2 | 16.2 | 17.0 | 1.7 | 2.5 | 2.0 | 2.7 |
| Contractor . . . . . . . . . . | 4.8 | 5.2 | 2.7 | 6.2 | 0.7 | 1.1 | 0.9 | 1.6 |
| Percent of physicians ${ }^{1}$ |  |  |  |  |  |  |  |  |

Hospital visits . . . . . . . . . . . . . . . . . . . . . . . . . . .
Telephone consultation . . . . . . . . . . . . . . . . .
Home visits . . . . . . . . . . . . . . . . . . . . .
E-mail/Internet consultation . . . . . . . . . . . . . . . .
Office visits . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Telephone consultation . . . . . . . . . . . . . . . . . . .
Hospital visits . . . . . . . . . . . . . . . . . . . . .
Home visits . . . . . . . . . . . . . . . . . . . . . .
E-mail/Internet consultations . . . . . . . . . . . . . . . . . .

| Mean numer |  |  |  |
| ---: | ---: | ---: | ---: |
| 76.5 | 92.4 | 63.5 | 57.3 |
| 20.8 | 26.3 | 11.5 | 15.7 |
| 20.5 | 17.0 | 17.6 | 34.1 |
| 10.1 | 11.7 | 2.6 | 6.0 |
| 6.0 | 5.7 | 7.3 | 5.2 |


| 1.9 | 3.2 | 2.3 | 3.5 |
| :--- | :--- | :--- | :--- |
| 1.3 | 2.1 | 1.0 | 2.0 |
| 1.6 | 2.1 | 1.5 | 4.8 |
| 1.8 | 2.2 | 0.7 | 1.8 |
| 1.2 | 1.8 | 2.4 | 1.1 |

Percent of revenue
from selected sources ${ }^{4}$
Private insurance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

| 48.3 | 52.7 | 43.7 | 44.1 |
| ---: | ---: | ---: | ---: |
| 29.8 | 24.6 | 28.2 | 31.8 |
| 12.0 | 14.3 | 9.9 | 9.5 |
| 10.3 | 8.2 | 9.4 | 15.9 |

Percent distribution


| 1.1 | 1.5 | 1.7 | 2.5 |
| :--- | :--- | :--- | :--- |
| 0.9 | 1.3 | 1.8 | 1.6 |
| 2.0 | 2.8 | 2.9 | 3.6 |
| 2.0 | 2.6 | 2.9 | 3.7 |
| 1.1 | 1.3 | 1.4 | 2.3 |

See footnotes at end of table.

Table 28. Office-based physician-level estimates with corresponding standard errors, by selected practice characteristics according to specialty type: United States, 2002-Con.


[^21]
## Technical Notes

## Data collection

The NAMCS data collection is authorized under Section 308d of the Public Health Service Act (Title 42 United States Code, Section 306[242k]). Participation is voluntary. In 2002, of the 1,492 in-scope physicians who participated in the NAMCS, 1,233 of them completed 28,738 Patient Record forms, and 259 physicians reported no patients during their sampled week. Also, for physicians who completed Patient Record forms, 98.5 percent ( $\mathrm{N}=1,215$ ) responded fully or adequately, and 1.5 percent $(\mathrm{N}=18)$ responded minimally, for an unweighted physician participation rate of 71.2 percent.

The U.S. Census Bureau, acting as the data collection agent for the survey, provided training to field representatives (FRs) throughout the Nation. They, in turn, oversaw data collection at the physician's office. FRs contacted physicians for induction into the survey after an advance letter was mailed by NCHS notifying the physicians of their selection for the survey. In most cases, physicians' and/or their staff completed the information requested on the Patient Record forms (see figure I). However, in 30.3 percent of the offices, FRs abstracted the data from medical records or computer printouts, either alone or with the doctor or office staff. No personally identifying information such as patient name or address is collected. Confidentiality of the data collected in the survey is protected under the Privacy Act, Public Health Service Act, Title 42 of the United States Code, Section 242 m (d), and Title V of the E-Government Act of 2002.

## 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 does not measure any systematic biases in the data.

The standard errors presented in the tables and used in tests of significance

Table I. Coefficients appropriate for determining approximate relative standard errors by type of estimate and physician specialty: National Ambulatory Medical Care Survey, 2002

| Type of estimate and physician specialty | Coefficient for use with estimates in thousands |  | Lowest reliable estimate (in thousands) |
| :---: | :---: | :---: | :---: |
|  | A | B |  |
| Visits |  |  |  |
| Overall totals | 0.001885 | 67.975 | 771 |
| General and family practice | 0.005017 | 46.488 | 548 |
| Internal medicine | 0.012114 | 117.073 | 1,504 |
| Pediatrics | 0.005394 | 51.389 | 608 |
| General surgery | 0.016740 | 20.945 | 286 |
| Obstetrics and gynecology | 0.011182 | 74.840 | 950 |
| Orthopedic surgery. | 0.018688 | 45.179 | 634 |
| Cardiovascular diseases | 0.015939 | 23.877 | 323 |
| Dermatology. | 0.014560 | 27.893 | 370 |
| Urology. | 0.012960 | 19.354 | 252 |
| Psychiatry | 0.016826 | 36.280 | 496 |
| Neurology | 0.009287 | 8.185 | 102 |
| Ophthalmology | 0.012374 | 71.024 | 915 |
| Otolaryngology | 0.015390 | 13.691 | 184 |
| All other specialties | 0.011088 | 79.546 | 1,009 |
| Drug mentions |  |  |  |
| Overall totals | 0.003469 | 132.030 | 1,526 |
| General and family practice | 0.006536 | 126.282 | 1,513 |
| Internal medicine. | 0.018887 | 330.478 | 4,647 |
| Pediatrics | 0.007724 | 107.747 | 1,310 |
| General surgery | 0.042731 | 52.401 | 1,109 |
| Obstetrics and gynecology. | 0.025114 | 126.290 | 1,946 |
| Orthopedic surgery. . | 0.026888 | 71.607 | 1,135 |
| Cardiovascular diseases | 0.031081 | 79.640 | 1,352 |
| Dermatology. | 0.014363 | 63.287 | 837 |
| Urology | 0.019728 | 25.141 | 358 |
| Psychiatry | 0.022866 | 90.933 | 1,355 |
| Neurology | 0.015312 | 21.435 | 287 |
| Ophthalmology | 0.027404 | 124.499 | 1,989 |
| Otolaryngology | 0.032009 | 21.442 | 370 |
| All other specialties | 0.016159 | 271.348 | 3,675 |

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 0.011915 and 29.949 , respectively. The corresponding coefficients for estimates of drug mentions in thousands are 0.012174 and 99.018 . To perform analyses of NAMCS data on visits to M.D.'s only, excluding doctors of osteopathy, contact the Ambulatory Care Statistics Branch.
for this report were estimated using SUDAAN software. SUDAAN computes standard errors by using a first-order Taylor series approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses has been published (4). 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.

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

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.

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

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. This 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 NAMCS are derived by a multistage estimation procedure that produces essentially unbiased national estimates. The estimation procedure has four basic components:

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

Estimates from the NAMCS data were adjusted to account for sample physicians who did not participate in the study. This was done in a manner that minimized the impact of nonresponse on final estimates by imputing to nonresponding physicians the practice characteristics of similar responding physicians. For this purpose, similar physicians were judged to be physicians having the same specialty designation and practicing in the same PSU. In 2002, the weight from physicians who provided a minimal number of Patient Record forms was capped. The remaining weight for these minimally responding doctors was accounted for
by all in-scope, responding doctors in the specialty and PSU. These doctors were counted as nonrespondents in the response rates presented.

## 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 items, 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 error rates ranged from 0.1 to 1.1 for various data items.

## Adjustments for survey

 nonresponse-The weighted response rate for the 2002 NAMCS was 71.1 percent. Table II presents weighted characteristics of NAMCS respondents and nonrespondents, along with weighted response rates. Distributions were similar, with the exception of region, metropolitan status, physician specialty where internal medicine physicians were less likely to cooperate, and practice type. The effect of this differential response is minimized in the visit estimates in most cases as NAMCS uses a nonresponse adjustment factor that takes all of these variables into account, except practice type.
## Adjustments for item

nonresponse-Item nonresponse rates in the NAMCS are generally low (5 percent or less). However, levels of nonresponse can vary considerably in the survey. 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 majority of tables include a
combined entry of "unknown" and/or "blank" to display missing data. For items where combined item nonresponse is between 30 and 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 causes 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 need to decide how best to treat items with high levels of missing responses. For items with a nonresponse greater than 50 percent, data are not presented.

Weighted item nonresponse rates (i.e., if the item was left blank or the "unknown" box was marked) were 5.0 percent or less for data items with the following exceptions: ethnicity (21.3 percent), was patient referred for this visit ( 18.4 percent), how many past visits in the last 12 months ( 5.5 percent), patient's PCP ( 5.6 percent), episode of care ( 9.3 percent), do other physicians share patient's care for this problem or diagnosis ( 13.2 percent), and cause of injury ( 36.8 percent of injury visits).

For some items, missing values were imputed by randomly assigning a value from a Patient Record form with similar characteristics and were based on physician specialty, geographic region, and three-digit ICD-9-CM codes for primary diagnosis. Imputations were performed for the following variables: birth year ( 2.3 percent), sex ( 5.0 percent), race ( 16.4 percent), and time spent with physician (13.1 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 noted in the data.

## Tests of significance and rounding

In this report, the determination of statistical inference is based on a two-tailed $t$-test. The Bonferroni

Table II. Characteristics of the 2002 National Ambulatory Medical Care Survey, physician respondents and nonrespondents

| Physician characteristic ${ }^{1}$ | Number of sampled in-scope physicians ${ }^{2}$ | Total sample percent distribution ${ }^{3}$ (weighted) | Responding physician distribution ${ }^{4}$ (weighted) | Nonresponding physician distribution ${ }^{5}$ (weighted) | Weighted response rate ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All office-based physicians | 2,095 | 100.0 | 100.0 | 100.0 | 0.711 |
| Age |  |  |  |  |  |
| Under 50 years. | 1,080 | 54.1 | 54.9 | 51.9 | 0.722 |
| 50 years and over | 1,015 | 45.9 | 45.1 | 48.1 | 0.697 |
| Sex |  |  |  |  |  |
| Male | 1711 | 79.6 | 78.6 | 82.1 | 0.702 |
| Female . | 384 | 20.4 | 21.4 | 17.9 | 0.746 |
| Region ${ }^{7}$ |  |  |  |  |  |
| Northeast | 479 | 21.3 | 18.2 | 29.0 | 0.607 |
| Midwest | 473 | 22.6 | 23.1 | 21.2 | 0.729 |
| South . | 660 | 33.3 | 36.3 | 25.8 | 0.776 |
| West | 483 | 22.8 | 22.3 | 24.0 | 0.695 |
| Metropolitan status ${ }^{7}$ |  |  |  |  |  |
| MSA area ${ }^{8}$. | 1,848 | 87.1 | 85.5 | 91.2 | 0.697 |
| Non-MSA area ${ }^{8}$. | 247 | 12.9 | 14.5 | 8.8 | 0.802 |
| Type of doctor |  |  |  |  |  |
| Doctor of medicine. | 1,940 | 93.8 | 93.6 | 94.3 | 0.709 |
| Doctor of osteopathy | 155 | 6.2 | 6.4 | 5.7 | 0.734 |
| Specialty ${ }^{7}$ |  |  |  |  |  |
| General/family practice | 328 | 18.4 | 19.7 | 15.1 | 0.762 |
| Internal medicine. | 156 | 15.1 | 12.5 | 21.6 | 0.588 |
| Pediatrics | 159 | 9.7 | 11.7 | 4.7 | 0.860 |
| General surgery | 115 | 3.8 | 4.0 | 3.2 | 0.755 |
| Obstetrics and gynecology | 120 | 7.7 | 8.0 | 7.1 | 0.734 |
| Orthopedic surgery. . | 114 | 4.9 | 4.4 | 6.1 | 0.638 |
| Cardiovascular diseases | 147 | 4.1 | 3.5 | 5.4 | 0.618 |
| Dermatology. | 92 | 2.1 | 2.3 | 1.7 | 0.764 |
| Urology. | 115 | 2.1 | 2.1 | 2.2 | 0.703 |
| Psychiatry | 158 | 5.5 | 5.3 | 6.0 | 0.683 |
| Neurology | 161 | 1.9 | 1.6 | 2.8 | 0.584 |
| Ophthalmology | 105 | 4.4 | 4.1 | 5.1 | 0.663 |
| Otolaryngology | 107 | 2.0 | 1.9 | 2.2 | 0.679 |
| All other specialties | 218 | 18.4 | 19.0 | 16.9 | 0.735 |
| Specialty type ${ }^{9}$ |  |  |  |  |  |
| Primary care | 749 | 50.0 | 51.0 | 47.6 | 0.725 |
| Surgical | 765 | 26.1 | 24.5 | 30.0 | 0.668 |
| Medical. | 581 | 23.9 | 24.5 | 22.3 | 0.729 |
| Practice type ${ }^{7}$ |  |  |  |  |  |
| Solo. | 685 | 31.6 | 31.9 | 31.0 | 0.717 |
| Two physicians . | 167 | 7.5 | 6.9 | 8.9 | 0.656 |
| Group/HMO ${ }^{10}$. | 704 | 33.9 | 35.0 | 31.0 | 0.735 |
| Medical school/government | 31 | 1.3 | 1.6 | 0.5 | 0.888 |
| Other . | 42 | 1.8 | 2.2 | 1.1 | 0.833 |
| Unclassified | 466 | 23.9 | 22.4 | 27.6 | 0.666 |

[^22]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.

A weighted least-squares regression analysis was used to determine the significance of trends. For the weighted least-squares test, the null hypothesis is that the slope, $\beta$, of the regression line between the two variables of interest does not significantly differ from zero, and the alternative hypothesis is that it does differ from zero (i.e., $H_{0}: \beta=0$, and $\left.\mathrm{H}_{\mathrm{A}}: \beta \neq 0\right)$. In this modified least-square regression, each estimate is weighted by the inverse of the standard error (17).

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 figures calculated from rounded data.

## Race

The instruction for the race item on the Patient Record form was changed in 1999 to be consistent with standards issued by the Office of Management and Budget to promote comparability of data among Federal data sources and so that more than one race could be recorded per person (18). The new race item includes the following groups: white, black or African American, Asian, Native Hawaiian or other Pacific Islander, and American Indian or Alaska Native. Respondents could check multiple categories for each patient. Prior to 1999 , only a single race category could be checked per person. Because of the difference between single and multiple race reporting, race-specific estimates prior to 1999 are not strictly comparable with those from

1999 and subsequent years. From 1999 to the present, only a small proportion of records had multiple races indicated. Where reliable multiple-race estimates can be obtained, they are presented in one category. Estimates for specific race categories reflect visits where only a single race was reported. See
"Population figures and rate calculation" in the "Technical Notes" for more information.

According to the same standards, data on race and Hispanic origin were collected separately. Consequently, all race categories include visits by persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race.

## Injury groups

Table 15 presents data on the intent and mechanism producing the injuries that resulted in 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." However, for table 15, 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 III shows the E-code groupings used to produce this table.

## Physician specialty groups

The NAMCS survey design grouped physicians into 15 strata, or specialty groups, for sampling purposes. One stratum, doctors of osteopathy, was based on information from the American Osteopathic Association. The other groups (general and family practice, internal medicine, pediatrics, general surgery, obstetrics and gynecology, orthopedic surgery, cardiovascular diseases, dermatology, urology, psychiatry, neurology, ophthalmology, otolaryngology, and a residual category of other specialties) were developed based on information from the American Medical Association (AMA). Estimates are presented in this report with doctors of osteopathy combined with doctors of medicine, unless otherwise noted. Table IV shows physician specialty groups split into three major categories: primary care, surgical specialties, and medical specialties based on the AMA classification.

## Population figures and rate calculation

The 2002 visit rates for age, sex, race, geographic region, and metropolitan status use Census 2000based postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2002, as prepared by the U.S. Census Bureau. Between 1992 and 2000, NAMCS and NHAMCS visit rates used 1990 census-based population estimates. The change in visit rates due to switching from the 1990 census-based population estimates to Census 2000-based population estimates presented in this report for age, sex, and race is minimal. To evaluate the effect of the change in the base year, the 2000 NAMCS and NHAMCS visit rates were calculated using both the 1990-based population estimates and the 2000-based population estimates. In no case were differences in the two rates statistically significant. It is, therefore, reasonable to conclude that the effect of the change in base year has little impact on observed trends that cross these survey years. For more information on rate comparisons, see http://www.cdc.gov/nchs/about/major/ ahcd/ahcd1.htm.

Table III. 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, medical 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, E914-E915, E918, E923, E925-E926, E928.3, E928.8, E929.0-E929.5 |
| Mechanism unspecified | E887, E928.9, 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 |

Table IV. Reclassification of physician specialty for use with National Ambulatory Medical Care Survey data

| Physician specialty group | Physician specialty |
| :---: | :---: |
| Primary care specialties | Family practice, geriatric medicine (family practice), sports medicine (family practice), general practice, internal medicine/ pediatrics, internal medicine, adolescent medicine, pediatrics, pediatric sports medicine, adolescent medicine (internal medicine), gynecology, maternal and fetal medicine, obstetrics and gynecology, obstetrics, geriatric medicine (internal medicine), and sports medicine (internal medicine). |
| Surgical specialties | Hand surgery, adult reconstructive orthopedics, foot and ankle orthopedics, musculoskeletal oncology, pediatric orthopedics, orthopedic surgery, sports medicine (orthopedic surgery), orthopedic surgery of the spine, orthopedic trauma, gynecological oncology, urology, pediatric urology, ophthalmology, pediatric ophthalmology, otology, otolaryngology, pediatric otolaryngology, general surgery, critical care medicine (obstetrics and gynecology), abdominal surgery, cardiovascular surgery, colon and rectal surgery, cardiothoracic surgery, facial plastic surgery, head and neck surgery, oral and maxillofacial surgery, plastic surgery within the head and neck, neurological surgery, pediatric surgery (neurology), pediatric surgery, vascular surgery, plastic surgery, surgical oncology, thoracic surgery, and transplant surgery. |
| Medical specialties. | Allergy, addiction medicine, addiction psychiatry, allergy and immunology, allergy and immunology/diagnostic laboratory immunology, bronchoesophageal medicine, cardiology, clinical genetics, clinical biochemical genetics, clinical cytogenetics, clinical molecular genetics, critical care medicine, dermatology, dermatological immunology/diagnostic laboratory. immunology, diabetes, emergency medicine, endocrinology, sports medicine (emergency medicine), medical toxicology (emergency medicine), gastroenterology, general preventive medicine, hematology, hepatology, hematology/oncology, cardiac electrophysiology, infectious diseases, immunology, legal medicine, medical management, medical genetics, neurology, nephrology, nutrition, occupational medicine, medical oncology, clinical pharmacology, pulmonary critical care medicine, pediatric emergency medicine (emergency medicine), psychiatry, public health and general preventive medicine, pediatric/diagnostic laboratory immunology, palliative medicine, physical medicine and rehabilitation, pain medicine, medical toxicology (preventive medicine), pulmonary diseases, rheumatology, spinal cord injury, sleep medicine, undersea medicine. |

Population estimates for race groups in the 2002 NAMCS and NHAMCS are based on Census 2000 where respondents were able to indicate more than one race category (as requested by the 1997 Standards for Federal Data on Race and Ethnicity) (18). The multiple race indication was adopted by the 1999 NAMCS and NHAMCS, but the denominators that were available for calculating rates in 1999 and 2000 were based on estimates from the 1990 census, which indicated single-response race categories. Population estimates for 2000 were not used as denominators for 2000 NAMCS and NHAMCS visit rates because these estimates were not available. In addition, NAMCS and NHAMCS had very few records for multiple-race persons, so rates for single-race groups were calculated by dividing estimates by denominators that included some unidentifiable multiplerace persons. Starting with 2001, the denominators used for calculating race-specific visit rates reflect the transition to multiple-race reporting. Specific race denominators reflect persons with a single race identification, and a separate denominator is available for persons of multiple races. In this report, a visit rate for white persons, for example, uses a denominator that reflects the "white only" population, and the numerator is the number of visits where white and no other race category was reported as the patient's race by the health care provider.

Data indicate that multiple races are recorded less frequently in medical records than occur in the general population. The 2002 population estimates indicate that multiple-race persons account for 1.5 percent of the total population, and multiple-race patients (as indicated by the provider) account for 0.3 percent of physician office visits. This difference exists because physicians are less likely to know and record the multiple-race preference of the patient and not because, after age adjusting, persons with multiple races make fewer doctor visits. This implies that the race population rates calculated in 2002 are probably slight overestimates for the single-race categories and underestimates for the multiple-race category.

The 2002 MSA population estimates based on Census 2000 were not available from the U.S. Census Bureau. They were calculated from data provided by the Office of Research Methods and Division of Health Interview Statistics, NCHS, and are based on estimates of the civilian noninstitutionalized population of the United States as of July 1, 2002, using Census 2000 data with adjustments to 2002 totals.

## Definition of terms

Continuity of care-Continuity of care is a goal of health care achieved
through an interdisciplinary process involving patients, families, health care professionals, and providers in the management of a coordinated plan of care. Based on changing needs and available resources, the process optimizes quality outcomes in the health status of clients. It may involve professionals from many different disciplines within multiple systems.

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 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.

Episode of care-This term attempts to measure the nature of the care provided at the visit, an initial visit versus a followup visit. An episode of care begins with the initial visit for care for a particular problem and ends when the patient is no longer continuing treatment. A problem may recur later, but that is considered a new episode of care. An initial visit may be diagnostic
in nature, whereas a followup visit may be to check progress or continue therapy.

Followup visit-Care was previously provided for this problem. This is the second or subsequent visit for a problem or complaint.

Illness-related visit-A visit is considered illness-related if it was not defined as an injury visit as in the definition for an injury-related visit.

Initial visit-This is the first visit for care of a particular problem or complaint.

Injury-related visit—A visit is injury-related if "Yes" was checked in response to item 4 a , "Is this visit related to injury, or poisoning, or adverse effect of medical treatment?," if a cause of injury or a nature of injury diagnosis was provided, or if an injury-related reason for the visit was reported.

In-scope physician-An in-scope 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.

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.

Patient-A patient is an individual seeking personal health care services who is not currently admitted to any health care institution on the premises.

Primary care physician/provider-A primary care physician/provider (PCP) plans and provides the comprehensive health care of the patient. A visit to the patient's PCP is one in which health care is provided by the patient's PCP or by a provider substituting for the patient's PCP.

Primary care specialist-A primary care specialist has designated a primary care specialty of general and family
practice, internal medicine, pediatrics, etc. Primary care specialists are grouped and presented in table IV of the "Technical Notes." The terms "primary care specialties" and "primary care specialists" are used interchangeably throughout this report and refer to the self-designated classification by physicians in the AMA and AOA masterfiles.

Primary expected source of payment-The primary expected source of payment is the source that to the best of the physician or physician's staff's knowledge describes how charges incurred for this visit will be paid:

- Self-pay-Charges billed directly to the patient that will not be reimbursed by a third party. Does not include prepaid plans for which copayment is charged.
- Medicare-Charges paid in part or in full by a Medicare plan, including payments made directly to the hospital as well as payments to the patient.
- Medicaid/SCHIP—Charges paid in part or in full by a Medicaid or State Children's Health Insurance Plan (SCHIP), including payments made directly to the hospital as well as payments to the patient. SCHIP, enacted as part of the Balanced Budget Act of 1997, gave States the opportunity to provide free or low-cost insurance coverage to low-income children not otherwise eligible to be covered by Medicaid. States began enrolling children in 1998 using Medicaid or State-specific programs separate from Medicaid, or both. By 2000, all States had implemented their SCHIP programs.
- Private insurance-Charges paid in part or in full by a private insurance company, health maintenance organization (HMO) plan or other prepayment plan, including independent practice associations (IPAs) and preferred provider organizations (PPOs).
- No charge/charity-Visits for which no fee is charged (not including visits paid for as part of a total care package, e.g., postoperative visits included in a surgical fee, pregnancy
visits for which a flat fee was charged, and HMO and prepaid systems).
- Other sources-All other sources of payment not in the preceding categories. Charges paid under any other local, State, or Federal health care program such as workers' compensation programs and CHAMPUS.
- Unknown-Cases where none of the previous sources of payment categories was checked.

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




## Trade name disclaimer

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[^0]:    Category not applicable.
    ${ }^{1}$ Visit rates for age, sex, race, and region are based on the July 1, 2002, set of estimates of the civilian noninstitutional population of the United States as developed by the Population Division, U.S. Census Bureau. These population estimates reflect Census 2000 data and are available from the U.S Census Bureau. See the "Technical Notes" for more details.
    ${ }^{2} 2002$ population estimates of metropolitan statistical area status are based on Census 2000 data and were obtained through the Office of Research and Methodology and Division of Health Interview Statistics, National Center for Health Statistics.
    ${ }^{3}$ The population used for the rate is based on visits by children under 15 years of age.
    ${ }^{4}$ The population used for the rate is based on visits by females 15 years old and over.
    ${ }^{5}$ Specialty type is defined in table IV of the "Technical Notes."
    ${ }^{6} \mathrm{MSA}$ is metropolitan statistical area.
    NOTE: Numbers may not add to totals because of rounding.

[^1]:    . Category not applicable.
    ${ }^{*}$ Figure does not meet standard of reliability or precision.
    ${ }^{1}$ Visit rates for age, sex, and race are based on the July 1, 2002, set of estimates of the civilian noninstitutional population of the United States as developed by the Population Division, U.S. Census Bureau. These population estimates reflect Census 2000 data and are available from the U.S. Census Bureau. See "Technical Notes" for more details.
    ${ }^{2}$ The race groups, white, black or African American, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and multiple races, include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to 1997 Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. However, the percent of visit records with multiple races indicated is small and lower than what is typically found for self-reported race. See "Technical Notes" for more details.
    NOTE: Numbers may not add to totals because of rounding.

[^2]:    Figure does not meet standard of reliability or precision. Category not applicable
    PCP is patient's primary care physician or provider
    NOTE: Numbers may not add to totals because of rounding.

[^3]:    . Category not applicable.

    * Figure does not meet standard of reliability or precision.
    ${ }^{1}$ Preventive care includes routine prenatal, general medical, well-baby, and screening or insurance examinations. NOTE: Numbers may not add to totals because of rounding.

[^4]:    Category not applicable.
    ${ }^{1}$ Based on A Reason for Visit Classification for Ambulatory Care (RVC) (6).
    ${ }^{2}$ Includes problems and complaints not elsewhere classified, entries of "none," blanks, and illegible entries.
    NOTE: Numbers may not add to totals because of rounding.

[^5]:    Calegory
    Based on A Reason for Visit Classification for Ambulatory Care (RFV) (6).
    ${ }^{2}$ Based on $529,075,000$ visits made by females.
    Based on $360,905,000$ visits made by males.
    NOTE: Numbers may not add to totals because of rounding.

[^6]:    Category not applicable.
    
     on health insurance coverage (Mills, B. Health Insurance Coverage: 2001 Current Population Reports P60-220 September 2002.)
    ${ }^{2}$ Preventive care includes prenatal, general medical, well-baby, and screening or insurance examinations.
    
    
     for self-reported race. See "Technical Notes" for more details."
    ${ }^{4}$ SCHIP is State Children's Health Insurance Program.
    ${ }^{5}$ Other includes Workers' Compensation, unknown/blank, and payments not classified elsewhere.

[^7]:    Category not applicable
    ${ }^{1}$ Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (7).
    ${ }^{2}$ Includes diseases of the blood and blood-forming organs (280-289); complications of pregnancy, childbirth, and the puerperium (630-677); congenital anomalies (740-759); certain conditions originating in the perinatal period (760-779).
    ${ }^{3}$ Includes blank diagnoses, uncodable diagnoses, and illegible diagnoses.
    NOTE: Numbers may not add to totals because of rounding.

[^8]:    Category not applicable.
     ${ }^{2}$ Based on $529,075,000$ visits made by females.
    Based on $360,905,000$ visits made by males.
    NOTE: Numbers may not add to totals because of rounding.

[^9]:    Category not applicable
    ${ }^{1}$ Visit rates for age, sex, and race are based on the July 1, 2002, set of estimates of the civilian noninstitutional population of the United States as developed by the Population Division, U.S. Census Bureau. These population estimates reflect Census 2000 data and are available from the U.S. Census Bureau. See "Technical Notes" for more details.
    
    
     or self-reported race. See "Technical Notes" for more details
    NOTE: Numbers may not add to totals because of rounding.

[^10]:    Category not applicable.

    * Figure does not meet standard of reliability or precision.
    ${ }^{1}$ Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Supplementary Classification of External Causes of Injury and Poisoning (7). A detailed description of the ICD-9-CM E-codes used to create the groupings in this table is provided in the "Technical Notes.'
    ${ }^{2}$ Includes suffocation, poisoning, other transportation, machinery, firearm, fire and flames, drowning/submersion, nontraffic motor vehicle, and pedal cycle.
    ${ }^{3}$ Includes assault, self-inflicted, and other causes of violence.
    ${ }^{4}$ Includes illegible entries and blanks.
    NOTE: Numbers may not add to totals because of rounding.

[^11]:    . Category not applicable

    * Figure does not meet standard of reliability or precision.
    0.0 Quantity more than zero, but less than 0.05 .
    ${ }^{1}$ Total exceeds "All visits" because more than one service may be reported per visit.
    ${ }^{2}$ Based on 529,075,000 visits made by females.
    ${ }^{3}$ Based on $360,905,000$ visits made by males.
    ${ }^{4}$ EKG is electrocardiogram.
    ${ }^{5} \mathrm{EEG}$ is electroencephalogram.
    ${ }^{6} \mathrm{CBC}$ is complete blood count.
    ${ }^{7}$ PSA is prostate-specific antigen

[^12]:    Category not applicable.
    ${ }^{1}$ Numbers may not add to totals because more than one type of therapeutic or preventive service may be reported per visit.
    ${ }^{2}$ Based on 529,075,000 visits made by females.
    ${ }^{3}$ Based on $360,905,000$ visits made by males.

[^13]:    Category not applicable.
    ${ }^{1}$ Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (7).
    ${ }^{2}$ Includes operations on the endocrine system (ICD-9-CM codes 06-07), operations on the respiratory system (ICD-9-CM codes 30-34), operations on the hemic and lymphatic system (ICD-9-CM codes 40-41).
    NOTES: Included are responses to the surgery item on the Patient Record form (item 8) (up to two procedures could be reported), and the diagnostic/screening services item (item 6) (up to two procedures can be reported in the "scope procedure-specify" and the "other service-specify" categories). Miscellaneous diagnostic and therapeutic procedures (nonsurgical procedures) were not included in the total. These procedures, coded to ICD-9-CM volumn 3, range 87-99, represented 113,864,000 procedures

[^14]:    Based on 529,075,000 visits made by females.
    Based on 360,905,000 visits made by males.
    ${ }^{3}$ Includes prescription drugs, over-the-counter preparations, immunizations, and desensitizing agents
    ${ }^{4}$ Visits at which one or more drugs were provided or prescribed by the physician.
    NOTE: Numbers may not add to totals because of rounding.

[^15]:    .. Category not applicable.
    Visits at which one or more drugs were provided or prescribed by the physician.

[^16]:    ${ }^{1}$ Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.
    ${ }^{2}$ Based on an estimated 1,347,312,000 drug mentions at office visits in 2002.

[^17]:    Category not applicable.
    ${ }^{1}$ The entry made by the physician on the prescription or other medical records. This may be a trade name, generic name, or desired therapeutic effect.
    ${ }^{2}$ Therapeutic classification is based on the National Drug Code Directory, 1995 edition (10). In cases where a drug had more than one therapeutic use, it was classified under each therapeutic class.
    ${ }^{3}$ NSAIDs are nonsteroidal anti-inflammatory drugs.
    ${ }^{4}$ A.S.A. is acetylsalicylic acid.
    NOTE: Numbers may not add to totals because of rounding.

[^18]:    Category not applicable.

    * Figure does not meet standard of reliability or precision.
    ${ }^{1}$ Total exceeds "All visits" because more than one provider may be reported per visit.
    ${ }^{2}$ R.N. is registered nurse.
    ${ }^{3}$ L.P.N. is licensed practical nurse.

[^19]:    . Category not applicable
    ${ }^{1}$ Total exceeds "All visits" because more than one disposition may be reported per visit.
    ${ }^{2}$ P.R.N. is "as needed."

[^20]:    ${ }^{1}$ Only visits where a physician was seen are included

[^21]:    Category not applicable.
    Percent of physicians reporting any consultations during a typical week of work. Missing values ranged from 12 to 16 percent depending on type of consultation.
    ${ }^{2}$ Missing values ranged from 12 to 16 percent depending on type of consulation.
    ${ }^{3}$ Mean number of consultations during a typical week of work for physicians with any of that type of consultation.
    ${ }^{4}$ Missing values ranged from 10 to 20 percent depending on revenue source.
    ${ }^{5}$ Missing values ranged from 3 to 15 percent depending on payment method. The missing value for accepting any new patients is 0.6 percent.
    ${ }^{6}$ Missing values are about 1.7 percent for electronic medical records and 5.1 percent for electronic billing records.
    NOTES: Estimates of office-based physicians exclude the specialties of anesthesiology, radiology, and pathology. Numbers may not add to totals because of rounding.

[^22]:    ${ }^{1}$ Characteristic information is from the master files of the American Medical Association and the American Osteopathic
    Association.
    ${ }^{2}$ In-scope physicians are those who verified that they were non-Federal and involved in direct patient care in an office-based
    setting, excluding the specialties of radiology, pathology, and anesthesiology.
    ${ }^{3}$ Total physicians are those who were selected from the master files of the American Medical Association and the American Osteopathic Association.
    ${ }^{4}$ Responding physicians are those who were in-scope and agreed to participate in the NAMCS survey.
    ${ }^{5}$ Nonresponding physicians are those who were in-scope and refused to participte in the NAMCS survey
    ${ }^{6}$ Numerator is the number of in-scope physicians who participated in the NAMCS or who did not see any patients during their sampled reporting week. Denominator is all in-scope sampled physicians.
    ${ }^{7}$ Significant difference in response rate $\mathrm{p}<.05$.
    ${ }^{8}$ MSA is metropolitan statistical area.
    ${ }^{9}$ Specialty type is defined in table IV of the "Technical Notes."
    ${ }^{10} \mathrm{HMO}$ is health maintenance organization.

