

# Vital and Health Statistics

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## Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1999–2000

Data From the National Health Care  
Survey

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

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**Objective**

This report describes ambulatory care visits to physician offices, hospital outpatient departments (OPDs), and hospital emergency departments (EDs) as well as factors that may affect where care is sought. Ambulatory medical care utilization is described in terms of patient, practice/facility, and visit characteristics. Visits to office-based physicians are divided into the categories of primary care, surgical specialties, and medical specialties.

**Methods**

Data from the 1999 and 2000 National Ambulatory Medical Care Surveys (NAMCS) and National Hospital Ambulatory Medical Care Surveys (NHAMCS) were combined to produce averaged annual estimates of ambulatory medical care utilization. To examine changes over time, current data were compared with data from the 1993 and 1994 NAMCS and NHAMCS.

**Results**

Patients in the United States made an estimated 979 million visits per year in 1999 and 2000 to physician offices, hospital OPDs, and EDs, an annual rate of 3.6 visits per person. The distribution of visits by patient age, sex, race, expected source of payment, geographic region, and metropolitan statistical area (MSA) status varied across settings. The percentage of visits to office-based primary care physicians was similar for the characteristics studied, but the percentage of visits to office-based surgical and medical specialists varied considerably. Black persons had higher visit rates than white persons to hospital OPDs and EDs but lower rates to office-based surgical and medical specialists. ED visits were more likely to be patient-paid or no charge than were visits to office-based physicians. Visit rates to office-based medical specialists decreased between 1993–94 and 1999–2000. Visit rates increased for hypertension and diabetes diagnoses, as did prescription rates for central nervous system, hormonal, pain relief, and respiratory tract drugs.

**Keywords:** ambulatory care visits, diagnoses, injury, ICD–9–CM

# Ambulatory Care Visits to Physician Offices, Hospital Outpatient Departments, and Emergency Departments: United States, 1999–2000

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## Introduction

The scope and magnitude of ambulatory health care in the United States can best be examined by analyzing data from multiple settings. Previous studies that combined encounter data from physician offices with data from hospital emergency and outpatient departments (OPDs) found that the majority of visits took place in physician offices (1,2). This report goes a step further by also analyzing office visit data by type of physician specialty, categorized as primary care, surgical specialty care, and medical specialty care. Therefore, in addition to estimates of total ambulatory care utilization, estimates are provided for visits to three types of office-based physicians and two types of hospital settings. Physician specialty data are not collected in the hospital outpatient or emergency department (ED) settings. In this report, the terms, “visits to office-based physicians” and “visits to physician offices” are used interchangeably, as are the terms “visits to specialists,” “visits to specialty offices,” and “visits to specialties.”

This analysis is useful for examining factors that affect patient access to these different types of care. Patients using hospital settings are known to differ from those using physician offices along several dimensions (2).

Access to primary care is seen as a major factor in improving the general quality of health care (3). Health insurance models that measure patient satisfaction also have shown that access to specialty care is a key component in consumer satisfaction (4). Access may vary according to the patient’s insurance status, demographic characteristics, and geographic area. For example, the supply of specialists is often greater in densely populated urban areas.

Reliance on EDs is also a critical health services utilization issue. When care is sought only in the ED, the ability of one provider to oversee the health of the patient is in question; the continuity of care is broken. The situation is further complicated by the general volume of care provided in hospital EDs, which has been increasing because of the closing of over 1,000 EDs since 1992 (5,6). The extra demand on EDs has contributed to overcrowding issues such as increased ambulance diversion, longer patient waiting times to see an ED physician, and less post-ED patient followup (6). EDs often serve as a safety net for health care of underinsured, uninsured, and other vulnerable populations. Vulnerable populations are known to include the uninsured, low-income underinsured, Medicaid beneficiaries, patients with special needs, individuals in geographically remote or economically disadvantaged communities, race and ethnic minorities, and immigrants (7).



Data from the National Health Interview Survey (NHIS) indicate that about 83 percent of the civilian noninstitutionalized population received care from a physician office, clinic, or hospital emergency or outpatient department in 1999 (8), and 17 percent made at least one visit to the ED. Persons without insurance were less likely than the general population to make an ambulatory care visit (65 vs. 83 percent) but were equally likely to make an ED visit (approximately 20 percent). Medicaid enrollees were much more likely to make ED visits (38 percent) compared with privately-insured persons (19 percent), Medicare enrollees (20 percent), or uninsured persons (20 percent). Unfortunately, population-based surveys like NHIS do not provide details on the kinds of providers seen or the nature and content of the medical encounters.

In order to examine the medical care and treatment that takes place at such visits, it is necessary to examine data from the medical providers. For this report, patient encounter data from the 1999 and 2000 National Ambulatory Medical Care Surveys (NAMCS) and National Hospital Ambulatory Medical Care Surveys (NHAMCS) were combined to produce annual estimates of ambulatory care in the United States. These surveys make up the ambulatory care component of the National Health Care Survey (NHCS), a provider-based family of health surveys. Information on the health care visit usually comes from the medical record or directly from the provider and is recorded on a one-page encounter form called the Patient Record form (PRF).

This report contains tables showing the distribution of ambulatory care across provider settings according to various patient and geographic characteristics. The characteristics selected represent those most salient to issues of care by vulnerable populations (i.e., those population groups who are least likely to have access to primary care). Accordingly, in addition to age, sex, race, and geographic region, most tables present data by expected source of payment and density of population defined as whether or not the visit took place in an MSA.

Variation in the distribution of visits across provider types by patient characteristics provides information on how care for vulnerable populations varies from the mainstream. The discussion section examines survey data concerning the relationship between these differences and issues of access and how these differences may influence disparity in quality of care among subgroups. With ED visits examined separately from visits to the other ambulatory care settings, inferences will also be drawn concerning how the ED functions as a safety-net provider.

This study also examines other salient variables that have been shown to be related to utilization, such as physician supply as well as patient income, education level, and ability to speak English. These variables are not directly collected by the NHCS; however, data from the U.S. Census Bureau are linked to the provider-based data using patient or provider ZIP Code.

This report provides summary statistics for many of the PRF items that are common across the NAMCS and NHAMCS. Some aspects of ambulatory care visits are not included here because their collection is inconsistent across providers. For a full discussion of care received in each setting, please refer to the annual summaries (5,6, 9–12). The main sections analyzed here include overall visit utilization, reasons for visit, diagnoses, injury characteristics, and medication therapy.

It should be noted that community health centers, an important provider for vulnerable populations, are not included in this analysis. Because the NAMCS is based on a sample of office-based physicians only, such locations are included in the sample with a lesser likelihood than their total utilization would suggest, given that physicians account for a smaller proportion of the medical providers in such settings. Although a doctor working in a community health center is eligible for selection in the NAMCS, others who provide care in this setting, such as nurse practitioners, physician assistants, or nurse midwives, are outside the scope of the survey and are not sampled. Community health centers accounted for 13 million visits in 1994 (13), which

means that NAMCS and NHAMCS estimates of ambulatory care utilization may be slightly underestimated.

## Methods

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This study includes a secondary analysis of data collected in the 1999 and 2000 NAMCS and NHAMCS. These are annual national probability sample surveys conducted by the Division of Health Care Statistics of the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention.

The target universe for 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) or the American Osteopathic Association (AOA) as office-based, patient care. Visits to private, non-hospital-based clinics and health maintenance organizations (HMOs) were within the scope of the survey, but visits that took place in federally operated facilities and hospital-based OPDs were not. Telephone contacts and visits made outside the ambulatory care setting were excluded from both the NAMCS and NHAMCS.

The target universe for the NHAMCS is in-person visits made in the United States to OPDs and EDs of non-Federal, short-stay hospitals (hospitals with an average stay of less than 30 days) or those whose specialty is general (medical or surgical) or children's general. Only OPD clinics that were under the supervision of a physician were within the scope of the NHAMCS. Clinics specializing in radiology, laboratory services, physical rehabilitation, or other ancillary services were out of scope. The NHAMCS sampling frame from 1992 to the present consists of hospitals that were listed in the April 1991 SMG Hospital Database. The hospital data presented in this report are representative of 1999–2000 utilization statistics for hospitals existent in 1991.



A multistage probability sample design is used in both surveys; the designs are described elsewhere (14,15). For the 1999 and 2000 NAMCS, 5,499 physicians were selected from the AMA and AOA master files. Of these, 3,777 were in-scope (i.e., eligible to participate in the survey). Sampled physicians were asked to complete PRFs for a systematic random sample of office visits occurring during a randomly assigned 1-week reporting period. The annual average response rate was 65 percent, and 48,129 PRFs were collected. Data collection occurred from December 29, 1998, through December 24, 2000.

The NHAMCS utilizes a fixed panel of 600 hospitals. To preclude hospitals participating during the same time period each year, the sample was randomly divided into 16 subsets of approximately equal size. Each subset was assigned to 1 of 16, 4-week reporting periods beginning December 2, 1991, that continue to rotate across each survey year. Therefore, the entire sample does not participate in a given year, and each hospital is inducted approximately once every 15 months. The 1999 NHAMCS collected data from December 21, 1998, through December 19, 1999, and consisted of a sample of 489 hospitals. Of these, 427 were in-scope. The overall hospital response rate was 95 percent. There were 376 participating EDs that provided data for 452 emergency service areas, and 241 participating OPDs provided data for 858 clinics. The overall response rate was 92 percent for EDs and 82 percent for OPDs. Hospital staffs were asked to complete PRFs for a systematic random sample of patient visits occurring during a randomly assigned 4-week reporting period. A total of 21,103 ED PRFs and 29,487 OPD PRFs was collected.

The 2000 NHAMCS collected data from December 27, 1999, through December 24, 2000, and consisted of a sample of 488 hospitals. Of these, 413 were eligible to participate. The overall hospital response rate was 96 percent. There were 376 participating EDs that provided data for 446 emergency service areas, and 221 participating OPDs provided data for 829 clinics. The overall response rate was 97 percent for EDs and 91 percent for OPDs. A total of

25,622 ED PRFs and 27,510 OPD PRFs was collected.

Because the estimates presented in this report are based on a sample rather than on the entire universe of ambulatory visits, they are subject to sampling variability. The “Technical Notes” include an explanation of sampling errors and guidelines for judging the precision of the estimates, as well as information on the tests of significance used to establish differences between survey estimates.

The PRF is produced in three separate versions that have been carefully designed for use in each of the three ambulatory care settings but that contain many data items in common; forms used within each setting were identical for 1999 and 2000. The NAMCS and OPD PRF are nearly identical, but the ED PRF differs in ways appropriate to that setting. These forms are used by medical staff to record information about patient visits. They are shown in “Appendix III” and should serve as a reference for readers as they review the survey findings presented in this document.

The PRF item, “Primary expected source of payment for this visit,” is used to define the method of payment expected by the provider for the visit. It includes the categories of private insurance, Medicare, Medicaid, Workers’ Compensation, self-pay, no charge, other, and unknown. For the purpose of this report, self-pay and no charge were combined to yield estimates of visits by persons with no health insurance. Workers’ Compensation, other, and unknown response categories were combined into a residual category called “Other.” Visit rates by expected pay source are based on 1999–2000 Current Population Survey (CPS) estimates of health insurance, which include private insurance, Medicare, Medicaid, and no insurance. The numerator used in calculating rates for the no insurance group comes from the PRF self-pay and no charge categories. Although not all self-pay visits are made by uninsured persons, it is the best method for matching encounter data to insurance status. For NAMCS and NHAMCS self-pay and no charge visits,

there is no expectation that third-party payers will cover the cost.

This study analyzed ambulatory care visit data by type of setting: three office-based settings and two hospital settings. The three office settings were taken from the NAMCS data and categorized offices according to the physician’s specialty: primary care, surgical, and medical. See the “Technical Notes” for more details and the specific specialty codes used to define the three office settings. The two hospital settings were taken from the NHAMCS, which collects information on hospital OPDs and EDs. EDs were defined as providing 24-hour emergency care. Emergency care clinics that are open less than 24 hours per day were considered part of the OPD. Visits from all sampled OPD clinics were combined to provide total estimates for OPD utilization. This includes clinics defined as general medical care (61 percent), pediatrics (13 percent), obstetrics/gynecology (7 percent), surgery (12 percent), and all other kinds of clinics (7 percent). Type of physician specialty is not collected in the NHAMCS. Clinics specializing in ancillary services, treatment only (e.g., chemotherapy, dialysis, radiation, or physical therapy), and ambulatory surgery were all out-of-scope for the NHAMCS. Visits to such clinics are not included in this report.

Many of the tables in this report present data on rates of ambulatory care visits. With the exception of the expected source of payment, the population figures used in calculating these rates are based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000, and have been adjusted for net underenumeration using the 1990 National Population Matrix (see “Technical Notes”). Population figures are shown in “Appendix I,” table VI.

Several medical classification systems were used to code data from the NAMCS and NHAMCS. Each PRF contains an identical item on the patient’s expressed reason for the visit. In this item, the respondent was asked

to record the patient's "complaint(s), symptom(s), or other reason(s) for this visit in the patient's (or patient surrogate's) own words." Up to three reasons for visit were classified and coded for each survey according to "A Reason for Visit Classification for Ambulatory Care (RVC)" (16).

Each PRF contains an item on the cause of injury for injury-related visits. Up to three external causes of injury were classified and coded according to the "Supplementary Classification of External Causes of Injury and Poisoning" found in the *International Classification of Diseases, 9th Revision Clinical Modification (ICD-9-CM)* (17). The edits for the injury-related checkbox on each form include combining information from the reason for visit, cause-of-injury, and diagnosis items to ensure that the visit is acknowledged as related to an injury (see "[Appendix II](#)"). In addition, each form contains an identical item on diagnosis. The respondent was asked to record the primary diagnosis or problem associated with the patient's most important reason for the current visit as well as any other significant current diagnoses. Up to three diagnoses were classified and coded according to the ICD-9-CM.

In the medication item, also identical on all three PRFs, respondents were instructed to record all new or continued medications ordered, supplied, or administered at the visit, including prescription and nonprescription preparations, immunization and desensitizing agents, and anesthetics. Up to six medications, referred to in the surveys as drug mentions, could be coded per visit according to a classification system developed at NCHS. A report describing the method and instruments used to collect and process drug information is available (18). Therapeutic classification of the drugs mentioned on the PRFs was determined using the *National Drug Code Directory*, 1995 edition (19).

The U.S. Census Bureau was responsible for data collection for all surveys. Constella Group, formerly Analytic Sciences, Inc., Durham, North Carolina, performed processing operations and medical coding. As part of the quality assurance procedure, a

10 percent quality control sample of survey records was independently processed. Error rates (which include coding and keying) ranged between 0.0 percent and 2.0 percent for all surveys.

Patient and provider ZIP Codes were used to calculate a mean distance traveled for an ambulatory care visit. An algorithm was used to measure the distance between the latitude and longitude of the centroid of the postal ZIP Code for the patient and the provider. If the patient ZIP Code was missing, the record was omitted from the analysis.

Additional information about the patient was obtained by linking aggregated data for the patient's residential ZIP Code from the sample data collected in Census 2000. These contextual variables include median household income, percentage of persons with an education level equivalent to a Bachelor's degree or higher (i.e., college graduates), percentage of persons who do not speak English, and percentage of persons who are foreign-born. Additional contextual data were obtained from the Health Resources and Services Administration's Area Resource File (ARF) for 2000. These data are used to yield estimates of medical providers located in the State and county of the sampled providers.

## Results

Data in [tables 1–7](#) provide details on the estimates of providers and encounters by patient characteristics. [Tables 8–10](#) provide details on encounters by patient complaint and condition. [Tables 11–15](#) provide estimates for injury-related encounters, and [tables 16–23](#) provide estimates for encounters that include medications prescribed or provided, including details of medications by therapeutic class. Below are highlights of information found in the tables.

### Ambulatory care providers

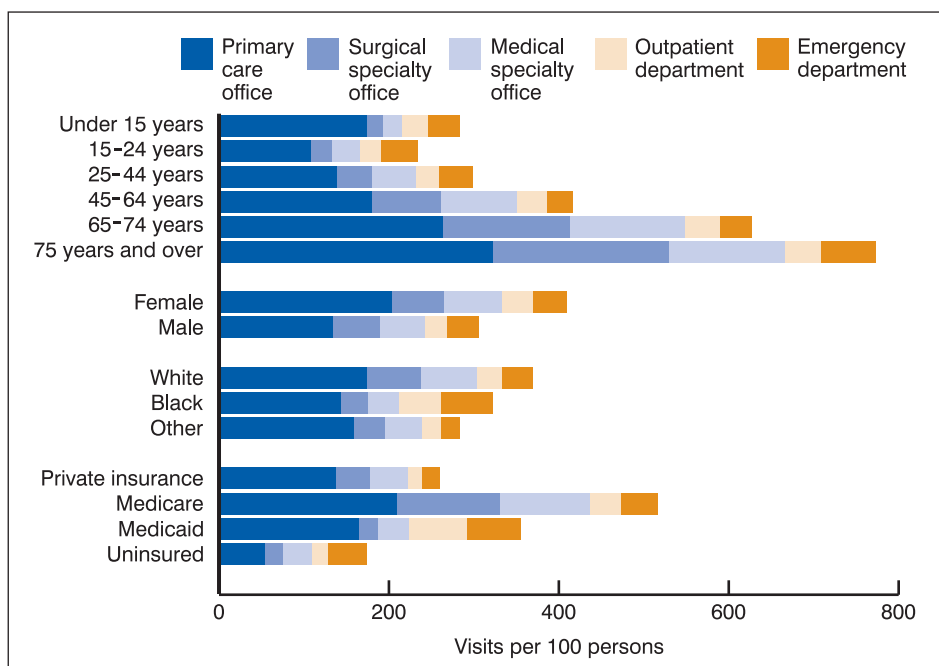
- Office-based primary care physicians were equally distributed per

population in MSAs and non-MSAs, with about 53 physicians per 100,000 persons. However, the rate of office-based medical specialists in non-MSAs was less than half the rate in MSAs (13 vs. 31 physicians per 100,000 persons). The number of OPDs and EDs per population in non-MSAs was more than double the rate in MSAs ([table 1](#)).

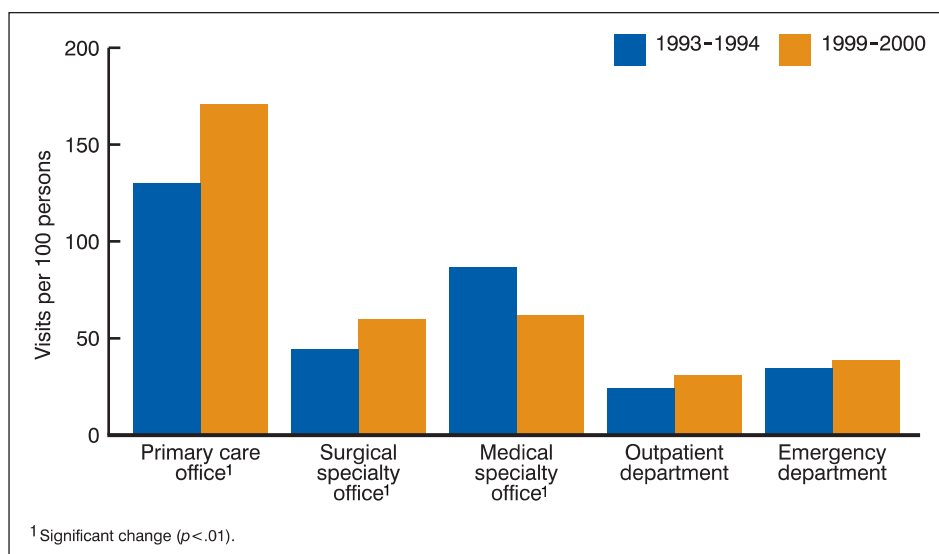
- In MSAs, there were, on average, about three hospital EDs per county, and in non-MSAs, there was about one hospital ED per county. OPDs with physician-supervised evaluation and management clinics were operated less frequently: about 3.5 OPDs for every two MSA counties and one OPD for every two non-MSA counties ([table 1](#)).
- The visit load was equivalent for physicians in MSAs and non-MSAs regardless of whether the physician was engaged in primary care, surgical specialties, or medical specialties. However, hospital OPDs and EDs in MSAs had, on average, three times the volume of annual visits compared with non-MSAs ([table 1](#)).

### Overall utilization

- There was an average of 979.5 million ambulatory care visits per year in 1999 and 2000. Nearly half were to primary care physicians, 17.0 and 16.3 percent were to office-based medical and surgical specialists respectively, 10.8 percent were to hospital EDs, and 8.6 percent were to hospital OPDs with physician-supervised evaluation and management clinics ([table 2](#)).
- The distribution of visits by setting type varied according to patient and provider location characteristics. Patients under the age of 45 had a higher percentage of their ambulatory care visits to the ED compared with older patients. Similarly, male, black, and uninsured patients had a higher percentage of their visits to the ED. Compared to MSAs, visits in non-MSAs were more likely to be to office-based primary care physicians



**Figure 1. Annual rate of ambulatory care visits by patient and visit characteristics and setting type: United States, 1999-2000**



**Figure 2. Age-adjusted ambulatory care visit rates by type of setting and year: United States, 1993-94 and 1999-2000**

and EDs but less likely to be to medical specialists (table 2).

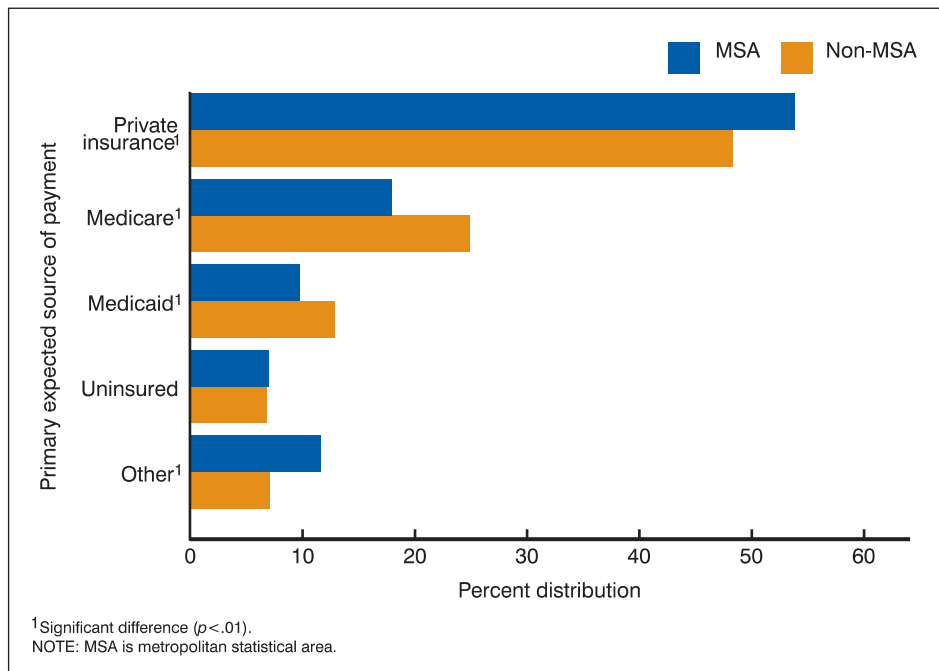
- Visit rates were also significantly different across patient age, sex, race, and payment categories, as well as for provider region and MSA status categories (figure 1). Females had a higher visit rate than males overall and to primary care physicians, medical specialists, and OPDs. There were no gender differences in visit rates to surgical specialists and EDs. Compared with

white persons, black persons had higher visit rates to hospital settings but lower visit rates to surgical and medical specialists. There was no race effect in overall visit rates or visit rates to primary care physicians. Visit rates for the uninsured were lower than for privately-insured persons overall, and for all physician office settings but higher in the ED.

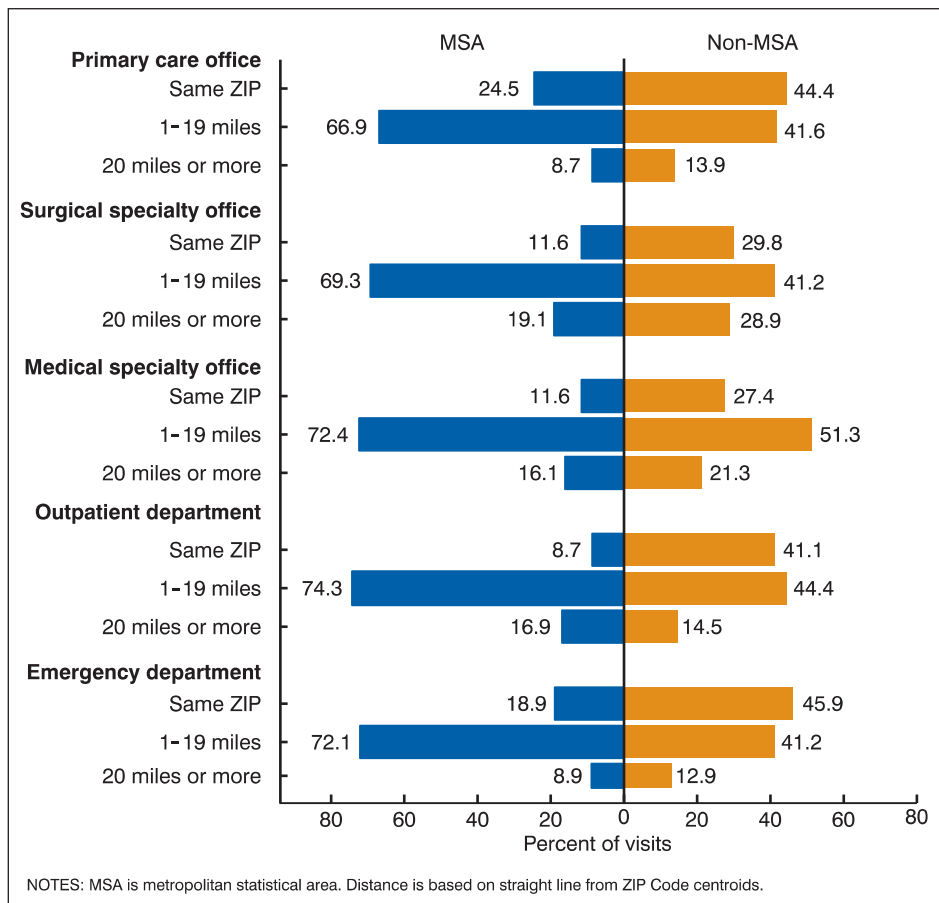
- Visit rates in MSAs and non-MSAs were similar for all settings except

medical specialties where the rate for non-MSAs was half the rate found in MSAs (29.9 visits per 100 persons vs. 69.1) (table 3). This could imply that persons in non-MSAs are less likely to seek care provided by medical specialists or that they may travel to MSAs for such care because medical specialists are less likely to be found working in non-MSAs.

- Age-adjusted visit rates to hospital settings did not change since 1993-94; however, visit rates to primary care and surgical specialists increased, and visit rates to medical specialists decreased (figure 2). This coincides with an increase in the percentage of visits by members of HMOs for all settings and may suggest that use of HMOs for health care has reduced utilization of care provided by medical specialists. Primary care physicians may substitute for medical specialists but are not likely to substitute for surgical specialists.
- Government sources (Medicare, Medicaid, and State Children’s Health Insurance Program) accounted for a larger amount of utilization in non-MSAs compared with MSAs (table 4, figure 3).
- Visits in non-MSAs were more likely to be made by patients living in the same ZIP Code as the provider, compared with visits in MSAs (figure 4). Distance traveled between the patient and provider is shorter for visits to primary care specialists and EDs compared with other setting types.
- Although private insurance covers the majority of total ambulatory care utilization for both white and black or African-American patients, visits by black patients were more likely to fall into the Medicaid or no insurance payment categories compared with visits by white patients (table 5).
- The percentage of visits to the ED was lower for patients living in high median income areas (7.1 percent) compared with patients living in low median income areas (15.0 percent) (table 6).



**Figure 3. Distribution of ambulatory care visits by primary expected source of payment, according to provider's metropolitan statistical area status: United States, 1999–2000**

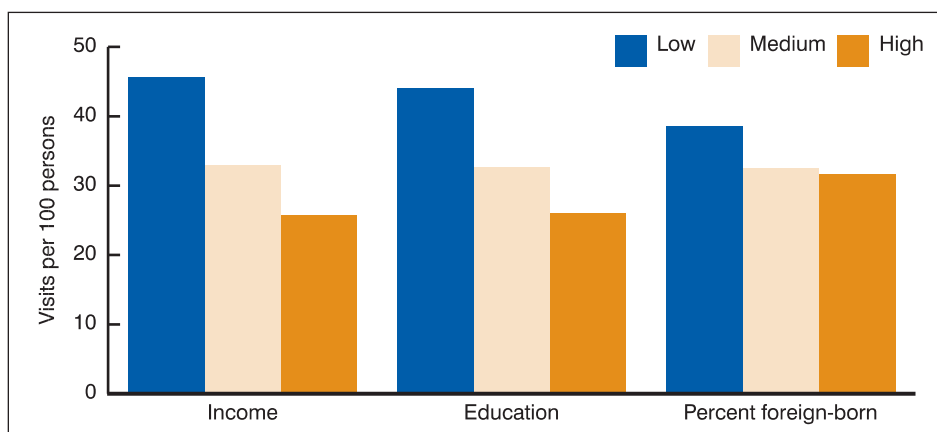


**Figure 4. Distribution of ambulatory care visits by distance traveled from patient to provider, according to metropolitan statistical area status and setting type: United States, 1999–2000**

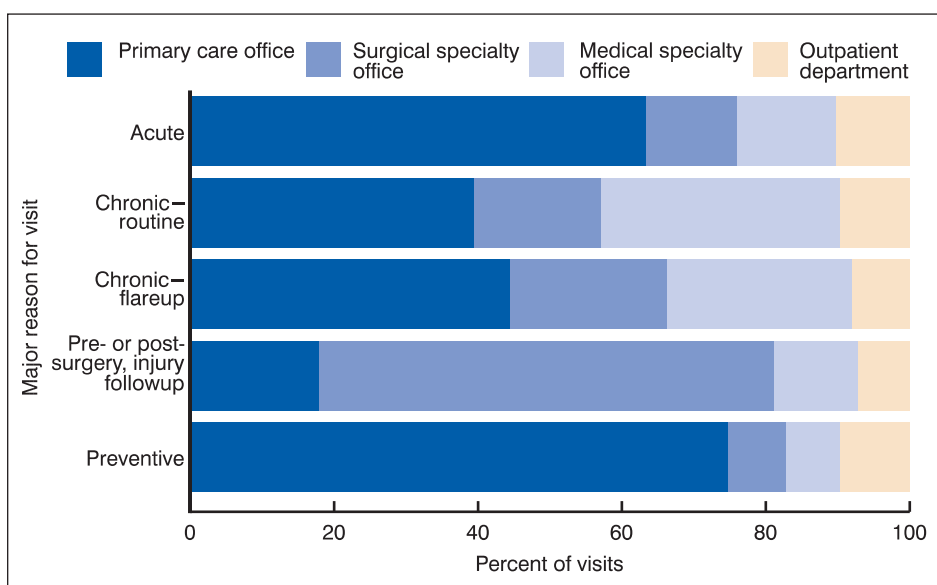
- Ordinal analysis (high, medium, and low) of the Census contextual variables (based on the patient's ZIP Code) and ED visit rates found that the visit rates were inversely related to median income, education level, being foreign-born, and speaking a language other than English (figure 5).
- Visit rates to surgical specialists, medical specialists, OPDs, and EDs were all linearly related to the median income of the patient's residential area. Higher visit rates to hospital settings were inversely related to income (table 7), confirming population-based surveys that show higher use of EDs and OPDs by lower-income persons. NAMCS data show that higher income was associated with visits to office-based surgical and medical specialists.

## Reasons for visit and diagnoses

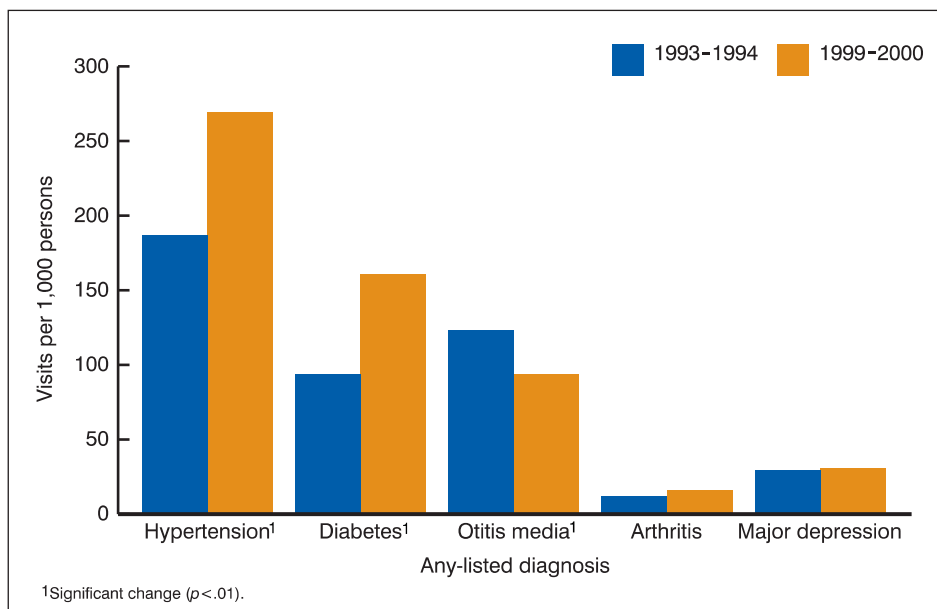
- Seventy-five percent of all visits for preventive care were made to primary care physicians (figure 6).
- The condition mix (i.e., types of conditions seen) as defined by the primary diagnosis at visits varied greatly across ambulatory care settings (table 9).
- Top illness-related primary diagnoses rendered at ambulatory care visits included essential hypertension (37.4 million visits per year), acute upper respiratory infections excluding pharyngitis (36.0 million), arthropathies (31.2 million), diabetes mellitus (24.7 million), malignant neoplasms (21.3 million), and spinal disorders (20.6 million) (table 10).
- There were 31.1 million visits per year for routine infant or child health checks, 22.1 million visits for normal pregnancy, 17.6 million visits for general medical exams, and 14.8 million visits for follow-up exams (table 10).
- Between 1993–94 and 1999–2000, age-adjusted visit rates increased for any-listed diagnoses of hypertension and diabetes (i.e., first-, second-, or



**Figure 5. Annual visit rates to hospital emergency departments by selected residential area characteristics: United States, 1999–2000**



**Figure 6. Percentage of ambulatory care visits by setting type, according to major reason for visit: United States, 1999–2000**



**Figure 7. Age-adjusted ambulatory care visit rates for selected diagnoses by year: United States, 1993–94 and 1999–2000**

third-listed diagnoses) but decreased for otitis media (figure 7).

- Conditions accounting for most of the rise in overall visit rates between 1993–94 and 1999–2000 can be explained by significant increases in visits with a primary diagnosis in the supplemental classification, ill-defined symptoms, endocrine system, musculoskeletal system, and circulatory system chapters of the ICD–9–CM.

## Injuries

- There was an annual average of 136.8 million visits for injuries in 1999–2000, including visits for acute, chronic, and late effects of injuries and poisonings and adverse effects of medical treatment, a rate of 501 visits per 1,000 persons (table 11).
- Nearly 30 percent of injury visits were to EDs, with a similar percentage to primary care physicians. One-quarter of the injury visits were to surgical specialists (table 11).
- The injury visit rate was highest among persons 75 years of age and over and lowest for children under 15 years of age (783 vs. 359 visits per 1,000 persons) (table 12).
- Injuries represented a larger share of the case mix in EDs (37.0 percent of visits) compared with other settings. Injuries accounted for 20.6 percent of visits to surgical specialists and between 8 and 11 percent of visits to primary care physicians, medical specialists, and OPDs (table 13).
- Leading causes of injury were falls (22.6 million visits), being struck by or against another object or person (12.8 million visits), and motor vehicle crashes (11.0 million visits). Adverse effects of medical treatment resulted in 6.7 million visits (figure 8).
- Intentional injuries accounted for 2.7 percent of all injury visits, or 3.7 million visits. Of these, 3 million visits were for assaults, and 464,000 visits were for self-inflicted injuries (table 14).
- The most frequent injuries treated at ambulatory care visits were open



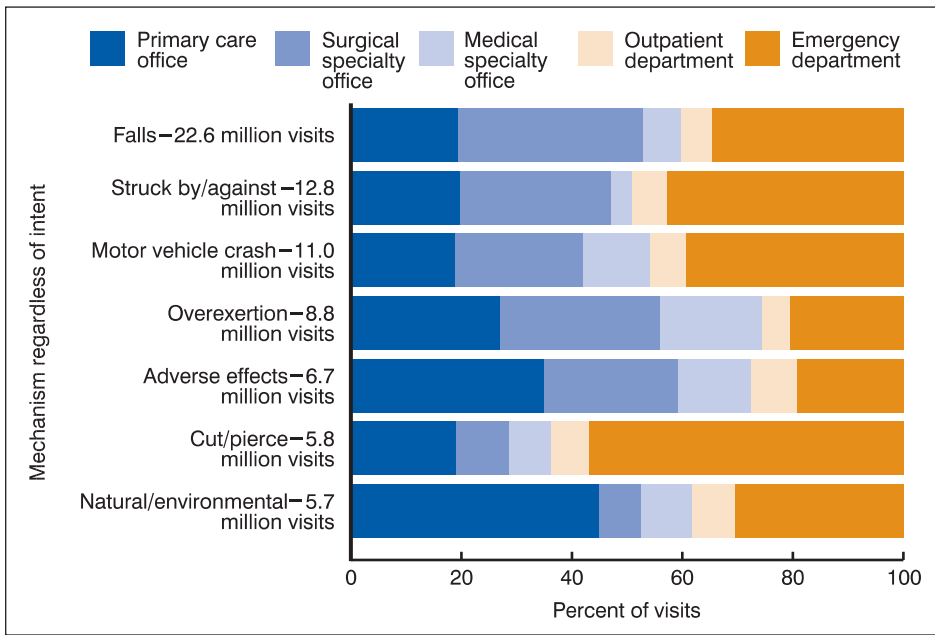


Figure 8. Percentage of ambulatory care visits by setting type, according to leading causes of injury: United States, 1999–2000

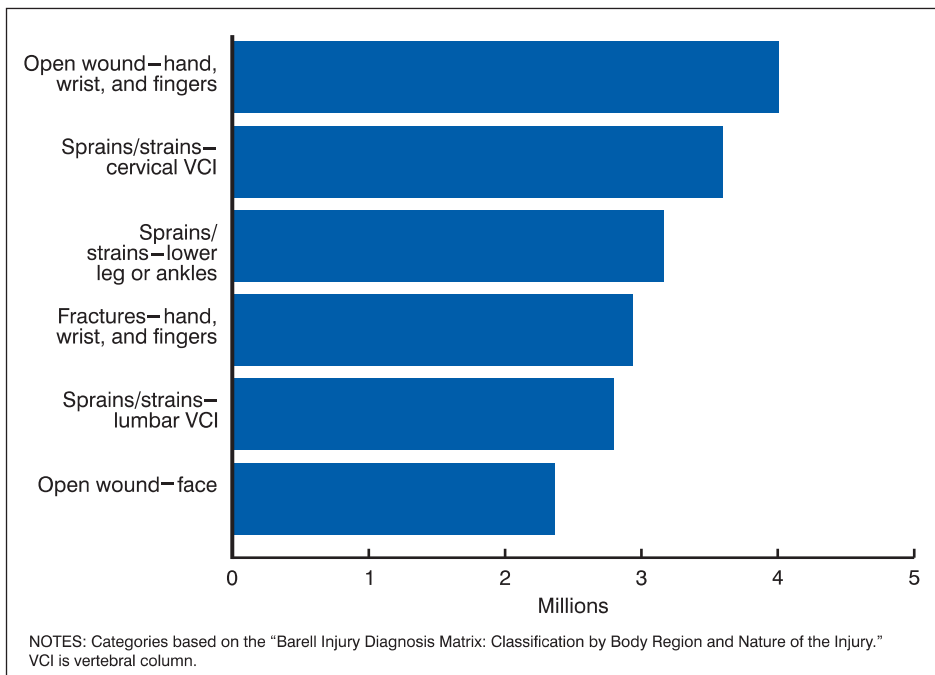


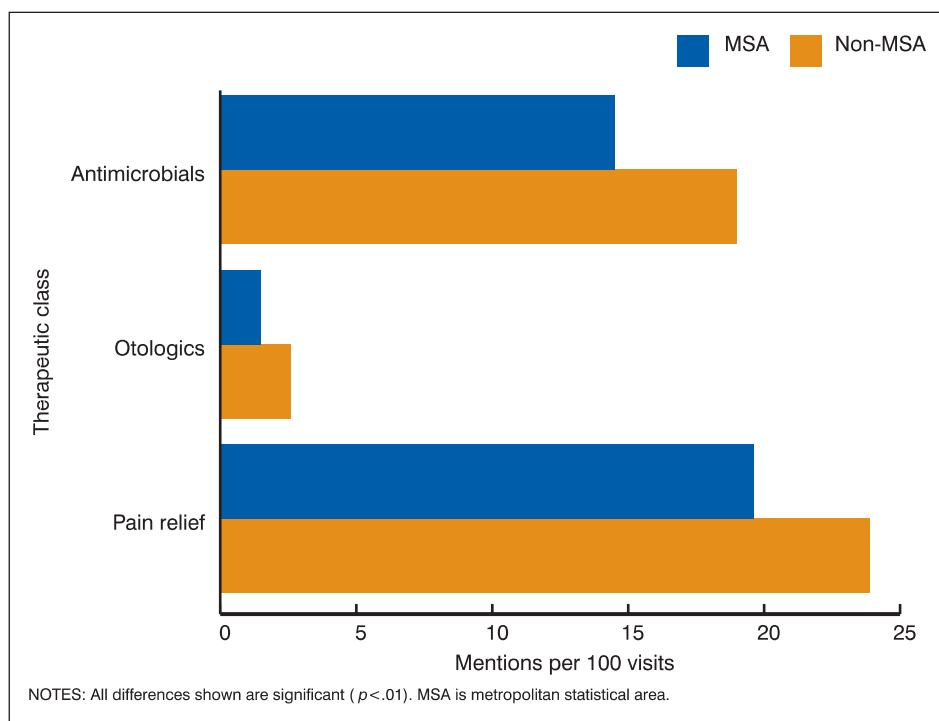
Figure 9. Most frequent annual injury visits at all types of ambulatory care settings: United States, 1999–2000

wounds of hand, wrist, and fingers (4.0 million visits); back sprains and strains (3.6 million cervical and 2.8 million lumbar visits); lower leg and ankle sprains and strains (3.2 million visits); fractures of hand, wrist, and fingers (2.9 million visits); and open wounds on the face (2.4 million visits) (figure 9).

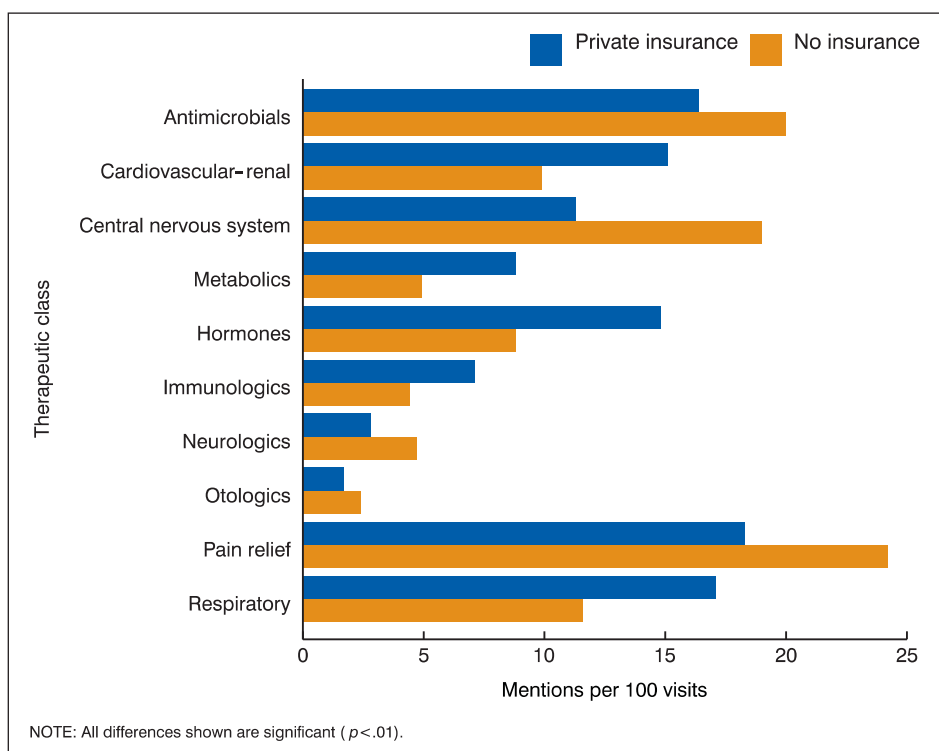
- Approximately 40 percent of injury visits had a primary diagnosis not in the acute injury/poisoning chapter of the ICD–9–CM. One-quarter of these diagnoses were in the musculoskeletal system chapter (table 15).

## Medications

- Drugs were provided, prescribed, or continued at 66.8 percent of ambulatory care visits. Visits to surgical specialists were least likely to include medications compared with the other settings, with only 42.7 percent of the visits listing one or more medications. In contrast, visits to medical specialists were most likely to include five or more drugs provided, prescribed, or continued (12.3 percent) (table 16).
- In 1999 and 2000, there was an annual average of 153 drug mentions for every 100 ambulatory care visits (table 17), a 16% increase from 1993–94. The therapeutic classes driving the increase were pain relief drugs (39% increase), central nervous system (CNS) drugs (42% increase), respiratory tract drugs (30% increase), and hormones (31% increase) (data not shown).
- Patients at visits in non-MSAs received more drug prescriptions than in MSAs, primarily driven by the higher drug mention rate at primary care visits (187 mentions per 100 visits in non-MSAs vs. 156 mentions per 100 visits in MSAs) (table 17). Higher prescribing rates for antimicrobial agents and pain relief drugs in non-MSAs also contributed to the difference (figure 10).
- Visits to medical specialists had the highest drug mention rate (189 drugs per 100 visits), and visits to surgical specialists had the lowest rate (81 drugs per 100 visits) (table 17).
- Compared with patients at private insurance visits, uninsured patients were more likely to receive prescriptions for antimicrobials, CNS drugs, pain relief drugs, and otologics; however, uninsured patients were less likely to receive prescriptions for cardiovascular-renal drugs, metabolics, hormones, immunologics, neurologics, and respiratory tract drugs (figure 11). The mean patient age at private insurance visits is the same as at visits by uninsured patients, so these observed differences in prescription



**Figure 10. Variation in drug mention rates for selected therapeutic classes by metropolitan statistical area status: United States, 1999–2000**



**Figure 11. Variation in drug mention rates for selected therapeutic classes by primary expected source of payment: United States, 1999–2000**

- patterns are more likely reflective of the types of conditions for which treatment is sought.
- The top drugs mentioned at ambulatory visits were acetaminophen, amoxicillin,

ibuprofen, albuterol, and hydrocodone (table 18).

- The top therapeutic classes included cardiovascular-renal drugs, pain relief drugs, respiratory tract drugs,

antimicrobial agents, and hormones (table 19).

- Within the antimicrobial class, penicillins were still the leading agent prescribed, with 41.3 million mentions per year, followed by cephalosporins with 30.7 million mentions (table 20). Antidepressants were the leading CNS drug prescribed, with 60 million mentions. Non-narcotic analgesics and nonsteroidal anti-inflammatory drugs (NSAIDs) each represented one-third of the pain-relief mentions (table 20).
- The top specific therapeutic classes include antiarthritics, antidepressants, vaccines, non-narcotic analgesics, and narcotic analgesics (table 21).
- Males had a higher prescription rate than females for hyperlipidemia drugs (141 vs. 127 scripts per 1,000 persons). Females had higher prescribing rates than males for all other classes (table 22).
- Cephalosporins were the preferred antimicrobial agent prescribed at visits by Medicare patients, and penicillins were recorded most frequently at visits by Medicaid patients (table 23).

## Discussion

The results presented in this report paint a picture of variation in medical care provided across ambulatory care settings. They also provide important information on access to providers and health condition of safety-net populations (e.g., African Americans, poor, uninsured, and persons living in non-MSAs). Because disparities in care and access to care are important public health issues, additional analysis of the NAMCS and NHAMCS data was conducted in an attempt to explain some of the findings in more detail. Logistic regression models (see “Appendix IV” and “Appendix V”), which compared utilization across subgroups after adjusting for subgroup differences on selected influential factors, were used for this purpose.



Although overall and office-based primary care utilization rates were the same for black or African Americans and white persons, the rates varied by type of setting. Black persons had higher visit rates than white persons to hospital settings, while white persons had higher rates of visits to surgical and medical specialty offices ( $\chi^2=219.4$ ,  $df = 8$ ,  $p<.01$ ). Similarly, the likelihood that a randomly selected ambulatory care visit was made to a hospital setting was higher for African Americans than for white persons (OR=2.15 for ED, and OR=2.19 for OPD). These odds are reduced to 1.83 for the ED and 1.52 for the OPD after adjusting for various patient characteristics including age, sex, income, education, insurance type, and type and number of conditions as well as provider MSA status (see “Appendix IV”).

In the logistic regression model, source of payment and type of condition (injury vs. illness) remain significant factors in modeling ED use. Compared with visits by patients with private insurance, Medicare patients (OR=1.71), Medicaid patients (OR=2.0), and the uninsured (OR=3.15) are all more likely to make a health care visit to the ED as opposed to other types of settings. One-quarter of care received by uninsured persons is provided by EDs, and almost one-fifth of care received by Medicaid recipients is obtained in the ED. This compares to less than one-tenth of privately-insured care being provided in the ED. This corroborates the population-based data from the NHIS that shows that, compared with privately-insured persons, uninsured persons are much less likely to make any health care visits but about equally likely to make at least one ED visit.

One of the key differences between patients visiting providers in MSAs and non-MSAs revolves around the likelihood of visiting primary care and medical specialists. Compared to non-MSAs, MSAs were less likely to have visits to office-based primary care physicians (OR=0.90) and EDs (OR=0.91) and more likely to have visits to office-based medical specialists (OR=3.00). To investigate this further, a logistic regression analysis was performed to model likelihood of visits

to these providers. After adding to the model the distance traveled between the ZIP Code of the patient and the ZIP Code of the provider and the amount of similar providers in the county of the sampled visit, the adjusted odds ratios for MSA status were no longer significantly different from 1.0 (see “Appendix V”). The model indicates that patients still travel farther to see surgical and medical specialists even after adjusting for MSA status and number of providers available. Therefore, it seems that the lack of medical specialists in non-MSAs is the factor most related to their lower use of these services. It is not that patients in these areas do not have conditions that are related to the kind of care best treated by medical specialties. But, because of the shortage of physician supply, such care is more often provided by a primary care physician in non-MSAs compared with MSAs. The results of this logistic regression analysis seem to support the hypothesis that, if more medical specialists were available in non-MSAs, their services would be used.

Primary care providers may substitute for medical specialists but are less likely to substitute for surgical specialists. There were no differences in the observed estimates for the likelihood of a visit being made to a surgical specialist by MSA status. The estimates in table 1 also support the theory of availability affecting utilization, as the rate of visits per provider in MSAs and non-MSAs is very similar for all physician services; however, the rate per provider for hospital settings is much higher in MSAs compared to non-MSAs.

The importance of health insurance in increased medical utilization has been demonstrated (8). Data in this report have clearly shown the wide variation in utilization rates across settings by various patient characteristics. The rates by setting for insurance type shown in table 2 can also be used to show important relative indicators of where care is provided. For example, the rate of ED use by the uninsured was 46.6 visits per 100 persons, and the rate of primary care physician use was 59.7 per 100 persons. So, for every ED visit by

an uninsured person, there were 1.3 visits to a primary care physician. But, for privately insured persons, there were 6.6 primary care physician visits for every ED visit. The visit rate for uninsured persons to the ED is twice as high as their rate of visit to an OPD, but the visit rates for persons on Medicaid were similar for the two hospital settings.

The NAMCS and NHAMCS data presented cannot show the relative value and quality of care received at ambulatory care encounters; however, when the data are presented in terms of population rates, observed variations raise questions regarding where further research should be performed. For example, table 23 shows great variation between privately-insured and uninsured persons for most of the therapeutic classes presented. Compared with uninsured persons, the rate of medication use for privately-insured persons was over three times higher for lipid-lowering drugs, two to three times higher for blood glucose regulators, medication for acid reflux and other peptic disorders, heart regulators (e.g., angiotensin converting enzyme (ACE) inhibitors, calcium channel blockers, and beta blockers), estrogens/progestins, and vitamins. Uninsured persons also have a lower population rate for mentions of antihistamines, vaccines, and electrolyte replenishers but have equal utilization rates for the various pain-relieving drugs, antimicrobials, and antidepressant medications. These results suggest that uninsured persons will make health care appointments when they are in pain, have an infection, or are depressed, but they are unlikely to make appointments for chronic conditions or preventive care for chronic conditions. This conclusion is reinforced by data that indicate that uninsured persons have the lowest rate of visits for preventive care than any other payment group (data not shown).

The trend analyses performed in this study found that between 1993–94 and 1999–2000, visit rates increased for primary care and surgical specialists but decreased for medical specialists. The lack of change in ED and OPD visit rates overall is belied by increases observed in these rates for subpopulations such as uninsured

persons. A study of NAMCS and NHAMCS data between 1996–97 and 2000–2001 found an increase in the proportion of all ambulatory care visits to EDs by uninsured persons (from 17.0 to 25.2 percent) (20). The study also found a 37% percent decrease in the use of physician offices by uninsured persons. The greater reliance on EDs by uninsured persons is likely related to a decline in the provision of charity care by office-based physicians (21,22).

This report also showed increases in visit rates for the chronic conditions of hypertension and diabetes but no change for arthritis or major depression. Use of medications at ambulatory care visits was found to increase by 13%, driven by a higher rate of prescribing for pain relievers, CNS drugs (including antidepressants), respiratory tract drugs, and hormones. Various factors, including adherence to treatment guidelines and the availability of new and improved medications, help explain these increases (23).

Finally, this report shed light on how the ED serves as a health care safety net for members of vulnerable populations. Although the observed percentage of ambulatory care visits made to the ED is double for black or African-American persons compared with white persons (18.9 vs. 9.8 percent), about one-third of the observed difference can be explained by differences in utilization patterns by patients with differing demographics (e.g., age, sex, income, education, insurance type, number and type of conditions). Insurance status has more impact on where the patient will seek care. The uninsured and persons with public insurance are receiving more care in hospital settings than physicians' offices. Evidence from the NAMCS induction interview indicates that, compared with willingness to accept new privately-insured patients, office-based physicians are less likely to accept new Medicare, Medicaid, or charity cases—especially primary care physicians (22). This means that patients who rely on these payment sources may need to seek care in hospital settings and other safety-net providers such as community health centers. Patients in these same payment groups are also

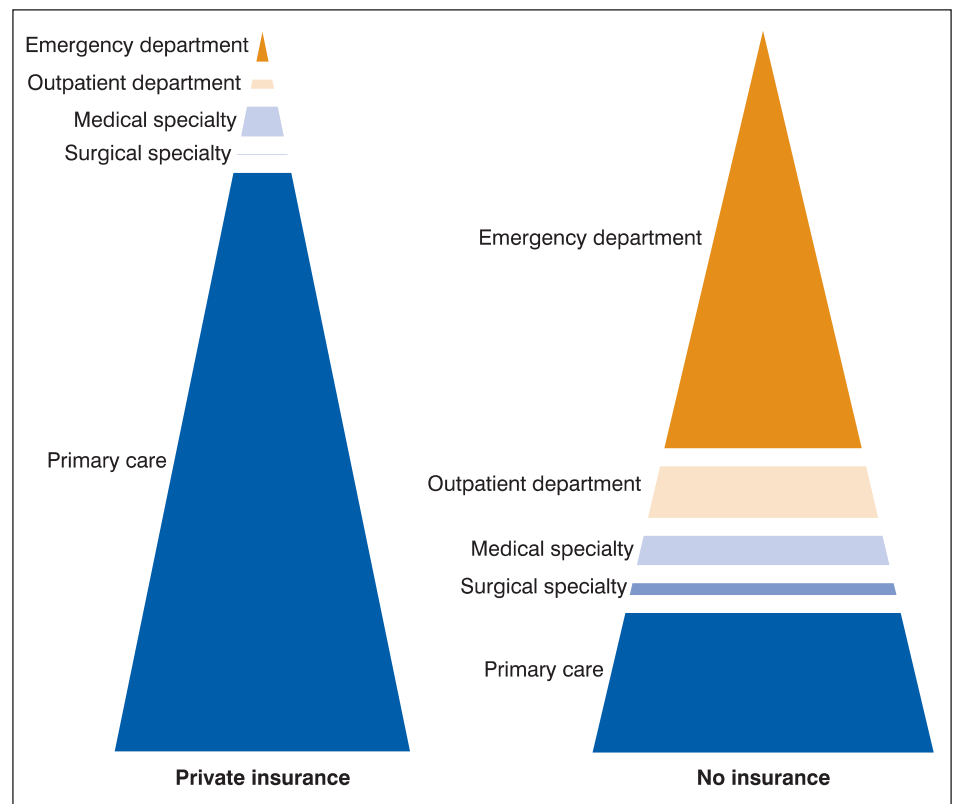


Figure 12. Comparison of distribution of visits for asthma: United States, 1999–2000

more likely to make visits to OPDs compared with privately insured patients.

The effect of no health insurance or under-insurance on ED utilization is also characterized by specific diseases. The overall distribution of visits with a primary diagnosis of asthma showed that 15.3 percent of visits occur in the ED (table 10), but that distribution is strikingly different when looking at different sources of payment. Figure 12 shows that, among asthma visits by the uninsured, approximately 44 percent are to the ED, but among asthma visits by the privately insured, the percentage is only 10 percent. Asthma is a condition considered sensitive to primary care; if the patient is receiving good primary care for this disease, then there should be relatively few visits to the ED.

The type of condition is also an important factor in selecting the ED as the provider of choice. The report indicated that diagnoses such as chest pain, open wounds, and contusions are primarily seen in the ED. Certain causes of injury are also predominantly seen in the ED (e.g., self-inflicted injuries, assaults, and unintentional injuries

involving cutting or piercing instruments). Visits for adverse effects of medical treatment are less likely to be seen in the ED compared with other types of injuries in general. Relatively more of these visits actually occur in physician offices.

One area of ED use that was not examined in this report is visits where the patient arrives by ambulance. Ambulance transport is an important access issue for some patients and especially for patients in less densely populated areas. Data from the 1999–2000 NHAMCS show that annually there were 14.8 million ambulance transports to the ED, occurring at 14 percent of ED visits. Ambulance use increased with patient age (270 per 1,000 persons 75 years of age and over vs. 20 per 1,000 persons under 15 years of age). The rate was double in non-MSAs compared with MSAs (118 vs. 53 per 1,000 persons). Approximately 40 percent of the transports were for trauma patients, and 33 percent resulted in a hospitalization. It is important to document how the use of ambulances is integral to emergency care in non-MSAs. No national

estimates are available for ambulance calls that did not result in a visit to the ED (i.e., where the emergency medical services (EMS) staff treated the patient on site). From the rate of transport to the ED we might assume that non-MSAs also have a higher rate of non-transport EMS calls.

Interpretation of NAMCS and NHAMCS encounter data on medical care utilization is limited by the fact that multiple sampled visits may be made by the same person, but these surveys do not track specific patients. Therefore, we do not know if computed visit rates actually represent fewer patients making more visits or more patients making fewer visits. Data from population-based surveys such as the NHIS, National Health and Nutrition Examination Survey (NHANES), and the Medical Expenditure Panel Survey can be investigated to compare the amount of care obtained by one person. For example, the 1999 NHIS indicates that uninsured persons make fewer ambulatory care visits than persons with insurance (7). NHANES III data indicate that 78.3 percent of adults used analgesic medications during the sampled month (1988–94) (24), and 6.5 percent of adults took lipid-lowering drugs during the sampled month (unpublished data).

## Additional Information

**A**mbulatory care visit and drug data from the NAMCS and NHAMCS are available in a variety of formats including CD-ROM and downloadable data files accessed through the Ambulatory Health Care Data homepage on the Internet at <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>. For additional information concerning NAMCS and NHAMCS data, contact the Ambulatory Care Statistics Branch at (301) 458–4600.

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**Table 1. Annual estimates of providers by setting type, according to geographic region and metropolitan statistical area status: United States, 1999–2000**

Provider characteristics	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of providers						
Total	295,221	143,729	62,366	81,573	2,623	4,930
Geographic region						
Northeast	69,040	32,635	14,363	20,811	535	697
Midwest	65,125	34,366	13,934	14,452	920	1,453
South	90,475	43,016	20,001	24,812	767	1,880
West	70,581	33,713	14,068	21,499	402	900
MSA <sup>1</sup> status						
MSA	243,276	113,131	51,497	74,334	1,560	2,755
Non-MSA	51,945	30,598	10,870	7,240	1,063	2,175
Number of providers per 100,000 persons <sup>2</sup>						
Total	108.2	52.7	22.9	29.9	1.0	1.8
Geographic region						
Northeast	131.8	62.3	27.4	39.7	1.0	1.3
Midwest	96.9	51.1	20.7	21.5	1.4	2.2
South	93.6	44.5	20.7	25.7	0.8	1.9
West	124.8	59.6	24.9	38.0	0.7	1.6
MSA <sup>1</sup> status						
MSA	112.0	52.1	23.7	31.2	0.7	1.3
Non-MSA	93.6	55.1	19.6	13.1	1.9	3.9
Number of providers per county <sup>3</sup>						
Total	91.7	44.6	19.4	25.3	0.8	1.5
MSA <sup>1</sup> status						
MSA	284.5	132.3	60.2	86.9	1.8	3.2
Non-MSA	22.0	12.9	4.6	3.1	0.4	0.9
Number of annual visits per provider						
Total	3,318	3,226	2,561	2,044	32,008	21,377
Geographic region						
Northeast	3,174	2,991	2,916	1,814	41,781	28,030
Midwest	3,541	3,339	2,514	2,119	25,339	18,525
South	3,514	3,502	2,332	2,201	33,069	21,637
West	3,001	2,987	2,572	2,034	32,240	20,288
MSA <sup>1</sup> status						
MSA	3,260	3,188	2,593	2,020	43,969	29,049
Non-MSA	3,590	3,368	2,412	2,282	14,454	11,660

<sup>1</sup>MSA is metropolitan statistical area.<sup>2</sup>Regional and metropolitan area estimates were provided by the Division of Health Interview Statistics (DHIS), National Center for Health Statistics, and are based on U.S. Census Bureau estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. DHIS estimates differ slightly from Census Bureau monthly postcensal estimates because of differences in the adjustment process.<sup>3</sup>Based on 3,220 counties: 855 MSA counties and 2,365 non-MSA counties.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 2. Annual number and percent distribution of ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined setting	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits in thousands						
All visits . . . . .	979,485	463,692	159,740	166,706	83,956	105,391
Patient age						
Under 15 years . . . . .	170,719	105,358	11,251	13,076	18,397	22,636
15–24 years . . . . .	89,730	41,517	9,438	12,484	9,692	16,600
25–44 years . . . . .	245,083	114,485	33,396	43,547	21,558	32,097
45–64 years . . . . .	248,291	107,644	48,422	53,281	20,831	18,112
65–74 years . . . . .	111,285	46,857	26,678	24,010	7,242	6,499
75 years and over . . . . .	114,377	47,832	30,555	20,308	6,236	9,447
Patient sex						
Female . . . . .	572,896	285,258	85,793	95,832	50,339	55,674
Male . . . . .	406,588	178,434	73,947	70,875	33,617	49,717
Patient race						
White . . . . .	826,886	391,210	143,717	147,806	63,289	80,864
Black . . . . .	114,050	50,822	11,165	13,007	17,487	21,568
Other . . . . .	38,550	21,660	4,858	5,893	3,179	2,959
Primary expected source of payment						
Private insurance . . . . .	516,508	275,313	80,134	86,880	32,482	41,699
Medicare . . . . .	188,693	76,575	44,463	38,575	13,307	15,773
Medicaid . . . . .	100,946	46,720	6,695	10,395	19,151	17,984
Uninsured . . . . .	76,305	23,279	12,452	13,546	8,858	18,169
Other . . . . .	97,034	41,804	15,996	17,309	10,158	11,766
Geographic region of provider						
Northeast . . . . .	219,117	97,596	41,881	37,749	22,353	19,537
Midwest . . . . .	230,619	114,741	35,030	30,619	23,311	26,917
South . . . . .	317,944	150,660	46,647	54,612	25,347	40,677
West . . . . .	211,805	100,694	36,181	43,726	12,944	18,259
MSA <sup>1</sup> status of provider						
MSA . . . . .	792,977	360,653	133,517	150,184	68,591	80,031
Non-MSA . . . . .	186,508	103,039	26,222	16,522	15,365	25,360
Percent distribution						
All visits . . . . .	100.0	47.3	16.3	17.0	8.6	10.8
Patient age						
Under 15 years . . . . .	100.0	61.7	6.6	7.7	10.8	13.3
15–24 years . . . . .	100.0	46.3	10.5	13.9	10.8	18.5
25–44 years . . . . .	100.0	46.7	13.6	17.8	8.8	13.1
45–64 years . . . . .	100.0	43.4	19.5	21.5	8.4	7.3
65–74 years . . . . .	100.0	42.1	24.0	21.6	6.5	5.8
75 years and over . . . . .	100.0	41.8	26.7	17.8	5.5	8.3
Patient sex						
Female . . . . .	100.0	49.8	15.0	16.7	8.8	9.7
Male . . . . .	100.0	43.9	18.2	17.4	8.3	12.2
Patient race						
White . . . . .	100.0	47.3	17.4	17.9	7.7	9.8
Black . . . . .	100.0	44.6	9.8	11.4	15.3	18.9
Other . . . . .	100.0	56.2	12.6	15.3	8.2	7.7
Primary expected source of payment						
Private insurance . . . . .	100.0	53.3	15.5	16.8	6.3	8.1
Medicare . . . . .	100.0	40.6	23.6	20.4	7.1	8.4
Medicaid . . . . .	100.0	46.3	6.6	10.3	19.0	17.8
Uninsured . . . . .	100.0	30.5	16.3	17.8	11.6	23.8
Other . . . . .	100.0	43.1	16.5	17.8	10.5	12.1

See footnotes at end of table.

**Table 2. Annual number and percent distribution of ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined setting	Primary care offices	Surgical specialty offices	Medical speciality offices	Outpatient departments	Emergency departments
Geographic region of provider		Percent distribution				
Northeast . . . . .	100.0	44.5	19.1	17.2	10.2	8.9
Midwest . . . . .	100.0	49.8	15.2	13.3	10.1	11.7
South . . . . .	100.0	47.4	14.7	17.2	8.0	12.8
West . . . . .	100.0	47.5	17.1	20.6	6.1	8.6
MSA <sup>1</sup> status of provider						
MSA . . . . .	100.0	45.5	16.8	18.9	8.6	10.1
Non-MSA . . . . .	100.0	55.2	14.1	8.9	8.2	13.6

<sup>1</sup>MSA is metropolitan statistical area.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.



**Table 3. Annual ambulatory care visit rates by setting type and selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined setting	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits per 100 persons <sup>1–3</sup>						
All visits . . . . .	358.9	169.9	58.5	61.1	30.8	38.6
Patient age						
Under 15 years . . . . .	283.2	174.8	18.7	21.7	30.5	37.6
15–24 years . . . . .	234.6	108.5	24.7	32.7	25.4	43.4
25–44 years . . . . .	297.9	139.2	40.6	52.9	26.2	39.0
45–64 years . . . . .	416.5	180.5	81.3	89.3	35.0	30.4
65–74 years . . . . .	626.2	263.7	150.1	135.1	40.8	36.6
75 years and over . . . . .	772.6	323.2	206.5	137.1	42.1	63.8
Patient sex						
Female . . . . .	409.5	203.9	61.4	68.4	36.0	39.8
Male . . . . .	305.5	134.1	55.6	53.3	25.3	37.4
Patient race						
White . . . . .	369.0	174.6	64.1	66.0	28.3	36.1
Black . . . . .	322.8	143.8	31.6	36.8	49.5	61.0
Other . . . . .	284.0	159.4	35.8	43.4	23.5	21.8
Primary expected source of payment						
Private insurance . . . . .	259.8	138.5	40.3	43.7	16.3	21.0
Medicare . . . . .	516.1	209.4	121.6	105.5	36.4	43.1
Medicaid . . . . .	355.0	164.3	23.5	36.6	67.4	63.2
Uninsured . . . . .	195.6	59.7	31.9	34.7	22.7	46.6
Geographic region of provider						
Northeast . . . . .	418.5	186.4	80.0	72.1	42.7	37.3
Midwest . . . . .	343.0	170.6	52.1	45.5	34.7	40.1
South . . . . .	328.7	155.8	48.2	56.5	26.2	42.1
West . . . . .	374.5	178.0	64.1	77.2	23.0	32.3
MSA <sup>4</sup> status of provider						
MSA . . . . .	365.0	166.0	61.5	69.1	31.6	36.9
Non-MSA . . . . .	336.4	185.9	47.3	29.9	27.7	45.7
Standard error of rate						
All visits . . . . .	11.4	7.9	2.6	3.3	2.2	1.4
Patient age						
Under 15 years . . . . .	13.2	11.3	1.8	2.9	2.7	2.0
15–24 years . . . . .	9.9	7.3	2.2	2.7	1.8	1.9
25–44 years . . . . .	10.8	7.9	2.2	4.1	1.9	1.4
45–64 years . . . . .	14.2	9.5	3.9	5.5	2.7	1.1
65–74 years . . . . .	23.9	1.7	7.6	8.6	3.9	1.8
75 years and over . . . . .	29.4	21.5	11.4	8.8	5.2	2.9
Patient sex						
Female . . . . .	13.6	9.6	3.0	4.1	2.5	1.5
Male . . . . .	9.9	6.7	2.3	3.1	1.9	1.4
Patient race						
White . . . . .	12.3	8.0	2.9	3.7	2.3	1.6
Black . . . . .	20.6	17.0	2.2	3.8	3.5	2.8
Other . . . . .	52.6	43.7	5.6	6.6	3.1	2.8
Primary expected source of payment						
Private insurance . . . . .	9.2	7.1	1.9	3.1	1.6	0.8
Medicare . . . . .	21.8	15.0	6.7	6.9	3.5	1.8
Medicaid . . . . .	19.4	14.3	2.4	5.7	4.5	2.9
Uninsured . . . . .	10.8	5.6	5.5	3.6	2.0	2.2

See footnotes at end of table.

**Table 3. Annual ambulatory care visit rates by setting type and selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined setting	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Geographic region of provider		Standard error of rate				
Northeast . . . . .	21.8	14.7	6.3	6.6	6.2	2.9
Midwest . . . . .	27.4	18.2	5.0	5.9	5.0	2.8
South . . . . .	20.1	14.1	4.5	6.2	3.3	2.7
West . . . . .	21.2	15.8	5.1	7.9	3.5	2.6
MSA <sup>4</sup> status of provider						
MSA . . . . .	11.6	7.9	2.9	3.9	2.4	1.4
Non-MSA . . . . .	37.2	23.9	7.7	7.7	5.4	4.4

<sup>1</sup>Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–99 (with short-term projection to dates in 2000)" and are available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

<sup>2</sup>Regional and metropolitan area estimates were provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on U.S. Census Bureau estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. DHIS estimates differ slightly from Census Bureau monthly postcensal estimates because of differences in the adjustment process.

<sup>3</sup>Denominators for primary expected source of payment rates are from the 1999 and 2000 estimates of health insurance coverage from the *Current Population Survey*.

<sup>4</sup>MSA is metropolitan statistical area.

NOTE: Figures are annual averages.

**Table 4. Percent distribution of ambulatory care visits by selected patient and provider characteristics, according to metropolitan statistical area status: United States, 1999–2000**

Characteristic	Total	MSA <sup>1</sup>	Non-MSA <sup>1</sup>	Percent distribution		
				Total	MSA <sup>1</sup>	Non-MSA <sup>1</sup>
All visits . . . . .	100.0	100.0	100.0	...	...	...
Patient age						
Under 15 years . . . . .	17.4	17.3	18.1	0.6	0.6	1.5
15–24 years . . . . .	9.2	9.1	9.5	0.2	0.2	0.5
25–44 years . . . . .	25.0	25.7	22.0	0.4	0.4	1.0
45–64 years . . . . .	25.3	25.6	24.2	0.3	0.4	0.9
65–74 years . . . . .	11.4	11.2	12.0	0.2	0.3	0.5
75 years and over . . . . .	11.7	11.1	14.2	0.3	0.3	0.7
Patient sex						
Female . . . . .	58.5	58.5	58.4	0.4	0.4	0.6
Male . . . . .	41.5	41.5	41.6	0.4	0.4	0.6
Patient race						
White . . . . .	84.4	82.9	90.9	0.9	1.0	2.3
Black . . . . .	11.6	12.5	*7.9	0.6	0.5	2.4
Other . . . . .	3.9	4.6	1.2	0.7	0.9	0.3
Primary expected source of payment						
Private insurance . . . . .	52.7	53.8	48.3	0.8	0.9	1.5
Medicare . . . . .	19.3	17.9	24.9	0.5	0.5	1.4
Medicaid . . . . .	10.3	9.7	12.9	0.5	0.5	1.0
Uninsured . . . . .	7.8	7.9	7.4	0.3	0.4	0.7
Other . . . . .	9.9	10.7	6.5	0.5	0.6	0.7
Geographic region of provider						
Northeast . . . . .	22.4	22.9	20.1	1.1	1.2	2.9
Midwest . . . . .	23.5	21.6	31.9	1.6	1.5	5.0
South . . . . .	32.5	31.6	36.3	1.6	1.6	5.4
West . . . . .	21.6	24.0	*11.6	1.2	1.3	5.3

... Category not applicable.

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>MSA is metropolitan statistical area.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 5. Percent distribution of ambulatory care visits by expected source of payment, according to selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Total	Private insurance	Medicare	Medicaid	Uninsured	Other
Percent distribution						
All visits . . . . .	100.0	52.7	19.3	10.3	7.8	9.9
Patient age						
Under 15 years . . . . .	100.0	61.2	1.2	23.8	6.6	7.2
15–24 years . . . . .	100.0	58.3	1.1	16.6	13.2	10.8
25–44 years . . . . .	100.0	63.2	2.7	8.6	11.1	14.3
45–64 years . . . . .	100.0	66.3	7.6	6.3	8.4	11.3
65–74 years . . . . .	100.0	21.8	65.6	4.4	2.5	5.7
75 years and over . . . . .	100.0	13.8	76.2	3.1	1.9	4.9
Patient sex						
Female . . . . .	100.0	53.3	19.4	11.0	7.5	8.7
Male . . . . .	100.0	51.9	19.0	9.3	8.2	11.6
Patient race						
White . . . . .	100.0	54.3	20.2	8.4	7.5	9.7
Black . . . . .	100.0	41.3	15.2	22.1	10.3	11.1
Other . . . . .	100.0	53.1	12.2	17.0	7.0	10.6
Geographic region of provider						
Northeast . . . . .	100.0	51.3	18.7	10.4	8.9	10.7
Midwest . . . . .	100.0	55.6	20.3	9.9	6.0	8.3
South . . . . .	100.0	51.0	20.8	11.2	9.4	7.6
West . . . . .	100.0	53.7	16.5	9.3	6.2	14.3
Standard error of percent						
All visits . . . . .	...	0.8	0.5	0.5	0.3	0.5
Patient age						
Under 15 years . . . . .	...	1.5	0.3	1.4	0.5	0.8
15–24 years . . . . .	...	1.1	0.2	0.9	0.6	0.6
25–44 years . . . . .	...	1.0	0.2	0.4	0.5	0.9
45–64 years . . . . .	...	1.0	0.4	0.4	0.5	0.7
65–74 years . . . . .	...	0.9	1.1	0.5	0.4	0.6
75 years and over . . . . .	...	0.9	1.2	0.3	0.3	0.8
Patient sex						
Female . . . . .	...	0.9	0.6	0.5	0.4	0.5
Male . . . . .	...	0.8	0.5	0.5	0.3	0.7
Patient race						
White . . . . .	...	0.8	0.6	0.4	0.4	0.5
Black . . . . .	...	1.4	0.8	1.3	0.7	1.0
Other . . . . .	...	3.4	1.1	3.3	0.8	1.8
Geographic region of provider						
Northeast . . . . .	...	1.6	0.8	0.8	0.9	1.2
Midwest . . . . .	...	1.1	0.8	0.6	0.5	0.8
South . . . . .	...	1.6	1.1	1.0	0.6	0.9
West . . . . .	...	1.7	1.3	1.0	0.6	1.5

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 6. Annual number of visits and percent distribution of ambulatory care visits by setting type, according to selected contextual variables based on residential ZIP Code: United States, 1999–2000**

Contextual variable <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Total percent distribution <sup>2</sup>
Number of visits in thousands							
All visits . . . . .	979,485	463,692	159,740	166,706	83,956	105,391	100.0
Percent distribution							
All visits . . . . .	100.0	47.3	16.3	17.0	8.6	10.8	...
Median household income <sup>3</sup>							
Low (less than \$33,000) . . . . .	100.0	43.5	15.4	13.4	12.8	15.0	23.4
Medium . . . . .	100.0	49.4	15.8	16.9	7.7	10.2	53.6
High (greater than \$60,000) . . . . .	100.0	46.2	19.7	21.6	5.4	7.1	17.6
Education level <sup>3</sup>							
Low (less than 15% with bachelor's degree) . . . . .	100.0	48.8	14.1	13.2	10.6	13.4	32.6
Medium . . . . .	100.0	48.0	17.1	16.6	8.0	10.4	41.2
High (greater than 35% with bachelor's degree) . . . . .	100.0	43.8	18.9	23.4	6.4	7.4	20.9
Foreign born <sup>3</sup>							
Low (less than 5%) . . . . .	100.0	48.5	17.1	13.5	9.3	11.6	44.3
Medium . . . . .	100.0	45.8	17.1	19.8	6.8	10.4	32.4
High (greater than 20%) . . . . .	100.0	47.2	13.7	20.1	9.6	9.4	18.0
Language other than English <sup>3</sup>							
Low (less than 1%) . . . . .	100.0	47.7	18.1	14.1	9.2	11.0	36.0
Medium . . . . .	100.0	46.5	16.3	18.8	7.6	10.7	46.7
High (greater than 10%) . . . . .	100.0	49.7	11.9	18.2	10.2	10.1	11.9
Standard error of percent							
All visits . . . . .	...	1.1	0.7	0.8	0.6	0.4	...
Median household income <sup>3</sup>							
Low (less than \$33,000) . . . . .	...	2.3	1.3	1.1	1.1	0.9	1.5
Medium . . . . .	...	1.3	0.7	0.9	0.7	0.4	1.4
High (greater than \$60,000) . . . . .	...	2.1	1.5	1.5	0.6	0.6	0.9
Education level <sup>3</sup>							
Low (less than 15% with Bachelor's degree) . . . . .	...	1.7	1.0	1.0	0.8	0.6	1.3
Medium . . . . .	...	1.6	0.8	1.0	0.7	0.5	1.0
High (greater than 35% with Bachelor's degree) . . . . .	...	1.6	1.2	1.4	0.6	0.5	0.9
Foreign born <sup>3</sup>							
Low (less than 5%) . . . . .	...	1.7	1.1	0.9	0.9	0.6	1.9
Medium . . . . .	...	1.5	1.1	1.1	0.6	0.5	1.6
High (greater than 20%) . . . . .	...	2.3	1.2	1.7	0.9	0.7	1.1
Language other than English <sup>3</sup>							
Low (less than 1%) . . . . .	...	1.7	1.2	1.0	0.9	0.6	1.7
Medium . . . . .	...	1.4	0.8	1.0	0.6	0.5	1.7
High (greater than 10%) . . . . .	...	2.7	1.2	2.0	1.0	0.9	0.9

... Category not applicable.

<sup>1</sup>Based on patient's residential ZIP Code matched to Census 2000 data.<sup>2</sup>Total percent distributions will not sum to 100.0 because ZIP Code information was missing on 5.3% of records.<sup>3</sup>For each contextual variable, categories reflect the percentage of persons in the low, medium, and high ranges as defined in the table based on their residential ZIP Code.

NOTE: Figures are annual averages.

**Table 7. Annual rate of visits of ambulatory care visits by setting type, according to selected contextual variables based on residential ZIP Code: United States, 1999–2000**

Contextual variable <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits per 100 persons <sup>2</sup>						
Median household income <sup>3</sup>						
Low (less than \$33,000) . . . . .	305.4	132.9	47.1	40.8	39.0	45.7
Medium . . . . .	323.3	159.7	51.1	54.8	24.8	33.0
High (greater than \$60,000) . . . . .	364.4	168.3	71.9	78.8	19.7	25.7
Education level <sup>3</sup>						
Low (less than 15% with bachelor's degree) . . . . .	328.2	160.2	46.2	43.2	34.6	44.0
Medium . . . . .	312.6	150.0	53.4	51.9	24.9	32.6
High (greater than 35% with Bachelor's Degree) . . . . .	349.1	152.9	66.0	81.7	22.5	26.0
Foreign born <sup>3</sup>						
Low (less than 5%) . . . . .	332.7	161.3	56.8	44.9	31.0	38.6
Medium . . . . .	310.9	142.5	53.1	61.7	21.1	32.5
High (greater than 20%) . . . . .	335.6	158.5	45.9	67.4	32.3	31.6
Language other than English <sup>3</sup>						
Low (less than 1%) . . . . .	332.4	158.4	60.1	46.8	30.5	36.6
Medium . . . . .	329.0	153.0	53.7	61.8	25.0	35.5
High (greater than 10%) . . . . .	294.3	146.2	35.0	53.5	30.0	29.7
Standard error of rate						
Median household income <sup>3</sup>						
Low (less than \$33,000) . . . . .	23.8	14.6	5.2	4.2	4.0	3.1
Medium . . . . .	13.1	9.0	2.4	3.7	2.2	1.5
High (greater than \$60,000) . . . . .	18.6	13.5	6.3	6.1	2.2	2.1
Education level <sup>3</sup>						
Low (less than 15% with Bachelor's degree) . . . . .	17.8	11.9	3.6	4.0	3.1	2.1
Medium . . . . .	13.0	9.6	2.9	3.3	2.3	1.6
High (greater than 35% with Bachelor's Degree) . . . . .	16.7	10.6	4.7	6.1	2.2	1.9
Foreign born <sup>3</sup>						
Low (less than 5%) . . . . .	19.8	12.0	4.5	4.0	3.5	2.2
Medium . . . . .	18.2	10.9	3.6	5.0	2.0	2.3
High (greater than 20%) . . . . .	19.9	14.9	4.4	5.9	3.4	2.2
Language other than English <sup>3</sup>						
Low (less than 1%) . . . . .	19.1	11.1	5.1	4.3	3.7	2.4
Medium . . . . .	16.3	10.4	3.2	4.1	2.0	2.0
High (greater than 10%) . . . . .	23.1	16.4	4.3	6.4	3.6	2.4

<sup>1</sup>Based on patient's residential ZIP Code matched to Census 2000 data.<sup>2</sup>Cases with missing ZIP Code information ( 5.3% of records) were assigned to the medium group for rate calculation. Denominators are based on the Census 2000 civilian noninstitutionalized population.<sup>3</sup> For each contextual variable, categories reflect the rate of visits by persons in the low, medium, and high ranges as defined in the table based on their residential ZIP Code.

NOTE: Figures are annual averages.

**Table 8. Annual number and percent distribution of ambulatory care visits by the 35 principal reasons for visit most frequently mentioned by patients, with percent distribution by setting type: United States, 1999–2000**

Principal reason for visit <sup>1</sup> and RVC code	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Percent distribution	
All visits . . . . .	979,485	100.0	100.0	47.3	16.3	17.0	8.6	10.8		
General medical examination . . . . . X100	60,401	6.2	100.0	77.2	2.9	11.0	8.8	*0.1		
Progress visit, not otherwise specified . . . . . T800	39,608	4.0	100.0	37.1	16.1	31.0	15.4	*0.3		
Cough . . . . . S440	26,403	2.7	100.0	73.5	1.4	6.6	8.7	9.8		
Postoperative visit . . . . . T205	23,690	2.4	100.0	12.1	73.4	6.7	6.8	1.0		
Prenatal examination, routine . . . . . X205	22,679	2.3	100.0	87.9	*	*	11.7	*		
Symptoms referable to throat . . . . . S455	20,340	2.1	100.0	71.4	4.7	*4.6	9.5	9.8		
Stomach pain, cramps and spasms . . . . . S545	19,302	2.0	100.0	41.7	5.4	10.8	7.5	34.6		
Fever . . . . . S010	15,255	1.6	100.0	59.5	*	*	8.8	29.7		
Back symptoms . . . . . S905	15,245	1.6	100.0	46.8	18.7	9.7	8.2	16.5		
Skin rash . . . . . S860	14,613	1.5	100.0	55.8	*	25.1	8.4	10.1		
Earache, or ear infection . . . . . S355	14,251	1.5	100.0	65.8	10.3	*	9.3	12.3		
Well baby examination . . . . . X105	14,205	1.5	100.0	87.9	*	*	9.9	*		
Knee symptoms . . . . . S925	14,050	1.4	100.0	28.7	49.8	*8.0	5.8	7.6		
Chest pain and related symptoms (not referable to body system) . . . . . S050	13,985	1.4	100.0	34.7	*	17.8	5.5	40.8		
Vision dysfunctions . . . . . S305	13,117	1.3	100.0	*	88.9	*2.8	2.7	1.2		
Headache, pain in head . . . . . S210	12,699	1.3	100.0	48.8	6.6	15.2	6.7	22.7		
Hypertension . . . . . D510	12,209	1.2	100.0	74.4	*	12.2	9.1	2.7		
Medication, other and unspecified kinds . . . . . T115	11,858	1.2	100.0	62.3	3.3	21.8	10.5	2.2		
Depression . . . . . S110	11,238	1.1	100.0	25.1	*	62.4	9.1	3.2		
Nasal congestion . . . . . S400	10,391	1.1	100.0	61.6	9.9	14.8	7.7	6.1		
Shoulder symptoms . . . . . S940	9,493	1.0	100.0	30.6	41.3	10.4	6.7	11.0		
Diabetes mellitus . . . . . D205	9,324	1.0	100.0	53.6	12.5	*23.6	9.6	*		
Low back symptoms . . . . . S910	9,151	0.9	100.0	35.9	17.8	23.9	7.0	15.4		
Head cold, upper respiratory infection (coryza) . . . . . S445	8,726	0.9	100.0	77.6	*2.6	*	7.7	6.2		
For other and unspecified test results . . . . . R700	8,670	0.9	100.0	56.1	18.2	14.9	10.1	*		
Leg symptoms . . . . . S920	8,549	0.9	100.0	45.2	19.9	11.8	8.1	15.0		
Gynecological examination . . . . . X225	8,065	0.8	100.0	90.1	*	*	6.1	*		
Counseling, not otherwise specified . . . . . T605	7,888	0.8	100.0	42.8	22.1	20.7	11.6	2.8		
Blood pressure test . . . . . X320	7,886	0.8	100.0	75.9	*	13.4	8.7	*		
Anxiety and nervousness . . . . . S100	7,886	0.8	100.0	37.2	*	51.1	6.0	4.9		
Neck symptoms . . . . . S900	7,762	0.8	100.0	37.7	22.9	16.5	5.5	17.3		
Sinus problems . . . . . S410	7,666	0.8	100.0	67.8	9.7	*	8.2	2.8		
Vertigo–dizziness . . . . . S225	7,443	0.8	100.0	54.2	8.5	12.7	6.7	17.9		
Shortness of breath . . . . . S415	7,443	0.8	100.0	37.1	*	21.6	5.5	35.4		
Eye examination . . . . . X230	7,145	0.7	100.0	*	93.9	*	4.4	*		
All other reasons . . . . .	470,848	48.1	100.0	40.1	17.8	20.6	8.5	13.0		
	Standard error in thousands			Standard error of percent						
All visits . . . . .	31,235	...	...	1.1	0.7	0.8	0.6	0.4		
General medical examination . . . . . X100	4,622	0.4	...	2.2	0.4	1.9	1.1	0.0		
Progress visit, not otherwise specified . . . . . T800	2,722	0.2	...	3.4	2.1	3.4	1.8	0.1		
Cough . . . . . S440	1,343	0.1	...	1.8	0.2	1.4	1.0	0.7		
Postoperative visit . . . . . T205	1,754	0.2	...	1.5	2.2	1.2	1.0	0.1		
Prenatal examination, routine . . . . . X205	2,013	0.2	...	1.4	...	...	1.4	...		
Symptoms referable to throat . . . . . S455	1,385	0.1	...	2.0	0.7	1.5	1.1	0.8		
Stomach pain, cramps and spasms . . . . . S545	1,044	0.1	...	2.3	0.7	2.6	0.8	1.9		
Fever . . . . . S010	880	0.1	...	2.3	...	...	1.0	1.8		
Back symptoms . . . . . S905	900	0.1	...	2.8	2.6	1.4	1.1	1.0		
Skin rash . . . . . S860	916	0.1	...	2.7	...	2.4	1.0	0.8		
Earache, or ear infection . . . . . S355	916	0.1	...	2.4	1.4	...	1.1	1.0		
Well baby examination . . . . . X105	1,252	0.1	...	1.8	...	...	1.3	...		
Knee symptoms . . . . . S925	1,007	0.1	...	2.7	3.3	2.6	0.7	0.7		
Chest pain and related symptoms (not referable to body system) . . . . . S050	697	0.1	...	2.4	...	2.1	0.6	2.1		
Vision dysfunctions . . . . . S305	1,185	0.1	...	...	1.9	1.3	0.8	0.2		
Headache, pain in head . . . . . S210	720	0.1	...	2.7	1.1	1.6	0.8	1.4		
Hypertension . . . . . D510	1,274	0.1	...	2.9	...	2.1	1.5	0.4		
Medication, other and unspecified kinds . . . . . T115	921	0.1	...	3.1	0.7	2.9	1.4	0.3		
Depression . . . . . S110	1,020	0.1	...	2.8	...	3.2	1.7	0.4		
Nasal congestion . . . . . S400	929	0.1	...	4.3	1.5	4.1	1.0	0.7		

See footnotes at end of table.



**Table 8. Annual number and percent distribution of ambulatory care visits by the 35 principal reasons for visit most frequently mentioned by patients, with percent distribution by setting type: United States, 1999–2000—Con.**

Principal reason for visit <sup>1</sup> and RVC code	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Standard error in thousands	Standard error of percent
Shoulder symptoms . . . . .	S940	654	0.1	...	3.2	3.3	2.4	1.0	1.0	
Diabetes mellitus . . . . .	D205	1,100	0.1	...	6.0	2.3	7.4	1.6	...	
Low back symptoms . . . . .	S910	829	0.1	...	3.8	2.9	5.8	1.0	1.5	
Head cold, upper respiratory infection (coryza) . . . . .	S445	801	0.1	...	2.7	0.9	...	1.2	0.9	
For other and unspecified test results . . . . .	R700	995	0.1	...	5.2	2.9	2.7	2.0	...	
Leg symptoms . . . . .	S920	573	0.1	...	3.2	3.4	1.9	1.1	1.2	
Gynecological examination . . . . .	X225	990	0.1	...	3.0	...	...	1.2	...	
Counseling, not otherwise specified . . . . .	T605	558	0.1	...	3.5	3.3	3.0	1.5	0.4	
Blood pressure test . . . . .	X320	836	0.1	...	3.7	...	3.2	1.6	...	
Anxiety and nervousness . . . . .	S100	609	0.1	...	4.0	...	4.2	0.9	0.6	
Neck symptoms . . . . .	S900	679	0.1	...	3.7	3.8	4.2	0.8	1.6	
Sinus problems . . . . .	S410	755	0.1	...	3.7	1.8	...	1.3	0.6	
Vertigo–dizziness . . . . .	S225	495	0.0	...	2.9	1.5	1.7	0.8	1.3	
Shortness of breath . . . . .	S415	555	0.1	...	3.9	...	3.2	0.8	2.7	
Eye examination . . . . .	X230	1,189	0.1	...	...	1.7	...	1.3	...	
All other reasons . . . . .		14,553	0.5	...	1.1	0.7	1.0	0.6	0.4	

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

<sup>1</sup>Based on *A Reason for Visit Classification (RVC)* (16).

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 9. Annual number and percent distribution of ambulatory care visits by diagnosis group, according to setting type: United States, 1999–2000**

Diagnosis group <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Number of visits in thousands						Percent distribution					
All visits . . . . .	979,485	463,692	159,740	166,706	83,956	105,391	100.0	100.0	100.0	100.0	100.0	100.0
Infectious and parasitic diseases . . . . .	29,590	17,754	976	4,933	2,882	3,045	3.0	3.8	0.6	3.0	3.4	2.9
Streptococcal sore throat . . . . .	2,425	1,725	*	*	293	301	0.2	0.4	*	*	0.3	0.3
HIV infection . . . . .	951	*458	*	*	324	*	*0.1	*0.1	*	*	0.4	*
Viral warts . . . . .	4,443	2,061	*	1,981	257	*	0.5	0.4	*	1.2	0.3	*
Unspecified viral and chlamydial infections . . . . .	6,640	4,708	*	*	464	1,281	0.7	1.0	*	*	0.6	1.2
Dermatophytosis . . . . .	3,149	1,763	*	912	264	156	0.3	0.4	*	0.5	0.3	0.1
Candidiasis . . . . .	1,998	1,503	*	*	200	143	0.2	0.3	*	*	0.2	0.1
Other infectious and parasitic diseases . . . . .	9,983	5,536	637	1,623	1,080	1,107	1.0	1.2	0.4	1.0	1.3	1.1
Neoplasms . . . . .	31,262	5,065	7,653	14,981	3,250	312	3.2	1.1	4.8	9.0	3.9	0.3
Malignant neoplasm of colon and rectum . . . . .	1,347	*	224	*	177	*	0.1	*	0.1	*	0.2	*
Malignant neoplasm of skin . . . . .	3,532	*	*839	2,101	217	*	0.4	*	*0.5	1.3	0.3	*
Malignant neoplasm of breast . . . . .	5,686	*	749	*4,224	462	*	0.6	*	0.5	*2.5	0.6	*
Malignant neoplasm of prostate . . . . .	2,755	*	1,916	*	129	*	0.3	*	1.2	*	0.2	*
Malignant neoplasm of lymphatic and hematopoietic tissue . . . . .	2,087	*	*	*1,186	487	*	0.2	*	*	*0.7	0.6	*
Other malignant neoplasms . . . . .	5,870	*	1,522	2,486	982	136	0.6	*	1.0	1.5	1.2	0.1
Benign neoplasm of skin . . . . .	3,869	1,066	524	2,130	142	*	0.4	0.2	0.3	1.3	0.2	*
Other benign neoplasm . . . . .	4,306	1,576	1,102	1,120	452	55	0.4	0.3	0.7	0.7	0.5	0.1
Neoplasm of uncertain behavior and unspecified nature . . . . .	1,809	*	680	624	202	*	0.2	*	0.4	0.4	0.2	*
Endocrine, nutritional and metabolic diseases and immunity disorders . . . . .	45,777	28,442	3,878	7,380	4,402	1,676	4.7	6.1	2.4	4.4	5.2	1.6
Acquired hypothyroidism . . . . .	2,811	1,654	*	*	298	*	0.3	0.4	*	*	0.4	*
Other disorders of the thyroid gland . . . . .	2,435	1,124	268	*831	197	*	0.2	0.2	0.2	*0.5	0.2	*
Diabetes mellitus . . . . .	24,695	14,858	3,044	3,704	2,592	497	2.5	3.2	1.9	2.2	3.1	0.5
Disorders of lipid metabolism . . . . .	7,875	6,582	*	675	491	*	0.8	1.4	*	0.4	0.6	*
Obesity . . . . .	3,144	2,301	*	*	300	*	0.3	0.5	*	*	0.4	*
Other endocrine, nutritional and metabolic diseases and immunity disorders . . . . .	4,816	1,922	358	*890	523	1,124	0.5	0.4	0.2	*0.5	0.6	1.1
Diseases of the blood and blood-forming organs . . . . .	5,105	2,759	*	1,057	632	461	0.5	0.6	*	0.6	0.8	0.4
Anemias . . . . .	3,580	2,217	*	*	370	322	0.4	0.5	*	*	0.4	0.3
Other diseases of the blood and blood-forming organs . . . . .	1,524	*	*	*	262	*	0.2	*	*	*	0.3	*
Mental disorders . . . . .	48,739	13,878	480	25,641	5,758	2,982	5.0	3.0	0.3	15.4	6.9	2.8
Schizophrenic disorders . . . . .	2,735	*	–	1,934	607	145	0.3	*	–	1.2	0.7	0.1
Major depressive disorder . . . . .	7,228	*	–	6,257	769	105	0.7	*	–	3.8	0.9	0.1
Other psychoses . . . . .	5,168	*	–	3,301	602	446	0.5	*	–	2.0	0.7	0.4
Anxiety states . . . . .	5,272	1,865	*	2,500	386	492	0.5	0.4	*	1.5	0.5	0.5
Neurotic depression . . . . .	3,720	1,107	*	2,200	319	88	0.4	0.2	*	1.3	0.4	0.1
Alcohol dependence syndrome . . . . .	564	*	–	*	*251	147	0.1	*	–	*	*0.3	0.1
Drug dependence and nondependent use of drugs . . . . .	2,162	*	*	215	485	703	0.2	*	*	0.1	0.6	0.7
Acute reaction to stress and adjustment reaction . . . . .	3,790	1,009	*	2,257	415	94	0.4	0.2	*	1.4	0.5	0.1
Depressive disorder, not elsewhere classified . . . . .	7,491	3,798	*	2,520	736	372	0.8	0.8	*	1.5	0.9	0.4
Attention deficit disorder . . . . .	4,949	2,463	–	1,921	554	*	0.5	0.5	–	1.2	0.7	*
Other mental disorders . . . . .	5,660	1,844	356	2,448	634	377	0.6	0.4	0.2	1.5	0.8	0.4
Diseases of the nervous system and sense organs . . . . .	83,906	26,329	40,652	5,376	5,725	5,826	8.6	5.7	25.4	3.2	6.8	5.5
Migraine . . . . .	4,142	1,995	*	787	253	947	0.4	0.4	*	0.5	0.3	0.9
Other disorders of the central nervous system . . . . .	4,018	974	*	2,029	526	220	0.4	0.2	*	1.2	0.6	0.2
Carpal tunnel syndrome . . . . .	2,604	*	1,363	377	161	*	0.3	*	0.9	0.2	0.2	*
Other disorders of the nervous system . . . . .	3,009	1,182	667	808	223	130	0.3	0.3	0.4	0.5	0.3	0.1
Retinal detachment and other retinal disorders . . . . .	3,600	*	3,249	*	97	*	0.4	*	2.0	*	0.1	*

See footnotes at end of table.

**Table 9. Annual number and percent distribution of ambulatory care visits by diagnosis group, according to setting type: United States, 1999–2000—Con.**

Diagnosis group <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Number of visits in thousands						Percent distribution					
Glaucoma . . . . .	7,522	*	7,208	*	237	*	0.8	*	4.5	*	0.3	*
Cataract . . . . .	9,478	*	8,889	101	*211	*	1.0	*	5.6	0.1	*0.3	*
Disorders of refraction and accommodation . . . . .	4,707	*	4,433	—	138	*	0.5	*	2.8	—	0.2	*
Conjunctivitis . . . . .	4,359	2,077	1,073	*	468	594	0.4	0.4	0.7	*	0.6	0.6
Disorders of eyelids . . . . .	2,143	*	1,388	*	162	89	0.2	*	0.9	*	0.2	0.1
Other disorders of the eye and adnexa . . . . .	8,240	*	6,425	*209	489	380	0.8	*	4.0	*0.1	0.6	0.4
Disorders of external ear . . . . .	5,090	2,573	1,594	*	360	408	0.5	0.6	1.0	*	0.4	0.4
Otitis media and Eustachian tube disorders . . . . .	19,965	13,184	1,891	*	1,968	2,580	2.0	2.8	1.2	*	2.3	2.4
Other diseases of the ear and mastoid process . . . . .	5,029	1,903	2,042	*	432	404	0.5	0.4	1.3	*	0.5	0.4
Diseases of the circulatory system . . . . .	73,475	44,141	2,619	16,144	6,175	4,397	7.5	9.5	1.6	9.7	7.4	4.2
Angina pectoris . . . . .	1,767	*	*	794	87	268	0.2	*	*	0.5	0.1	0.3
Coronary atherosclerosis . . . . .	8,284	3,798	*	3,708	555	*	0.8	0.8	*	2.2	0.7	*
Other ischemic heart disease . . . . .	2,132	*	*	824	107	648	0.2	*	*	0.5	0.1	0.6
Cardiac dysrhythmias . . . . .	5,234	2,314	*	1,672	432	782	0.5	0.5	*	1.0	0.5	0.7
Congestive heart failure . . . . .	3,374	1,735	—	753	264	622	0.3	0.4	—	0.5	0.3	0.6
Other heart disease . . . . .	4,362	1,979	*	1,751	372	160	0.4	0.4	*	1.1	0.4	0.2
Essential hypertension . . . . .	37,451	28,591	489	4,449	3,322	600	3.8	6.2	0.3	2.7	4.0	0.6
Cerebrovascular disease . . . . .	2,993	1,281	*	552	125	763	0.3	0.3	*	0.3	0.1	0.7
Diseases of the arteries, arterioles, and capillaries . . . . .	2,107	*	432	738	224	87	0.2	*	0.3	0.4	0.3	0.1
Hemorrhoids . . . . .	1,868	943	354	*	173	132	0.2	0.2	0.2	*	0.2	0.1
Other diseases of the circulatory system . . . . .	3,903	1,771	693	637	514	288	0.4	0.4	0.4	0.4	0.6	0.3
Diseases of the respiratory system . . . . .	117,247	73,344	6,075	15,232	9,751	12,844	12.0	15.8	3.8	9.1	11.6	12.2
Acute sinusitis . . . . .	3,654	2,788	213	*	309	184	0.4	0.6	0.1	*	0.4	0.2
Acute pharyngitis . . . . .	11,294	7,746	196	*	1,178	1,584	1.2	1.7	0.1	*	1.4	1.5
Acute tonsillitis . . . . .	3,041	2,074	263	*	274	344	0.3	0.4	0.2	*	0.3	0.3
Acute bronchitis and bronchiolitis . . . . .	4,623	3,245	*	*	321	911	0.5	0.7	*	*	0.4	0.9
Other acute respiratory infections . . . . .	25,577	19,447	440	751	2,369	2,569	2.6	4.2	0.3	0.5	2.8	2.4
Chronic sinusitis . . . . .	13,195	9,179	1,088	951	1,285	693	1.3	2.0	0.7	0.6	1.5	0.7
Allergic rhinitis . . . . .	13,565	5,032	1,596	*6,233	610	94	1.4	1.1	*1.0	*3.7	0.7	0.1
Pneumonia . . . . .	4,188	2,268	*	*	345	1,371	0.4	0.5	*	*	0.4	1.3
Chronic and unspecified bronchitis . . . . .	10,559	7,321	*	501	832	1,791	1.1	1.6	*	0.3	1.0	1.7
Asthma . . . . .	12,504	5,906	*	*3,383	1,173	1,916	1.3	1.3	*	*2.0	1.4	1.8
Other chronic obstructive pulmonary disease and allied conditions . . . . .	3,916	2,624	*	*620	353	253	0.4	0.6	*	*0.4	0.4	0.2
Other diseases of the respiratory system . . . . .	11,131	5,714	1,935	*1,645	703	1,134	1.1	1.2	1.2	*1.0	0.8	1.1
Diseases of the digestive system . . . . .	35,569	14,556	5,883	5,904	3,106	6,121	3.6	3.1	3.7	3.5	3.7	5.8
Diseases of the teeth and supporting structures . . . . .	3,157	716	*1,178	*	201	919	0.3	0.2	*0.7	*	0.2	0.9
Gastritis and duodenitis . . . . .	2,907	1,740	*	*	216	578	0.3	0.4	*	*	0.3	0.5
Esophagitis . . . . .	709	*	*	*	*47	*	0.1	*	*	*	*0.1	*
Ulcer of stomach and small intestine . . . . .	876	*	*	*	77	108	0.1	*	*	*	*0.1	0.1
Hernia of abdominal cavity . . . . .	3,291	*	2,018	*	246	160	0.3	*	1.3	*	0.3	0.2
Noninfectious enteritis and colitis . . . . .	5,912	2,918	*	*965	531	1,428	0.6	0.6	*	*0.6	0.6	1.4
Diverticula of intestine . . . . .	1,232	*	*	*	103	142	0.1	*	*	*	0.1	0.1
Constipation . . . . .	1,439	*	*	*	218	403	0.1	*	*	*	0.3	0.4
Irritable colon . . . . .	1,336	*	*	*	105	*	0.1	*	*	*	0.1	*
Anal and rectal diseases . . . . .	1,577	*	377	*	159	227	0.2	*	0.2	*	0.2	0.2
Disorders of the gallbladder and biliary tract . . . . .	1,767	*	728	*	109	407	0.2	*	0.5	*	0.1	0.4
Gastrointestinal hemorrhage . . . . .	1,091	*	*	*	69	365	0.1	*	*	*	0.1	0.3
Other diseases of the digestive system . . . . .	10,276	4,751	1,168	2,032	1,025	1,299	1.0	1.0	0.7	1.2	1.2	1.2

See footnotes at end of table.

**Table 9. Annual number and percent distribution of ambulatory care visits by diagnosis group, according to setting type: United States, 1999–2000—Con.**

Diagnosis group <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Percent distribution					
							Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Number of visits in thousands						Percent distribution					
Diseases of the genitourinary system . . . . .	49,336	26,080	11,443	*3,184	3,948	4,681	5.0	5.6	7.2	*1.9	4.7	4.4
Calculus of kidney and ureter . . . . .	2,256	*	988	*	121	550	0.2	*	0.6	*	0.1	0.5
Cystitis and other disorders of the bladder . . . . .	2,596	1,005	1,105	*	148	179	0.3	0.2	0.7	*	0.2	0.2
Urinary tract infection, site not specified . . . . .	8,316	5,070	914	*	607	1,568	0.8	1.1	0.6	*	0.7	1.5
Other diseases of the urinary system . . . . .	5,143	1,242	1,764	*766	625	745	0.5	0.3	1.1	*0.5	0.7	0.7
Hyperplasia of prostate . . . . .	3,154	*	2,202	*	104	*	0.3	*	1.4	*	0.1	*
Other disorders of male genital organs . . . . .	3,774	1,083	2,108	*	231	299	0.4	0.2	1.3	*	0.3	0.3
Disorders of breast . . . . .	5,600	2,062	1,860	*	489	88	0.6	0.4	1.2	*	0.6	0.1
Inflammatory disorders of female pelvic organs . . . . .	2,805	1,968	*	*	306	396	0.3	0.4	*	*	0.4	0.4
Noninflammatory disorders of female genital organs . . . . .	2,922	2,197	*	*	317	319	0.3	0.5	*	*	0.4	0.3
Disorders of menstruation and abnormal bleeding . . . . .	3,250	2,717	*	*	270	203	0.3	0.6	*	*	0.3	0.2
Menopausal and postmenopausal disorders . . . . .	4,019	3,748	*	*	177	*	0.4	0.8	*	*	0.2	*
Other disorders of the female genital tract . . . . .	5,502	3,700	361	*563	554	324	0.6	0.8	0.2	*0.3	0.7	0.3
Complications of pregnancy, childbirth, and the puerperium . . . . .	6,426	3,901	*	*	1,032	1,206	0.7	0.8	*	*	1.2	1.1
Diseases of the skin and subcutaneous tissue . . . . .	50,159	16,789	3,829	23,186	3,429	2,926	5.1	3.6	2.4	13.9	4.1	2.8
Cellulitis and abscess . . . . .	4,635	2,307	399	*	450	1,137	0.5	0.5	0.3	*	0.5	1.1
Other infection of the skin and subcutaneous tissue . . . . .	1,980	1,039	295	*	187	245	0.2	0.2	0.2	*	0.2	0.2
Contact dermatitis and other eczema . . . . .	8,700	4,498	*	2,833	680	656	0.9	1.0	*	1.7	0.8	0.6
Psoriasis and similar disorders . . . . .	1,538	*	–	1,244	164	*	0.2	*	–	0.7	0.2	*
Other inflammatory conditions of skin and subcutaneous tissue . . . . .	6,009	1,749	*	3,582	456	197	0.6	0.4	*	2.1	0.5	0.2
Corns, callosities and other hypertrophic and atrophic skin conditions . . . . .	2,481	*	*746	1,062	131	*	0.3	*	*0.5	0.6	0.2	*
Actinic and seborrheic keratosis . . . . .	5,662	*	*	4,645	119	*	0.6	*	*	2.8	0.1	*
Acne . . . . .	6,728	1,257	*	5,206	232	*	0.7	0.3	*	3.1	0.3	*
Sebaceous cyst . . . . .	3,134	1,109	843	956	150	75	0.3	0.2	0.5	0.6	0.2	0.1
Urticaria . . . . .	1,700	*	*	*	131	357	0.2	*	*	*	0.2	0.3
Other disorders of the skin and subcutaneous tissue . . . . .	7,592	2,980	1,185	2,462	729	236	0.8	0.6	0.7	1.5	0.9	0.2
Diseases of the musculoskeletal system and connective tissue . . . . .	71,645	27,889	19,897	12,707	5,461	5,691	7.3	6.0	12.5	7.6	6.5	5.4
Rheumatoid arthritis . . . . .	3,223	*	*	*2,261	199	*	0.3	*	*	*1.4	0.2	*
Osteoarthritis and allied disorders . . . . .	7,485	2,944	2,861	1,100	500	81	0.8	0.6	1.8	0.7	0.6	0.1
Other arthropathies and related disorders . . . . .	5,855	2,334	978	1,929	443	172	0.6	0.5	0.6	1.2	0.5	0.2
Derangements and other and unspecified joint disorders . . . . .	9,814	3,636	3,487	933	744	1,013	1.0	0.8	2.2	0.6	0.9	1.0
Intervertebral disc disorders . . . . .	4,433	962	2,026	*1,157	191	97	0.5	0.2	1.3	*0.7	0.2	0.1
Lumbago . . . . .	4,452	1,967	351	*839	514	781	0.5	0.4	0.2	*0.5	0.6	0.7
Other dorsopathies . . . . .	11,756	4,774	2,743	1,681	978	1,581	1.2	1.0	1.7	1.0	1.2	1.5
Peripheral enthesopathies and allied disorders . . . . .	6,749	2,594	2,988	485	414	268	0.7	0.6	1.9	0.3	0.5	0.3
Synovitis and tenosynovitis . . . . .	1,953	*	1,069	*	100	82	0.2	*	0.7	*	0.1	0.1
Myalgia and myositis, unspecified . . . . .	3,053	1,399	*	*843	233	468	0.3	0.3	*	*0.5	0.3	0.4
Other rheumatism, excluding back . . . . .	7,819	3,670	1,812	781	622	934	0.8	0.8	1.1	0.5	0.7	0.9
Disorders of bone and cartilage . . . . .	3,599	1,777	886	*	308	160	0.4	0.4	0.6	*	0.4	0.2
Other diseases of the musculoskeletal system and connective tissue . . . . .	1,454	*668	464	*	216	*	0.1	0.1	0.3	*	0.3	*
Congenital anomalies . . . . .	3,251	1,030	956	462	773	*	0.3	0.2	0.6	0.3	0.9	*
Certain conditions originating in the perinatal period . . . . .	555	*	*	*	86	*	0.1	*	*	*	0.1	*

See footnotes at end of table.

**Table 9. Annual number and percent distribution of ambulatory care visits by diagnosis group, according to setting type: United States, 1999–2000—Con.**

Diagnosis group <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Number of visits in thousands						Percent distribution					
Symptoms, signs, and ill-defined conditions . . . . .	68,723	30,655	5,825	9,932	5,262	17,049	7.0	6.6	3.6	6.0	6.3	16.2
Syncope and collapse . . . . .	1,568	*	–	246	67	779	0.2	*	–	0.1	0.1	0.7
Convulsions . . . . .	2,191	*	–	559	325	691	0.2	*	–	0.3	0.4	0.7
Dizziness and giddiness . . . . .	2,460	1,150	322	269	189	530	0.3	0.2	0.2	0.2	0.2	0.5
Pyrexia of unknown origin . . . . .	2,222	900	–	*	139	1,152	0.2	0.2	–	*	0.2	1.1
Symptoms involving skin and other integumentary tissue . . . . .	5,659	3,561	449	640	409	601	0.6	0.8	0.3	0.4	0.5	0.6
Headache . . . . .	3,949	1,483	*	663	299	1,217	0.4	0.3	*	0.4	0.4	1.2
Epistaxis . . . . .	1,167	*	355	–	*	422	0.1	*	0.2	–	*	0.4
Abnormal heart sounds . . . . .	1,715	*	–	296	157	361	0.2	*	–	0.2	0.2	0.3
Dyspnea and respiratory abnormalities . . . . .	2,252	892	*	369	149	784	0.2	0.2	*	0.2	0.2	0.7
Cough . . . . .	2,030	1,270	*	*	174	214	0.2	0.3	*	*	0.2	0.2
Chest pain . . . . .	6,955	2,084	*	880	432	3,517	0.7	0.4	*	0.5	0.5	3.3
Symptoms involving urinary system . . . . .	3,297	882	1,375	*	210	587	0.3	0.2	0.9	*	0.2	0.6
Abdominal pain . . . . .	9,159	3,349	434	*1,150	706	3,521	0.9	0.7	0.3	*0.7	0.8	3.3
Other symptoms, signs, and ill-defined conditions . . . . .	24,098	12,747	2,428	4,291	1,960	2,672	2.5	2.7	1.5	2.6	2.3	2.5
Injury and poisoning . . . . .	80,291	21,083	18,607	4,974	5,303	30,325	8.2	4.5	11.6	3.0	6.3	28.8
Fracture of radius and ulna . . . . .	2,268	*	1,454	–	183	563	0.2	*	0.9	–	0.2	0.5
Fracture of hand and fingers . . . . .	2,938	*	1,512	–	268	858	0.3	*	0.9	–	0.3	0.8
Fracture of lower limb . . . . .	4,935	*	2,858	*	426	1,255	0.5	*	1.8	*	0.5	1.2
Other fractures . . . . .	3,740	*	1,743	*	210	1,069	0.4	*	1.1	*	0.3	1.0
Sprains and strains of wrist and hand . . . . .	1,837	*	*	*	125	539	0.2	*	*	*	0.1	0.5
Sprains and strains of knee and leg . . . . .	2,540	805	847	*	176	594	0.3	0.2	0.5	*	0.2	0.6
Sprains and strains of ankle . . . . .	3,167	*	652	*	182	1,392	0.3	*	0.4	*	0.2	1.3
Sprains and strains of neck . . . . .	3,597	1,232	*	*550	146	1,294	0.4	0.3	*	*0.3	0.2	1.2
Other sprains and strains of back . . . . .	6,354	2,883	860	*963	328	1,320	0.6	0.6	0.5	*0.6	0.4	1.3
Other sprains and strains . . . . .	5,756	2,362	1,438	*	349	1,312	0.6	0.5	0.9	*	0.4	1.2
Intracranial injury, excluding those with skull fracture . . . . .	661	*	*	*	*	333	0.1	*	*	*	*	0.3
Open wound of head . . . . .	3,361	*	*	*	178	2,595	0.3	*	*	*	0.2	2.5
Open wound of hand and fingers . . . . .	3,834	867	*	*	232	2,139	0.4	0.2	*	*	0.3	2.0
Other open wound . . . . .	4,837	1,057	613	*	445	2,598	0.5	0.2	0.4	*	0.5	2.5
Superficial injury of cornea . . . . .	937	*	*	–	76	388	0.1	*	*	–	0.1	0.4
Other superficial injury . . . . .	3,015	1,161	*	*	202	1,304	0.3	0.3	*	*	0.2	1.2
Contusions with intact skin surfaces . . . . .	8,914	2,092	1,113	*	517	4,756	0.9	0.5	0.7	*	0.6	4.5
Other injuries . . . . .	9,683	1,993	2,785	*622	702	3,581	1.0	0.4	1.7	*0.4	0.8	3.4
Poisonings . . . . .	1,681	*	*	*	65	973	0.2	*	*	*	0.1	0.9
Other and unspecified effects of external causes . . . . .	4,188	2,108	*	*	314	1,041	0.4	0.5	*	*	0.4	1.0
Complications of surgical and medical care, not elsewhere classified . . . . .	2,048	*	889	*	138	423	0.2	*	0.6	*	0.2	0.4
Supplementary classification of factors influencing health status and contact with health services . . . . .	154,519	97,979	27,951	10,651	14,850	3,087	15.8	21.1	17.5	6.4	17.7	2.9
Potential health hazards related to communicable diseases . . . . .	3,045	2,162	*	*	536	94	0.3	0.5	*	*	0.6	0.1
Potential health hazards relating to personal and family history . . . . .	10,300	4,313	2,917	1,841	956	273	1.1	0.9	1.8	1.1	1.1	0.3
Routine infant or child health check . . . . .	31,175	27,479	*	*754	2,860	*	3.2	5.9	*	*0.5	3.4	*
Normal pregnancy . . . . .	22,098	19,287	–	*	2,520	186	2.3	4.2	–	*	3.0	0.2
Postpartum care and examination . . . . .	2,178	1,958	–	–	220	*	0.2	0.4	*	–	0.3	*
Encounter for contraceptive management . . . . .	2,066	1,159	439	*	425	*	0.2	0.3	0.3	*	0.5	*
Other encounter related to reproduction . . . . .	1,208	785	*	*	244	*	0.1	0.2	–	*	0.3	*
Lens replaced by pseudophakos . . . . .	1,997	–	1,979	–	*	–	0.2	–	–	–	*	–

See footnotes at end of table.

**Table 9. Annual number and percent distribution of ambulatory care visits by diagnosis group, according to setting type: United States, 1999–2000—Con.**

Diagnosis group <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Number of visits in thousands						Percent distribution					
Artificial opening status and other postsurgical states . . . . .	7,776	679	5,910	*506	620	61	0.8	0.1	3.7	*0.3	0.7	0.1
Attention to surgical dressing and sutures . . . . .	1,922	747	*	*	196	557	0.2	0.2	*	*	0.2	0.5
Follow-up examination . . . . .	14,846	4,498	6,638	*2,354	1,153	202	1.5	1.0	4.2	*1.4	1.4	0.2
General medical examination . . . . .	17,583	14,121	404	*1,345	1,531	183	1.8	3.0	0.3	*0.8	1.8	0.2
Observation and evaluation for suspected conditions not found . . . . .	4,932	2,454	912	514	543	508	0.5	0.5	0.6	0.3	0.6	0.5
Gynecological examination . . . . .	9,155	8,458	*	*	515	*	0.9	1.8	*	*	0.6	*
Other factors influencing health status and contact with health services . . . . .	24,240	9,877	8,190	2,701	2,515	956	2.5	2.1	5.1	1.6	3.0	0.9
Blank and illegible . . . . .	23,910	11,622	2,778	4,702	2,133	2,675	2.4	2.5	1.7	2.8	2.5	2.5

\* Figure does not meet standard of reliability or precision.

– Quantity zero.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

Table 10. Annual number and percent distribution of ambulatory care visits by setting type, according to selected primary diagnosis groups: United States, 1999–2000

Primary diagnosis group <sup>1</sup> and ICD–9–CM codes	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Percent distribution	
All visits . . . . .	979,485	100.0	100.0	47.3	16.3	17.0	8.6	10.8		
Essential hypertension . . . . . 401	37,451	3.8	100.0	76.3	1.3	11.9	8.9	1.6		
Acute URI, excluding pharyngitis . . . . . 460–461, 463–466	36,895	3.8	100.0	74.7	2.5	3.1	8.9	10.9		
Routine infant or child health check . . . . . V20.2	31,175	3.2	100.0	88.1	*	*2.4	9.2	*		
Arthropathies and related disorders . . . . . 710–719	26,377	2.7	100.0	36.2	28.2	23.6	7.1	4.9		
Diabetes mellitus . . . . . 250	24,695	2.5	100.0	60.2	12.3	15.0	10.5	2.0		
Normal pregnancy . . . . . V22	22,098	2.3	100.0	87.3	*	*	11.4	0.8		
Malignant neoplasms . . . . . 140–208, 230–234	21,278	2.2	100.0	10.1	25.1	52.2	11.5	1.1		
Spinal disorders . . . . . 720–724	20,642	2.1	100.0	37.3	24.8	17.8	8.2	11.9		
Otitis media and Eustachian tube disorders . . . . . 381–382	19,965	2.0	100.0	66.0	9.5	*	9.9	12.9		
Rheumatisms, excluding back . . . . . 725–729	19,573	2.0	100.0	41.9	30.5	11.6	7.0	9.0		
General medical examination . . . . . V70	17,583	1.8	100.0	80.3	2.3	*7.6	8.7	1.0		
Follow-up examination . . . . . V67	14,846	1.5	100.0	30.3	44.7	15.9	7.8	1.4		
Allergic rhinitis . . . . . 477	13,565	1.4	100.0	37.1	*11.8	45.9	4.5	0.7		
Chronic sinusitis . . . . . 473	13,195	1.3	100.0	69.6	8.2	7.2	9.7	5.3		
Heart disease, excluding ischemic . . . . . 391–392, 393–398, 402, 404, 415–416, 420–429	12,970	1.3	100.0	46.5	*	32.2	8.2	12.1		
Asthma . . . . . 493	12,504	1.3	100.0	47.2	*	27.1	9.4	15.3		
Ischemic heart disease . . . . . 410–414.9	12,183	1.2	100.0	40.2	*	43.7	6.1	7.9		
Acute pharyngitis . . . . . 462	11,294	1.2	100.0	68.6	1.7	*	10.4	14.0		
Chronic and unspecified bronchitis . . . . . 490–491	10,559	1.1	100.0	69.3	*	4.7	7.9	17.0		
Potential health hazards relating to personal and family history . . . . . V10–V19	10,300	1.1	100.0	41.9	28.3	17.9	9.3	2.6		
Sprains and strains, excluding ankles and back . . . . . 840–844, 845.4, 848	10,133	1.0	100.0	39.1	25.0	*5.4	6.4	24.1		
Benign neoplasms . . . . . 210–229, 235–239	9,984	1.0	100.0	29.3	23.1	38.8	8.0	0.9		
Sprains and strains of neck and back . . . . . 846, 847	9,951	1.0	100.0	41.3	12.4	15.2	4.8	26.3		
Cataract . . . . . 366	9,478	1.0	100.0	*	93.8	*	*2.2	*		
Abdominal pain . . . . . 789	9,159	0.9	100.0	36.6	4.7	12.6	7.7	38.4		
Gynecological examination . . . . . V72.3	9,155	0.9	100.0	92.4	*	*	5.6	*		
Fractures, excluding lower limb . . . . . 800–819	8,946	0.9	100.0	10.4	52.6	*	7.4	27.8		
Contusions with intact skin surface . . . . . 920–924	8,914	0.9	100.0	23.5	12.5	*	5.8	53.4		
Contact dermatitis and other eczema . . . . . 692	8,700	0.9	100.0	51.7	*	32.6	7.8	7.5		
Open wound, excluding head . . . . . 874–897	8,670	0.9	100.0	22.2	10.3	*	7.8	54.6		
Urinary tract infection, site not specified . . . . . 599.0	8,316	0.8	100.0	61.0	11.0	*	7.3	18.9		
Psychoses, excluding major depressive disorder . . . . . 290–295, 296.0–296.1, 296.4–299	7,902	0.8	100.0	11.0	*	66.2	15.3	7.5		
Disorder of lipid metabolism . . . . . 272	7,875	0.8	100.0	83.6	*	8.6	6.2	*		
Artificial opening and other postsurgical status . . . . . V44–V45	7,776	0.8	100.0	8.7	76.0	*6.5	8.0	*		
Glaucoma . . . . . 365	7,522	0.8	100.0	*	95.8	*	3.1	*		
All other . . . . .	457,855	46.7	100.0	41.6	17.4	19.3	8.8	12.9		

See footnotes at end of table.



**Table 10. Annual number and percent distribution of ambulatory care visits by setting type, according to selected primary diagnosis groups: United States, 1999–2000—Con.**

Primary diagnosis group <sup>1</sup> and ICD–9–CM codes	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Standard error in thousands	Standard error of percent						
All visits . . . . .	31,235	...	...	1.1	0.7	0.8	0.6	0.4
Essential hypertension . . . . . 401	2,825	0.2	...	2.2	0.4	1.8	1.0	0.2
Acute URI, excluding pharyngitis . . . . . 460–461, 463–466	2,268	0.2	...	1.7	0.4	0.8	1.0	0.7
Routine infant or child health check . . . . . V20.2	2,332	0.2	...	1.6	...	1.3	1.1	...
Arthropathies and related disorders . . . . . 710–719	2,335	0.2	...	3.7	2.8	5.5	1.0	0.5
Diabetes mellitus . . . . . 250	1,886	0.2	...	3.5	1.8	3.7	1.2	0.3
Normal pregnancy . . . . . V22	1,926	0.2	...	1.4	...	...	1.3	0.1
Malignant neoplasms . . . . . 140–208, 230–234	2,466	0.3	...	1.7	3.3	5.6	2.1	0.2
Spinal disorders . . . . . 720–724	1,806	0.2	...	3.6	4.7	4.1	1.2	1.1
Otitis media and Eustachian tube disorders . . . . . 381–382	1,330	0.1	...	2.3	1.3	...	1.1	1.0
Rheumatisms, excluding back . . . . . 725–729	1,117	0.1	...	2.6	2.3	2.4	0.8	0.6
General medical examination . . . . . V70	1,604	0.1	...	2.5	0.6	2.4	1.3	0.2
Follow-up examination . . . . . V67	1,534	0.2	...	5.0	5.1	4.6	1.2	0.4
Allergic rhinitis . . . . . 477	2,776	0.3	...	8.7	3.8	10.8	1.2	0.2
Chronic sinusitis . . . . . 473	925	0.1	...	2.6	1.3	1.9	1.4	0.6
Heart disease, excluding ischemic . . . . . 391–392, 393–398, 402, 404, 415–416, 420–429	836	0.1	...	3.0	...	2.7	1.6	0.9
Asthma . . . . . 493	1,292	0.1	...	4.6	...	6.5	1.3	1.6
Ischemic heart disease . . . . . 410–414.9	914	0.1	...	3.8	...	4.0	1.0	0.8
Acute pharyngitis . . . . . 462	1,010	0.1	...	3.3	0.4	...	1.4	1.6
Chronic and unspecified bronchitis . . . . . 490–491	769	0.1	...	2.5	...	1.3	1.2	1.5
Potential health hazards relating to personal and family history . . . . . V10–V19	753	0.1	...	3.5	3.1	2.9	1.2	0.4
Sprains and strains, excluding ankles and back . . . . . 840–844, 845.4, 848	626	0.1	...	2.8	2.5	1.7	0.9	1.6
Benign neoplasms . . . . . 210–229, 235–239	715	0.1	...	2.8	2.6	3.1	1.0	0.2
Sprains and strains of neck and back . . . . . 846, 847	801	0.1	...	4.2	2.4	3.9	0.9	2.3
Cataract . . . . . 366	1,083	0.1	...	...	1.7	...	0.8	...
Abdominal pain . . . . . 789	693	0.1	...	3.2	0.8	4.8	1.1	3.2
Gynecological examination . . . . . V72.3	1,062	0.1	...	2.3	...	...	1.0	...
Fractures, excluding lower limb . . . . . 810–819	638	0.1	...	1.9	3.4	...	1.2	2.2
Contusions with intact skin surface . . . . . 920–924	679	0.1	...	5.2	2.0	...	1.0	4.2
Contact dermatitis and other eczema . . . . . 692	709	0.1	...	3.9	...	3.7	1.0	0.8
Open wound, excluding head . . . . . 874–897	490	0.0	...	2.9	1.9	...	1.0	2.8
Urinary tract infection, site not specified . . . . . 599.0	570	0.0	...	2.5	1.3	...	1.1	1.4
Psychoses, excluding major depressive disorder . . . . . 290–295, 296.0–296.1, 296.4–299	730	0.1	...	2.6	...	3.8	2.6	0.9
Disorder of lipid metabolism . . . . . 272	736	0.1	...	2.4	...	1.7	1.2	...
Artificial opening and other postsurgical status . . . . . V44–V45	795	0.1	...	2.2	3.2	2.1	1.3	...
Glaucoma . . . . . 365	866	0.1	...	...	1.1	...	0.9	...
All other . . . . .	14,395	0.5	...	1.1	0.7	0.9	0.6	0.4

... Category not applicable.

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>These groups are based on the principal diagnosis coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM) (17). A complete list of the ICD–9–CM codes used to formulate the groupings in this table is shown in Appendix I. The intent of this table is to provide a more detailed breakdown of the diagnostic content of ambulatory care visits than would be possible using only the major disease categories or chapter heading used in the ICD–9–CM.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 11. Annual number and percent distribution of injury-related ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits in thousands						
All injury-related visits . . . . .	136,815	37,850	32,948	17,571	9,417	39,029
Patient age						
Under 15 years . . . . .	21,630	6,778	3,661	852	1,742	8,597
15–24 years . . . . .	18,056	3,960	4,056	1,226	1,288	7,526
25–44 years . . . . .	43,527	11,507	10,362	5,713	3,109	12,835
45–64 years . . . . .	32,084	9,540	8,998	5,425	2,216	5,904
65–74 years . . . . .	9,929	3,016	2,715	1,997	501	1,700
75 years and over . . . . .	11,588	3,049	3,154	2,357	561	2,467
Patient sex						
Female . . . . .	66,724	19,969	15,717	8,615	4,679	17,743
Male . . . . .	70,091	17,881	17,230	8,956	4,738	21,286
Patient race						
White . . . . .	115,970	32,464	29,357	15,529	7,597	31,023
Black . . . . .	17,085	4,082	2,855	1,753	1,524	6,872
Other . . . . .	3,760	1,304	735	289	296	1,135
Primary expected source of payment						
Private insurance . . . . .	64,100	20,779	16,656	6,253	3,873	16,540
Medicare . . . . .	18,639	5,274	4,683	3,718	1,035	3,928
Medicaid . . . . .	11,342	3,006	1,263	536	1,470	5,067
Uninsured . . . . .	12,942	1,633	2,051	957	1,165	7,136
Other . . . . .	29,791	7,158	8,295	6,107	1,874	6,357
Geographic region of provider						
Northeast . . . . .	28,724	6,558	8,858	3,822	1,860	7,625
Midwest . . . . .	32,560	11,050	6,074	2,414	3,188	9,833
South . . . . .	43,973	11,589	9,095	6,327	2,666	14,296
West . . . . .	31,558	8,653	8,920	5,008	1,703	7,276
MSA <sup>1</sup> status of provider						
MSA . . . . .	110,269	29,514	27,487	16,360	7,482	29,425
Non-MSA . . . . .	26,546	8,337	5,460	1,211	1,935	9,604
Percent distribution						
All injury-related visits . . . . .	100.0	27.7	24.1	12.8	6.9	28.5
Patient age						
Under 15 years . . . . .	100.0	31.3	16.9	3.9	8.1	39.7
15–24 years . . . . .	100.0	21.9	22.5	6.8	7.1	41.7
25–44 years . . . . .	100.0	26.4	23.8	13.1	7.1	29.5
45–64 years . . . . .	100.0	29.7	28.0	16.9	6.9	18.4
65–74 years . . . . .	100.0	30.4	27.3	20.1	5.0	17.1
75 years and over . . . . .	100.0	26.3	27.2	20.3	4.8	21.3
Patient sex						
Female . . . . .	100.0	29.9	23.6	12.9	7.0	26.6
Male . . . . .	100.0	25.5	24.6	12.8	6.8	30.4
Patient race						
White . . . . .	100.0	28.0	25.3	13.4	6.6	26.8
Black . . . . .	100.0	23.9	16.7	10.3	8.9	40.2
Other . . . . .	100.0	34.7	19.6	7.7	7.9	30.2
Primary expected source of payment						
Private insurance . . . . .	100.0	32.4	26.0	9.8	6.0	25.8
Medicare . . . . .	100.0	28.3	25.1	19.9	5.6	21.1
Medicaid . . . . .	100.0	26.5	11.1	4.7	13.0	44.7
Uninsured . . . . .	100.0	12.6	15.8	7.4	9.0	55.1
Other . . . . .	100.0	24.0	27.8	20.5	6.3	21.3

See footnotes at end of table.

**Table 11. Annual number and percent distribution of injury-related ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Geographic region of provider			Percent distribution			
Northeast . . . . .	100.0	22.8	30.8	13.3	6.5	26.5
Midwest . . . . .	100.0	33.9	18.7	7.4	9.8	30.2
South . . . . .	100.0	26.4	20.7	14.4	6.1	32.5
West . . . . .	100.0	27.4	28.3	15.9	5.4	23.1
MSA <sup>1</sup> status of provider						
MSA . . . . .	100.0	26.8	24.9	14.8	6.8	26.7
Non-MSA . . . . .	100.0	31.4	20.6	4.6	7.3	36.2

<sup>1</sup>MSA is metropolitan statistical area.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 12. Annual rate of injury-related ambulatory care visits by setting type and selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits per 1,000 persons <sup>1–3</sup>						
All injury-related visits	501.2	138.6	120.7	64.4	34.5	143.0
Patient age						
Under 15 years	358.8	112.4	60.7	14.1	28.9	142.6
15–24 years	472.2	103.5	106.1	32.2	33.7	196.8
25–44 years	529.2	139.9	126.0	69.4	37.8	156.0
45–64 years	538.4	159.9	151.0	91.3	37.2	99.1
65–74 years	558.7	169.7	152.8	112.4	28.2	95.7
75 years and over	782.8	206.0	213.3	159.2	37.8	166.5
Patient sex						
Female	477.0	142.7	112.4	61.7	33.5	126.9
Male	526.6	134.3	129.4	67.4	35.6	159.9
Patient race						
White	517.5	144.8	131.0	69.4	33.9	138.4
Black	483.8	115.5	80.9	49.8	43.1	194.5
Other	277.4	*96.2	54.2	21.4	21.9	83.8
Primary expected source of payment						
Private insurance	322.4	104.5	83.8	31.5	19.5	83.2
Medicare	509.8	144.3	128.1	101.7	28.3	107.5
Medicaid	398.9	105.7	44.4	*18.9	51.7	178.2
Uninsured	331.8	41.9	52.6	24.5	29.9	183.0
Geographic region of provider						
Northeast	548.4	125.3	169.0	72.9	35.5	145.6
Midwest	484.1	164.3	90.2	35.9	47.5	146.3
South	454.7	119.8	94.0	65.5	27.6	147.8
West	557.7	152.8	157.6	88.7	30.1	128.5
MSA <sup>4</sup> status of provider						
MSA	507.5	135.8	126.5	75.5	34.4	135.4
Non-MSA	478.9	150.6	98.5	*22.0	34.9	173.0
Standard error of rate						
All injury-related visits	19.9	10.1	8.3	7.5	3.5	5.4
Patient age						
Under 15 years	17.4	11.0	9.5	3.7	3.4	6.9
15–24 years	25.0	14.0	12.1	5.8	3.9	9.1
25–44 years	26.2	13.6	9.8	14.9	4.2	6.4
45–64 years	30.2	15.8	12.7	11.4	4.2	3.9
65–74 years	30.2	20.8	12.7	11.6	3.9	6.5
75 years and over	40.0	24.0	21.2	15.8	7.1	10.1
Patient sex						
Female	19.0	10.3	8.1	7.1	3.4	5.0
Male	23.1	11.4	9.3	10.1	3.9	6.2
Patient race						
White	21.8	10.5	9.2	7.5	3.8	6.1
Black	29.8	17.6	10.5	14.3	4.5	9.3
Other	45.5	31.1	10.2	5.4	4.6	11.3
Primary expected source of payment						
Private insurance	13.7	7.5	7.0	3.1	2.4	3.8
Medicare	24.5	14.5	10.8	10.2	3.9	6.0
Medicaid	23.7	13.2	8.6	6.9	5.1	9.3
Uninsured	18.5	6.3	8.3	5.1	3.6	9.4

See footnotes at end of table.

**Table 12. Annual rate of injury-related ambulatory care visits by setting type and selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Geographic region of provider			Standard error of rate			
Northeast . . . . .	48.3	13.9	21.5	18.3	7.2	12.0
Midwest . . . . .	44.4	32.5	11.6	5.8	9.1	11.6
South . . . . .	28.1	11.3	14.5	14.1	5.4	9.3
West . . . . .	47.0	18.3	19.4	19.5	6.5	11.9
MSA <sup>4</sup> status of provider						
MSA . . . . .	21.5	10.6	9.1	9.2	3.9	5.5
Non-MSA . . . . .	55.6	20.5	23.5	6.7	8.1	17.2

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999 (with short-term projection to dates in 2000)" and are available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

<sup>2</sup>Regional and metropolitan area estimates were provided by the Division of Health Interview Statistics (DHIS), NCHS, and are based on Census Bureau estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. DHIS estimates differ slightly from Census Bureau monthly postcensal estimates because of differences in the adjustment process.

<sup>3</sup>Denominators for primary expected source of payment rates are from the 1999 and 2000 estimates of health insurance coverage from the *Current Population Survey*.

<sup>4</sup>MSA is metropolitan statistical area.

NOTE: Figures are annual averages.

**Table 13. Percentage of injury-related ambulatory care visits to each setting, by selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Percent of visits that are for injuries						
All visits . . . . .	14.0	8.2	20.6	10.5	11.2	37.0
Patient age						
Under 15 years . . . . .	12.7	6.4	32.5	6.5	9.5	38.0
15–24 years . . . . .	20.1	9.5	43.0	9.8	13.3	45.3
25–44 years . . . . .	17.8	10.1	31.0	13.1	14.4	40.0
45–64 years . . . . .	12.9	8.9	18.6	10.2	10.6	32.6
65–74 years . . . . .	8.9	6.4	10.2	8.3	6.9	26.2
75 years and over . . . . .	10.1	6.4	10.3	11.6	9.0	26.1
Patient sex						
Female . . . . .	11.7	7.0	18.3	9.0	9.3	31.9
Male . . . . .	17.2	10.0	23.3	12.6	14.1	42.8
Patient race						
White . . . . .	14.0	8.3	20.4	10.5	12.0	38.4
Black . . . . .	15.0	8.0	25.6	13.5	8.7	31.9
Other . . . . .	9.8	6.0	15.1	4.9	9.3	38.4
Primary expected source of payment						
Private insurance . . . . .	12.4	7.6	20.8	7.2	11.9	39.7
Medicare . . . . .	9.9	6.9	10.5	9.6	7.8	24.9
Medicaid . . . . .	11.2	6.4	18.9	*5.2	7.7	28.2
Uninsured . . . . .	17.0	7.0	16.5	7.1	13.2	39.3
Other . . . . .	30.7	17.1	51.9	35.3	18.5	54.0
Geographic region of provider						
Northeast . . . . .	13.1	6.7	21.2	10.1	8.3	39.0
Midwest . . . . .	14.1	9.6	17.3	7.9	13.7	36.5
South . . . . .	13.8	7.7	19.5	11.6	10.5	35.1
West . . . . .	14.9	8.6	24.7	11.5	13.2	39.9
MSA <sup>1</sup> status of provider						
MSA . . . . .	13.9	8.2	20.6	10.9	10.9	36.8
Non-MSA . . . . .	14.2	8.1	20.8	7.3	12.6	37.9
Standard error of percent						
All visits . . . . .	0.4	0.4	1.1	1.1	0.7	0.4
Patient age						
Under 15 years . . . . .	0.6	0.5	3.6	1.5	0.7	0.9
15–24 years . . . . .	0.9	1.2	4.0	1.7	1.0	0.8
25–44 years . . . . .	0.7	0.7	1.8	2.4	1.0	0.6
45–64 years . . . . .	0.5	0.7	1.3	1.1	0.8	0.7
65–74 years . . . . .	0.4	0.7	0.8	0.8	0.7	1.2
75 years and over . . . . .	0.4	0.6	0.9	1.1	1.2	0.9
Patient sex						
Female . . . . .	0.4	0.4	1.1	0.9	0.6	0.5
Male . . . . .	0.5	0.6	1.2	1.6	0.9	0.6
Patient race						
White . . . . .	0.4	0.4	1.1	1.0	0.8	0.5
Black . . . . .	0.8	0.9	2.8	3.3	0.6	0.7
Other . . . . .	0.7	0.7	2.5	1.4	1.6	1.7
Primary expected source of payment						
Private insurance . . . . .	0.4	0.4	1.4	0.6	0.8	0.6
Medicare . . . . .	0.4	0.5	0.8	0.9	0.7	0.7
Medicaid . . . . .	0.5	0.7	2.9	1.6	0.5	0.8
Uninsured . . . . .	0.7	0.9	2.3	1.1	1.0	0.7
Other . . . . .	1.7	2.2	3.3	5.9	2.5	1.4

See footnotes at end of table.

**Table 13. Percentage of injury-related ambulatory care visits to each setting, by selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Geographic region of provider			Standard error of percent			
Northeast . . . . .	0.9	0.5	2.2	2.2	1.0	1.1
Midwest . . . . .	0.6	1.2	1.6	1.2	1.4	0.7
South . . . . .	0.8	0.6	2.2	2.2	1.3	0.6
West . . . . .	0.8	0.7	2.5	2.2	1.5	1.1
MSA <sup>1</sup> status of provider						
MSA . . . . .	0.4	0.5	1.2	1.2	0.8	0.4
Non-MSA . . . . .	0.8	0.6	3.1	1.1	1.4	1.1

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>MSA is metropolitan statistical area.

NOTE: Figures are annual averages.



**Table 14. Annual number, percent distribution, and rate of injury-related ambulatory care visits, by intent and mechanism: United States, 1999–2000**

Intent and mechanism	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Rate of visits per 1,000 persons	Standard error of rate	Percent seen in emergency departments
All injury-related visits . . . . .	136,815	5,428	100.0	...	501	20	28.5
Unintentional injuries . . . . .	94,115	4,091	68.8	0.8	345	15	32.3
Falls . . . . .	22,505	1,118	16.5	0.5	82	4	34.6
Struck against or struck accidentally by objects or persons . . . . .	11,134	667	8.1	0.3	41	2	40.3
Motor vehicle traffic . . . . .	11,010	687	8.1	0.4	40	3	39.3
Overexertion and strenuous movements . . . . .	8,796	878	6.4	0.5	32	3	20.5
Natural and environmental factors . . . . .	5,716	480	4.2	0.3	21	2	30.5
Cutting and piercing instruments or objects . . . . .	5,499	375	4.0	0.2	20	1	56.0
Foreign body accidentally entering eye or other orifice . . . . .	1,930	193	1.4	0.1	7	1	45.4
Poisoning by drugs, medicinal substances, biologicals, other solid and liquid substances, gases, and vapors . . . . .	1,713	164	1.3	0.1	6	1	44.7
Motor vehicle, nontraffic . . . . .	1,167	181	0.9	0.1	4	1	33.0
Fire and flames, hot substance or object, caustic or corrosive material, and steam . . . . .	1,131	149	0.8	0.1	4	1	42.0
Pedal cycle, nontraffic, and other . . . . .	1,073	123	0.8	0.1	4	<1	49.9
Machinery . . . . .	1,063	144	0.8	0.1	4	1	34.8
Other transportation . . . . .	602	106	0.4	0.1	2	<1	26.0
Drowning/submersion and suffocation . . . . .	*188	56	0.1	<1	1	<1	*63.2
Firearm missile . . . . .	176	43	0.1	<1	1	<1	30.2
Other and not elsewhere classified . . . . .	10,766	723	7.9	0.4	39	3	13.1
Mechanism unspecified . . . . .	9,644	615	7.1	0.4	35	2	21.1
Intentional injuries . . . . .	3,744	326	2.7	0.2	14	1	57.5
Self-inflicted . . . . .	464	56	0.3	<1	2	<1	87.9
Poisoning by solid or liquid substances, gases, and vapors . . . . .	294	41	0.2	<1	1	<1	97.2
Cutting and piercing instrument . . . . .	95	23	0.1	<1	0	<1	74.4
Other mechanism . . . . .	*	...	*	...	*	...	*
Mechanism unspecified . . . . .	*	...	*	...	*	...	*
Assault . . . . .	3,074	226	2.3	0.2	11	1	55.8
Firearms . . . . .	*49	17	<1	<1	*<1	<1	*
Cutting and piercing instrument . . . . .	187	39	0.1	<1	1	<1	71.9
Unarmed fight or brawl, striking by blunt or thrown object . . . . .	1,581	132	1.2	0.1	6	<1	60.2
Other mechanism . . . . .	516	88	0.4	0.1	2	<1	46.8
Mechanism unspecified . . . . .	741	115	0.5	0.1	3	<1	50.0
Other causes of violence . . . . .	*205	152	0.2	0.1	*1	1	*
Injuries of undetermined intent . . . . .	373	67	0.3	0.1	1	<1	45.7
Adverse effects of medical treatment . . . . .	6,686	476	4.9	0.3	24	2	19.2
Missing cause <sup>1</sup> . . . . .	31,898	1,481	23.3	0.8	117	5	15.7

... Category not applicable.

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>Includes illegible and blank entries.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 15. Annual number and percent distribution of injury-related ambulatory care visits, by region of body and nature of injury: United States, 1999–2000**

Region of body and nature of injury <sup>1</sup>	Number of visits in thousands	Standard error in thousands	Percent distribution	Standard error of percent	Percent of visits seen in emergency departments	Standard error of percent
All injury-related visits . . . . .	136,815	5,434	100.0	...	28.5	1.1
Head, face, and neck . . . . .	9,337	462	6.8	0.3	64.6	2.6
Fracture . . . . .	490	85	0.4	0.1	45.1	8.0
Internal . . . . .	672	120	0.5	0.1	49.5	8.7
Open wound . . . . .	3,448	247	2.5	0.2	76.2	4.5
Contusions/superficial . . . . .	3,342	287	2.4	0.2	57.0	4.9
Burns . . . . .	117	25	0.1	0.0	68.7	13.2
Unspecified . . . . .	1,197	124	0.9	0.1	71.5	5.5
Spine and back . . . . .	8,059	651	5.9	0.4	26.3	2.4
Fracture . . . . .	725	133	0.5	0.1	12.2	3.2
Sprains and strains . . . . .	7,247	639	5.3	0.4	27.6	2.7
Torso . . . . .	5,522	437	4.0	0.3	36.4	3.0
Fracture . . . . .	735	128	0.5	0.1	38.4	7.2
Sprains and strains . . . . .	2,800	321	2.0	0.2	23.5	3.2
Internal . . . . .	107	28	0.1	0.0	*	...
Open wound . . . . .	237	66	0.2	0.0	49.6	13.6
Contusions/superficial . . . . .	1,325	154	1.0	0.1	57.0	5.9
Unspecified . . . . .	259	63	0.2	0.0	41.8	10.5
Upper extremities . . . . .	21,494	1,193	15.7	0.6	38.2	2.2
Fracture . . . . .	6,995	565	5.1	0.4	27.1	2.4
Dislocation . . . . .	867	118	0.6	0.1	35.4	5.1
Sprains and strains . . . . .	4,369	392	3.2	0.2	23.7	2.4
Open wound . . . . .	4,753	373	3.5	0.2	56.3	4.1
Amputations . . . . .	122	27	0.1	0.0	55.3	11.5
Contusions/superficial . . . . .	2,842	266	2.1	0.2	55.8	5.2
Crushing . . . . .	165	47	0.1	0.0	56.1	14.6
Burns . . . . .	420	73	0.3	0.1	56.0	8.6
Unspecified . . . . .	876	121	0.6	0.1	34.7	5.2
Lower extremities . . . . .	18,335	923	13.4	0.5	33.6	1.8
Fracture . . . . .	4,522	380	3.3	0.3	26.1	2.6
Dislocation . . . . .	1,842	223	1.3	0.2	7.1	1.5
Sprains and strains . . . . .	6,530	422	4.8	0.3	34.7	2.2
Open wound . . . . .	1,621	133	1.2	0.1	62.7	4.3
Contusion/superficial . . . . .	2,875	307	2.1	0.2	44.0	4.9
Burns . . . . .	139	38	0.1	0.0	*	...
Unspecified . . . . .	719	120	0.5	0.1	30.6	6.0
Other and unspecified body sites . . . . .	7,965	509	5.8	0.3	33.8	2.3
Fracture . . . . .	413	84	0.3	0.1	*	...
Sprains and strains . . . . .	2,295	268	1.7	0.2	21.2	2.7
Open wound . . . . .	1,838	166	1.3	0.1	44.9	4.2
Contusion/superficial . . . . .	2,482	229	1.8	0.2	37.7	3.6
Burns . . . . .	316	69	0.2	0.1	33.0	8.8
Unspecified . . . . .	367	52	0.3	0.0	64.0	7.1
System wide and late effects . . . . .	3,691	278	2.7	0.2	47.9	3.6
Foreign bodies . . . . .	1,237	153	0.9	0.1	47.6	5.8
Poisoning . . . . .	1,681	172	1.2	0.1	57.9	5.7
Other and unspecified effects of external causes . . . . .	239	75	*0.2	0.1	*45.3	14.6
Late effects . . . . .	232	84	*0.2	0.1	*	...
Early complications of trauma . . . . .	205	80	*0.1	0.1	*	...
Adverse effects . . . . .	5,889	469	4.3	0.3	22.6	1.9
Anaphylactic shock . . . . .	3,840	346	2.8	0.2	23.6	2.4
Surgical and medical complications . . . . .	2,048	279	1.5	0.2	20.6	3.0
All other body sites . . . . .	54,798	2,827	40.1	1.0	14.8	0.8
Musculoskeletal . . . . .	15,817	1,234	11.6	0.7	13.6	1.1
Ill-defined symptoms . . . . .	3,876	371	2.8	0.2	32.7	2.8
Skin and subcutaneous tissue . . . . .	9,151	629	6.7	0.4	9.2	0.9
Mental disorders . . . . .	3,138	448	2.3	0.3	23.2	3.3
Nervous system . . . . .	3,641	321	2.7	0.2	14.2	1.5
Other illness . . . . .	10,361	668	7.6	0.4	14.3	1.1
Supplementary classification . . . . .	8,814	740	6.4	0.5	12.7	1.2
Unknown <sup>2</sup> . . . . .	1,726	245	1.3	0.2	34.9	5.5

... Category not applicable.

\*Figure does not meet standard of reliability or precision.

0.0 Quantity greater than zero but less than 0.05.

<sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (17). A description of the codes used to define each category is shown in Appendix I, table IV.<sup>2</sup>Includes blank diagnoses, uncodable diagnoses, and illegible diagnoses.

NOTE: Numbers may not add to totals because of rounding and because subcategories having fewer than 30 records have been omitted. Figures are annual averages.

**Table 16. Annual number and percent distribution of ambulatory care visits by medication therapy, according to setting type: United States, 1999–2000**

Medication therapy	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of visits in thousands						
All visits . . . . .	979,485	463,692	159,740	166,706	83,956	105,391
Was medication therapy provided or prescribed?						
Yes . . . . .	654,429	331,486	68,196	123,028	54,610	77,109
No . . . . .	325,056	132,206	91,544	43,678	29,346	28,282
Number of medications provided or prescribed						
0 . . . . .	325,056	132,206	91,544	43,678	29,346	28,282
1 . . . . .	272,898	139,210	36,922	44,138	21,767	30,862
2 . . . . .	166,572	83,260	16,669	29,923	13,803	22,919
3 . . . . .	90,211	45,161	7,096	18,697	7,459	11,798
4 . . . . .	48,437	26,405	2,894	9,725	3,933	5,480
5 . . . . .	30,026	15,124	1,692	7,687	2,643	2,879
6 . . . . .	46,285	22,326	2,924	12,859	5,005	3,172
Percent distribution						
All visits . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Was medication therapy provided or prescribed?						
Yes . . . . .	66.8	71.5	42.7	73.8	65.0	73.2
No . . . . .	33.2	28.5	57.3	26.2	35.0	26.8
Number of medications provided or prescribed						
0 . . . . .	33.2	28.5	57.3	26.2	35.0	26.8
1 . . . . .	27.9	30.0	23.1	26.5	25.9	29.3
2 . . . . .	17.0	18.0	10.4	17.9	16.4	21.7
3 . . . . .	9.2	9.7	4.4	11.2	8.9	11.2
4 . . . . .	4.9	5.7	1.8	5.8	4.7	5.2
5 . . . . .	3.1	3.3	1.1	4.6	3.1	2.7
6 . . . . .	4.7	4.8	1.8	7.7	6.0	3.0
Standard error of percent						
All visits . . . . .	...	...	...	...	...	...
Was medication therapy provided or prescribed?						
Yes . . . . .	0.7	1.0	1.5	1.6	1.3	0.8
No . . . . .	0.7	1.0	1.5	1.6	1.3	0.8
Number of medications provided or prescribed						
0 . . . . .	0.7	1.0	1.5	1.6	1.3	0.8
1 . . . . .	0.4	0.7	0.9	1.3	0.7	0.5
2 . . . . .	0.3	0.5	0.5	0.8	0.5	0.3
3 . . . . .	0.2	0.4	0.4	0.6	0.3	0.3
4 . . . . .	0.2	0.3	0.2	0.5	0.2	0.2
5 . . . . .	0.1	0.2	0.2	0.5	0.2	0.2
6 . . . . .	0.3	0.4	0.4	0.7	0.6	0.3

... Category not applicable.

NOTE: Numbers may not add to totals because of rounding. Figures are annual averages.

**Table 17. Annual rate of drug mentions at ambulatory care visits by setting type and selected patient and provider characteristics: United States, 1999–2000**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of mentions per 100 visits <sup>1</sup>						
All visits . . . . .	153.0	163.1	80.8	188.7	155.7	158.9
Patient age						
Under 15 years . . . . .	117.4	119.4	36.8	158.7	117.7	123.5
15–24 years . . . . .	110.7	97.6	69.2	154.3	106.2	136.7
25–44 years . . . . .	127.4	123.4	65.5	155.3	134.9	163.3
45–64 years . . . . .	169.2	193.9	76.8	189.5	189.0	185.8
65–74 years . . . . .	203.2	247.2	99.1	227.3	227.2	198.4
75 years and over . . . . .	210.1	259.6	107.9	253.1	222.9	188.9
Patient sex						
Female . . . . .	156.0	162.6	85.8	193.5	156.2	165.5
Male . . . . .	148.7	164.0	75.1	182.2	154.9	151.4
Patient race						
White . . . . .	152.5	163.1	80.1	188.1	157.0	160.6
Black . . . . .	158.9	167.8	84.6	201.6	154.7	153.8
Other . . . . .	146.1	151.9	91.8	174.5	135.1	148.1
Primary expected source of payment						
Private insurance . . . . .	141.1	144.4	75.5	179.6	147.9	159.9
Medicare . . . . .	211.0	259.9	101.2	245.6	219.5	191.8
Medicaid . . . . .	159.0	163.5	83.1	221.0	147.2	151.7
Uninsured . . . . .	131.8	142.0	69.4	150.5	127.6	149.7
Other . . . . .	113.7	120.7	58.9	117.9	137.9	136.2
Geographic region of provider						
Northeast . . . . .	152.7	161.9	86.3	191.6	172.0	151.3
Midwest . . . . .	148.9	159.0	78.9	188.4	156.0	145.5
South . . . . .	155.3	169.4	72.6	187.5	144.1	161.8
West . . . . .	154.3	159.6	87.1	188.0	149.9	180.2
MSA <sup>2</sup> status of provider						
MSA . . . . .	149.0	156.3	82.6	188.7	150.7	156.0
Non-MSA . . . . .	169.8	187.1	71.9	212.8	178.2	168.0
Standard error of rate						
All visits . . . . .	2.7	4.3	4.5	6.8	4.6	3.4
Patient age						
Under 15 years . . . . .	3.3	4.3	4.4	14.3	3.9	3.2
15–24 years . . . . .	3.0	4.3	18.6	7.0	3.3	3.0
25–44 years . . . . .	2.9	4.5	3.7	7.3	4.0	3.2
45–64 years . . . . .	3.6	6.1	4.6	8.3	6.5	5.1
65–74 years . . . . .	5.8	9.5	6.8	11.7	10.3	7.0
75 years and over . . . . .	5.8	10.3	8.3	11.6	17.8	8.3
Patient sex						
Female . . . . .	3.1	4.9	5.0	8.0	5.0	3.7
Male . . . . .	2.7	4.3	4.5	6.9	4.9	3.3
Patient race						
White . . . . .	2.9	4.5	4.6	6.9	5.1	3.8
Black . . . . .	4.3	7.9	7.7	13.8	6.0	3.6
Other . . . . .	6.2	9.6	10.7	12.8	9.4	7.3
Primary expected source of payment						
Private insurance . . . . .	2.7	4.0	4.8	6.7	5.2	3.5
Medicare . . . . .	5.6	9.7	7.4	10.9	13.3	7.3
Medicaid . . . . .	4.2	7.5	9.4	12.1	4.4	4.3
Uninsured . . . . .	4.3	7.8	10.1	8.4	6.8	3.5
Other . . . . .	4.1	6.6	5.0	14.5	6.5	4.4

See footnotes at end of table.

**Table 17. Annual rate of drug mentions at ambulatory care visits by setting type and selected patient and provider characteristics: United States, 1999–2000—Con.**

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Geographic region of provider			Standard error of rate			
Northeast . . . . .	5.9	8.6	9.1	17.7	9.6	7.4
Midwest . . . . .	4.8	7.8	8.1	14.4	7.3	3.4
South . . . . .	5.9	9.4	8.2	11.9	7.6	6.1
West . . . . .	4.3	6.3	11.1	10.5	11.0	10.0
MSA <sup>2</sup> status of provider						
MSA . . . . .	2.7	4.3	4.5	6.8	4.4	3.3
Non-MSA . . . . .	7.4	10.4	6.9	24.7	17.8	9.8

<sup>1</sup>Number of drug mentions divided by total number of visits multiplied by 100.

<sup>2</sup>MSA is metropolitan statistical area.

NOTE: Figures are annual averages.

**Table 18. Annual number and rate per 100 drug mentions of the 35 most frequently occurring generic substances at ambulatory care visits, with percent distribution by setting: United States, 1999–2000**

Generic substance	Number of occurrences in thousands <sup>1</sup>	Number of occurrences per 100 drug mentions <sup>2</sup>	Total	Percent distribution				
				Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Acetaminophen . . . . .	67,284	4.5	100.0	37.7	9.6	9.4	8.7	34.7
Amoxicillin . . . . .	36,761	2.5	100.0	68.8	3.2	4.9	10.1	13.0
Ibuprofen . . . . .	32,784	2.2	100.0	39.7	4.9	8.0	10.8	36.5
Albuterol . . . . .	26,002	1.7	100.0	53.3	2.6	15.7	9.9	18.6
Hydrocodone . . . . .	24,437	1.6	100.0	43.5	12.5	7.7	5.2	31.1
Hydrochlorothiazide . . . . .	23,156	1.5	100.0	69.6	4.5	14.5	9.5	2.0
Estrogens . . . . .	21,884	1.5	100.0	70.1	5.5	13.9	8.2	2.3
Levothyroxine . . . . .	19,095	1.3	100.0	57.1	5.0	26.7	8.1	3.1
Aspirin . . . . .	18,960	1.3	100.0	45.3	6.9	27.6	10.1	10.2
Furosemide . . . . .	18,432	1.2	100.0	52.3	5.4	25.1	8.3	9.0
Guaifenesin . . . . .	18,430	1.2	100.0	69.8	5.7	8.0	9.7	6.9
Loratadine . . . . .	18,268	1.2	100.0	63.8	6.6	20.2	7.1	2.3
Lisinopril . . . . .	16,262	1.1	100.0	67.3	4.4	17.5	8.3	2.5
Atorvastatin calcium . . . . .	15,857	1.1	100.0	61.0	4.8	25.5	6.7	2.1
Prednisone . . . . .	14,943	1.0	100.0	33.9	5.7	38.1	9.1	13.2
Atenolol . . . . .	14,590	1.0	100.0	58.8	5.6	23.8	8.6	3.1
Omeprazole . . . . .	13,330	0.9	100.0	55.6	4.1	25.3	10.1	5.0
Amlodipine . . . . .	13,082	0.9	100.0	61.3	3.7	22.8	9.4	2.9
Cephalexin . . . . .	12,763	0.9	100.0	52.9	9.9	5.7	8.5	23.0
Naproxen . . . . .	12,570	0.8	100.0	54.3	11.9	12.2	9.4	12.3
Multiple vitamins . . . . .	12,539	0.8	100.0	64.1	4.0	14.9	14.1	3.0
Metoprolol . . . . .	12,120	0.8	100.0	54.8	4.9	27.2	8.3	5.0
Digoxin . . . . .	11,862	0.8	100.0	52.7	4.0	32.4	5.7	5.1
Triamcinolone . . . . .	11,610	0.8	100.0	47.4	9.0	33.0	8.1	2.6
Pseudoephedrine . . . . .	11,603	0.8	100.0	65.7	5.2	13.0	10.2	5.9
Insulin . . . . .	11,426	0.8	100.0	50.4	5.8	21.7	13.3	8.8
Influenza virus vaccine . . . . .	11,187	0.7	100.0	81.4	0.1	6.6	11.7	0.2
Metformin . . . . .	11,098	0.7	100.0	64.7	4.0	19.8	9.1	2.4
Fluticasone propionate . . . . .	10,915	0.7	100.0	50.3	7.8	30.6	8.8	2.6
Promethazine . . . . .	10,303	0.7	100.0	38.7	1.6	0.6	5.6	53.5
Sertraline . . . . .	10,095	0.7	100.0	47.2	2.8	37.8	9.1	3.1
Clavulanate potassium . . . . .	10,018	0.7	100.0	70.5	5.4	2.4	9.7	12.0
Warfarin . . . . .	9,739	0.6	100.0	51.4	6.3	27.7	9.5	5.2
Medroxyprogesterone . . . . .	9,716	0.6	100.0	71.3	3.6	10.8	12.2	2.1
Trimethoprim . . . . .	9,639	0.6	100.0	55.3	9.3	5.2	13.3	16.9

<sup>1</sup>Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.<sup>2</sup>Based on an estimated annual average of 1,498,266,000 drug mentions at ambulatory care visits in 1999–2000.

NOTE: Figures are annual averages.

**Table 19. Annual rate of drug mentions at ambulatory care visits by setting type and therapeutic classification: United States, 1999–2000**

Therapeutic classification <sup>1</sup>	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Number of mentions per 100 visits <sup>2</sup>						
All drug mentions . . . . .	153.0	163.1	80.8	188.7	155.7	158.9
Anesthetic drugs . . . . .	1.5	0.5	2.7	1.4	1.9	4.3
Antidotes . . . . .	0.1	*0.0	*0.0	*0.2	*0.1	0.3
Antimicrobial agents . . . . .	15.3	18.3	6.8	9.2	16.6	23.5
Hematologic agents . . . . .	2.6	2.8	0.7	3.7	3.2	2.4
Cardiovascular-renal drugs . . . . .	21.7	26.3	8.5	29.1	20.7	10.6
Central nervous system . . . . .	12.5	10.8	2.2	29.1	12.9	8.5
Contrast media/radiopharmaceuticals . . . . .	0.5	0.8	*0.6	*0.1	0.6	0.1
Gastrointestinal agents . . . . .	6.7	7.1	1.9	8.9	7.9	8.0
Metabolic/nutrients . . . . .	10.3	12.8	3.2	13.2	11.2	5.3
Hormones and agents related to hormonal mechanisms . . . . .	14.8	18.5	5.8	17.9	15.0	7.7
Immunologics . . . . .	6.2	9.4	*0.6	4.0	7.7	3.4
Skin/mucous membrane . . . . .	7.1	6.2	3.1	16.1	5.9	3.5
Neurologic drugs . . . . .	4.0	3.4	1.2	7.8	4.8	4.7
Oncolytics . . . . .	1.2	0.4	0.7	4.5	1.6	0.1
Ophthalmics . . . . .	4.3	1.1	20.8	0.7	1.8	1.3
Otologics . . . . .	0.8	0.9	0.4	0.7	0.9	1.3
Relief of pain . . . . .	21.0	18.1	12.4	18.2	21.4	50.9
Antiparasitics . . . . .	0.6	0.6	*0.1	*1.2	0.9	0.2
Respiratory tract . . . . .	16.9	19.9	6.3	17.8	16.6	19.0
Unclassified . . . . .	4.3	5.2	2.6	4.4	3.7	3.7
Homeopathic products . . . . .	0.2	0.2	0.2	*0.4	0.2	*0.0
Standard error of rate						
All drug mentions . . . . .	2.7	4.3	4.5	6.8	4.7	3.4
Anesthetic drugs . . . . .	0.1	0.1	0.6	0.2	0.3	0.2
Antidotes . . . . .	0.0	0.0	0.0	0.1	0.0	0.0
Antimicrobial agents . . . . .	0.4	0.6	0.5	0.7	0.8	0.6
Hematologic agents . . . . .	0.1	0.2	0.1	0.4	0.2	0.1
Cardiovascular-renal drugs . . . . .	0.8	1.4	1.0	2.1	1.4	0.6
Central nervous system . . . . .	0.5	0.6	0.4	2.0	0.8	0.4
Contrast media/radiopharmaceuticals . . . . .	0.1	0.1	0.5	0.1	0.1	0.0
Gastrointestinal agents . . . . .	0.2	0.4	0.2	0.9	0.5	0.3
Metabolic/nutrients . . . . .	0.4	0.7	0.4	1.1	0.7	0.3
Hormones and agents related to hormonal mechanisms . . . . .	0.5	0.7	0.7	2.1	0.8	0.3
Immunologics . . . . .	0.4	0.7	0.3	1.2	0.5	0.1
Skin/mucous membrane . . . . .	0.3	0.3	0.3	1.3	0.4	0.2
Neurologic drugs . . . . .	0.2	0.2	0.1	0.6	0.3	0.2
Oncolytics . . . . .	0.2	0.1	0.1	1.1	0.2	0.0
Ophthalmics . . . . .	0.4	0.1	2.1	0.1	0.2	0.1
Otologics . . . . .	0.1	0.1	0.1	0.2	0.1	0.1
Relief of pain . . . . .	0.5	0.8	0.8	1.8	0.9	1.0
Antiparasitics . . . . .	0.1	0.1	0.0	0.4	0.1	0.0
Respiratory tract . . . . .	0.7	0.8	0.6	3.4	1.1	0.5
Unclassified . . . . .	0.2	0.4	0.3	0.5	0.2	0.2
Homeopathic products . . . . .	0.0	0.1	0.1	0.2	0.0	0.0

\* Figure does not meet standard of reliability or precision.

0.0 Quantity is greater than zero but less than 0.05.

<sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (19).<sup>2</sup>Number of drug mentions divided by total number of visits multiplied by 100.

NOTE: Figures are annual averages.



**Table 20. Annual number and percent distribution of drug mentions at ambulatory care visits by therapeutic classification, with percent distribution by setting type: United States, 1999–2000**

Therapeutic classification <sup>1</sup>	Number of mentions in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
All drug mentions . . . . .	1,498,266	100.0	100.0	50.5	8.6	21.0	8.7	11.2
Anesthetic drugs . . . . .	15,025	1.0	100.0	15.0	28.9	15.1	10.7	30.3
Anesthetics, local (Injectable) . . . . .	10,089	0.7	100.0	14.1	38.4	14.4	10.2	22.9
Anesthetics, general . . . . .	737	0.0	100.0	*	*	*	*37.9	49.9
Adjuncts to anesthesia/analeptics . . . . .	2,430	0.2	100.0	*	*	*	5.0	69.2
Medicinal gases . . . . .	662	0.0	100.0	*	*	76.4	*	*
Anesthetics, topical . . . . .	389	0.0	100.0	*	*	*	*27.1	28.1
Anesthetics, rectal . . . . .	416	0.0	100.0	*	*	*	*	*
Antidotes . . . . .	960	0.1	100.0	*	*	35.5	*7.5	28.1
Antidotes, specific . . . . .	582	0.0	100.0	*	*	*	*	32.3
Antidotes, general . . . . .	155	0.0	100.0	*	*	*	*	*52.6
Antitoxins/antivenins . . . . .	223	0.0	100.0	*	*	*	*	*
Antimicrobial agents . . . . .	149,999	10.0	100.0	56.7	7.2	10.3	9.3	16.5
Penicillins . . . . .	41,294	2.8	100.0	66.5	3.4	4.7	10.2	15.2
Cephalosporins . . . . .	30,693	2.0	100.0	55.6	6.8	5.5	7.5	24.6
Erythromycins/lincosamides/macrolides . . . . .	22,526	1.5	100.0	62.3	4.6	10.6	8.4	14.2
Tetracyclines . . . . .	7,428	0.5	100.0	41.2	5.0	39.8	7.0	7.0
Aminoglycosides . . . . .	3,012	0.2	100.0	40.8	11.7	*	7.3	33.6
Sulfonamides and trimethoprim . . . . .	10,051	0.7	100.0	52.8	8.7	*8.0	13.3	17.1
Urinary tract antiseptics . . . . .	4,324	0.3	100.0	56.2	25.8	*	6.4	4.0
Miscellaneous antibacterial agents . . . . .	7,174	0.5	100.0	40.1	4.7	29.0	9.0	17.2
Antimycobacterial/anti-leprosy agents . . . . .	457	0.0	100.0	*	*	*	*19.5	*
Quinolones/derivatives . . . . .	14,201	0.9	100.0	50.9	18.4	7.6	6.7	16.4
Antifungals . . . . .	673	0.0	100.0	*	*	*	*28.6	*
Antiviral agents . . . . .	6,825	0.5	100.0	48.2	4.9	21.9	18.2	6.9
Hematologic agents . . . . .	25,536	1.7	100.0	51.1	4.6	23.9	10.6	9.8
Deficiency anemias . . . . .	10,261	0.7	100.0	57.5	*	22.7	14.5	3.1
Anticoagulants/thrombolytics . . . . .	14,999	1.0	100.0	47.5	6.1	24.6	8.0	13.8
Blood components/substitutes . . . . .	59	0.0	100.0	*	*	*	*	*
Hemostatics/antihemophilics . . . . .	211	0.0	100.0	*	*	*	*	*37.5
Cardiovascular-renal drugs . . . . .	212,630	14.2	100.0	57.4	6.4	22.9	8.2	5.3
Cardiac glycosides . . . . .	11,870	0.8	100.0	52.7	4.0	32.4	5.8	5.2
Antiarrhythmic agents . . . . .	2,351	0.2	100.0	38.8	*	36.3	6.4	9.6
Antianginal agents . . . . .	12,519	0.8	100.0	44.9	2.8	25.6	6.5	20.2
Vascular disorders, cerebral/peripheral . . . . .	4,108	0.3	100.0	55.7	21.1	15.6	7.0	*
Agents used to treat shock/hypotension . . . . .	467	0.0	100.0	*	*	*	*	34.0
Antihypertensive agents . . . . .	19,184	1.3	100.0	58.6	8.5	22.2	7.9	2.8
Diuretics . . . . .	32,561	2.2	100.0	57.0	4.8	22.5	9.3	6.4
Coronary vasodilators . . . . .	264	0.0	100.0	*	*	*	*	*
Relaxants/stimulants, urinary tract . . . . .	2,326	0.2	100.0	47.8	29.7	*	7.1	4.3
Calcium channel blockers . . . . .	35,719	2.4	100.0	59.8	5.2	22.4	8.6	4.0
Carbonic anhydrase inhibitors . . . . .	530	0.0	100.0	*	*	*	*	*
Beta blockers . . . . .	33,452	2.2	100.0	58.3	6.3	24.2	8.1	3.1
Alpha agonists/alpha blockers . . . . .	16,860	1.1	100.0	54.0	9.5	21.7	8.5	6.3
ACE <sup>2</sup> inhibitors . . . . .	40,353	2.7	100.0	63.6	4.4	20.2	8.5	3.3
Central nervous system . . . . .	122,151	8.2	100.0	41.1	2.9	39.7	8.9	7.3
Sedatives and hypnotics . . . . .	13,768	0.9	100.0	44.0	*4.9	27.7	8.9	14.5
Antianxiety agents . . . . .	23,388	1.6	100.0	47.5	3.7	31.5	7.2	10.0
Antipsychotic/antimanics . . . . .	11,099	0.7	100.0	17.7	*	58.7	14.5	8.2
Antidepressants . . . . .	59,984	4.0	100.0	42.2	3.0	43.2	8.7	3.0
Anorexiant/CNS <sup>3</sup> stimulants . . . . .	8,657	0.6	100.0	51.0	*	37.6	8.6	1.3
CNS <sup>3</sup> , miscellaneous . . . . .	713	0.0	100.0	*	*	49.2	*7.2	*
Alzheimer-type dementia . . . . .	987	0.1	100.0	*	*	40.1	10.3	*
Antiemetics . . . . .	3,448	0.2	100.0	*	*	*	6.3	50.7
Contrast media/radiopharmaceutical . . . . .	5,328	0.4	100.0	67.9	*17.2	*	8.8	2.3
Diagnostics, radiopaque and nonradioactive . . . . .	5,251	0.4	100.0	68.9	*17.4	*	8.9	2.3
Gastrointestinal agents . . . . .	65,573	4.4	100.0	49.9	4.6	22.5	10.2	12.8
Disorders, acid/peptic . . . . .	45,407	3.0	100.0	53.3	4.8	23.6	9.6	8.7
Antidiarrheals . . . . .	4,503	0.3	100.0	57.3	*	18.0	7.7	13.7
Laxatives . . . . .	6,004	0.4	100.0	42.9	5.2	16.8	18.2	16.9
Miscellaneous gastrointestinals . . . . .	3,853	0.3	100.0	34.4	*	42.2	10.8	9.1
Antispasmodics/anticholinergics . . . . .	2,639	0.2	100.0	46.7	*	*	8.3	23.0
Antacids . . . . .	2,468	0.2	100.0	31.9	*	*	8.7	48.9

See footnotes at end of table.

**Table 20. Annual number and percent distribution of drug mentions at ambulatory care visits by therapeutic classification, with percent distribution by setting type: United States, 1999–2000—Con.**

Therapeutic classification <sup>1</sup>	Number of mentions in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Metabolic/nutrients	101,353	6.8	100.0	58.4	5.1	21.7	9.3	5.6
Hyperlipidemia	36,490	2.4	100.0	61.5	4.5	24.9	7.2	1.8
Vitamins/minerals	29,878	2.0	100.0	61.0	5.5	18.3	12.2	3.0
Nutrition, enteral/parenteral	1,755	0.1	100.0	*	*	*	7.2	27.1
Replenishers/regulators of electrolytes/water	24,065	1.6	100.0	54.5	5.4	17.0	8.8	14.3
Calcium metabolism	7,744	0.5	100.0	57.1	6.7	27.0	8.1	1.2
Hematopoietic growth factor	1,421	0.1	100.0	*	*	*	*17.4	*
Hormones/hormonal mechanisms	145,284	9.7	100.0	58.9	6.3	20.5	8.7	5.6
Adrenal corticosteroids	31,628	2.1	100.0	39.7	10.3	27.5	8.2	14.3
Androgens/anabolic steroids	2,641	0.2	100.0	63.2	20.7	*	4.6	*
Estrogens/progestins	32,380	2.2	100.0	70.1	5.2	13.5	8.8	2.4
Anterior pituitary/hypothalamic function	464	0.0	100.0	*	*	*	*	*
Blood glucose regulators	45,933	3.1	100.0	60.9	4.9	20.7	9.6	4.0
Thyroid/antithyroid	21,369	1.4	100.0	56.1	5.3	27.4	8.0	3.2
Antidiuretics	210	0.0	100.0	*	*	*	*	*
Relaxants/stimulants uterine	294	0.0	100.0	*	*	*	*	*
Contraceptives	8,923	0.6	100.0	82.1	*	*4.7	8.4	2.4
Infertility	376	0.0	100.0	*	*	*	*	*
Immunologics	61,201	4.1	100.0	70.9	*1.7	11.0	10.6	5.8
Vaccines/antisera	53,645	3.6	100.0	77.6	*	*5.0	10.5	6.6
Immunomodulators	1,871	0.1	100.0	*	*	45.7	29.8	*
Allergenic extracts	3,808	0.3	100.0	*37.1	*19.4	*36.6	*6.9	*
Skin/mucous membrane	69,159	4.6	100.0	41.6	7.1	38.8	7.1	5.4
Antiseptics/disinfectants	3,988	0.3	100.0	35.4	*7.7	37.7	6.9	12.2
Dermatologics, miscellaneous	14,230	0.9	100.0	41.2	4.0	44.7	7.3	2.8
Keratolytics	878	0.1	100.0	*	*	39.9	*	*
Topical steroids	23,088	1.5	100.0	38.2	9.5	41.1	6.5	4.6
Burn/sunburn, sunscreen/suntan products	454	0.0	100.0	*	*	*	*	*
Acne products	3,791	0.3	100.0	*	*	86.2	2.7	*
Topical anti-infectives	18,165	1.2	100.0	56.4	4.3	23.5	9.1	6.6
Dermatitis/antipruritics	691	0.0	100.0	*	*	*	12.3	*
Topical analgesics	3,340	0.2	100.0	29.8	29.0	23.4	4.3	13.5
Neurologic drugs	39,558	2.6	100.0	39.8	4.7	32.8	10.2	12.6
Extrapyramidal movement disorders	3,213	0.2	100.0	31.0	*	48.3	12.0	5.3
Skeletal muscle hyperactivity	15,765	1.1	100.0	49.1	7.3	15.5	7.9	20.2
Anticonvulsants	20,488	1.4	100.0	34.1	2.8	43.5	11.7	7.9
Oncolytics	11,831	0.8	100.0	14.2	9.7	63.7	11.2	1.3
Antineoplastics, miscellaneous	3,399	0.2	100.0	*	*	73.8	*13.9	*
Hormonal/biological response modulators	3,476	0.2	100.0	24.6	27.5	39.1	7.8	*
Antimetabolites	3,538	0.2	100.0	*	*	73.4	*8.7	*
Antibiotics, alkaloids, enzymes	578	0.0	100.0	*	*	*	*14.9	*
DNA damaging drugs	818	0.1	100.0	*	*	*	22.6	*
Ophthalmics	42,331	2.8	100.0	11.8	78.5	2.8	3.7	3.2
Glaucoma	12,923	0.9	100.0	10.3	83.4	*	2.9	0.8
Cycloplegics/mydriatics	4,237	0.3	100.0	*	90.1	*	*3.4	*1.4
Ocular anti-infective/anti-inflammatory	15,915	1.1	100.0	18.1	69.4	*	4.5	4.9
Miscellaneous ophthalmics	6,421	0.4	100.0	*	88.8	*	*2.7	4.6
Decongestants/antiallergy agents	1,689	0.1	100.0	*	72.3	*	*2.8	*
Contact lens products	109	0.0	100.0	*	*	*	*11.2	*
Otologics	8,042	0.5	100.0	51.5	7.2	15.2	9.6	16.5
Otic, topical (Misc)	3,188	0.2	100.0	63.0	12.2	*	8.9	12.2
Vertigo/motion sickness/vomiting	4,854	0.3	100.0	43.9	3.9	22.8	10.1	19.3
Relief of pain	205,804	13.7	100.0	40.8	9.6	14.8	8.7	26.1
Analgesics/general	7,382	0.5	100.0	46.1	5.5	29.9	8.2	10.4
Analgesics, narcotic	29,962	2.0	100.0	30.2	10.5	11.9	8.0	39.4
Analgesics, non-narcotic	72,152	4.8	100.0	38.2	8.2	14.7	9.5	29.4
Antimigraine/other headaches	3,238	0.2	100.0	53.0	*	29.2	7.9	6.6
Antiarthritics	9,296	0.6	100.0	43.4	20.3	27.0	6.4	2.9
Antigout	4,122	0.3	100.0	55.3	*	28.5	7.5	3.1
NSAID <sup>4</sup>	79,638	5.3	100.0	45.2	10.2	11.8	8.7	24.1

See footnotes at end of table.

**Table 20. Annual number and percent distribution of drug mentions at ambulatory care visits by therapeutic classification, with percent distribution by setting type: United States, 1999–2000—Con.**

Therapeutic classification <sup>1</sup>	Number of mentions in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments	Percent distribution	
									Standard error in thousands	Standard error of percent
Antiparasitics . . . . .	5,818	0.4	100.0	44.7	*	34.7	12.7	4.2		
Antiprotozoals . . . . .	2,640	0.2	100.0	63.3	*	*	16.4	4.9		
Scabicides/pediculicides . . . . .	461	0.0	100.0	*	*	*	*10.0	*		
Antimalarials . . . . .	2,646	0.2	100.0	*	*	63.7	*9.2	*		
Respiratory tract . . . . .	165,860	11.1	100.0	55.6	6.0	17.9	8.4	12.1		
Antiasthmatics/bronchodilators . . . . .	46,811	3.1	100.0	49.9	4.0	20.7	9.2	16.2		
Nasal decongestants . . . . .	17,724	1.2	100.0	60.5	11.9	*11.6	9.7	6.4		
Antitussives/expectorants/mucolytics . . . . .	21,955	1.5	100.0	71.5	4.8	7.5	8.7	7.6		
Antihistamines . . . . .	54,390	3.6	100.0	52.8	4.8	18.3	7.4	16.6		
Cold remedies . . . . .	1,165	0.1	100.0	*	*	*	*7.0	*		
Corticosteroid-inhalation/nasal . . . . .	22,950	1.5	100.0	53.5	9.9	26.8	7.8	2.1		
Unclassified/miscellaneous . . . . .	42,446	2.8	100.0	56.7	9.6	17.2	7.4	9.1		
Unclassified . . . . .	37,265	2.5	100.0	56.5	8.8	17.8	7.7	9.3		
Pharmaceutical aids . . . . .	1,621	0.1	100.0	63.7	*	*	5.6	5.3		
Homeopathic products . . . . .	2,377	0.2	100.0	45.8	*15.6	*30.7	5.9	*		
	Standard error in thousands								Standard error of percent	
All drug mentions . . . . .	62,436	...	...	1.4	0.6	1.1	0.7	0.5		
Anesthetic drugs . . . . .	1,270	0.1	...	2.1	5.1	2.3	1.8	2.6		
Anesthetics, local (injectable) . . . . .	1,115	0.1	...	2.5	6.5	3.1	1.9	2.8		
Anesthetics, general . . . . .	151	0.0	...	...	...	...	11.5	10.3		
Adjuncts to anesthesia/analeptics . . . . .	219	0.0	...	...	...	...	1.4	5.1		
Medicinal gases . . . . .	169	0.0	...	...	...	13.1	...	...		
Anesthetics, topical . . . . .	92	0.0	...	...	...	...	8.5	7.6		
Anesthetics, rectal . . . . .	114	0.0	...	...	...	...	...	...		
Antidotes . . . . .	170	0.0	...	...	...	8.8	2.7	5.2		
Antidotes, specific . . . . .	134	0.0	...	...	...	...	...	7.5		
Antidotes, general . . . . .	62	0.0	...	...	...	...	...	21.0		
Antitoxins/antivenins . . . . .	82	0.0	...	...	...	...	...	...		
Antimicrobial agents . . . . .	6,382	0.3	...	1.5	0.6	0.8	0.8	0.8		
Penicillins . . . . .	2,303	0.1	...	1.9	0.6	1.1	1.0	0.9		
Cephalosporins . . . . .	1,790	0.1	...	2.2	0.9	1.0	0.9	1.5		
Erythromycins/lincosamides/macrolides . . . . .	1,337	0.1	...	2.4	0.6	1.7	1.0	1.1		
Tetracyclines . . . . .	580	0.0	...	3.8	1.0	3.5	1.1	0.8		
Aminoglycosides . . . . .	283	0.0	...	5.3	3.3	...	1.1	3.5		
Sulfonamides and trimethoprim . . . . .	833	0.0	...	3.3	1.3	2.7	1.5	1.4		
Urinary tract antiseptics . . . . .	377	0.0	...	3.9	2.7	...	0.9	0.7		
Miscellaneous antibacterial agents . . . . .	567	0.0	...	3.7	1.0	4.1	1.0	1.5		
Antimycobacterial/anti-leprosy agents . . . . .	203	0.0	...	...	...	...	11.3	...		
Quinolones/derivatives . . . . .	878	0.1	...	3.0	1.9	1.7	0.9	1.2		
Antifungals . . . . .	175	0.0	...	...	...	...	12.2	...		
Antiviral agents . . . . .	603	0.0	...	4.5	1.3	4.5	2.7	1.0		
Hematologic agents . . . . .	1,335	0.1	...	2.4	0.7	2.3	1.0	0.7		
Deficiency anemias . . . . .	876	0.1	...	3.9	...	4.1	1.7	0.4		
Anticoagulants/thrombolytics . . . . .	907	0.0	...	2.9	0.9	2.3	1.0	1.1		
Blood components/substitutes . . . . .	24	0.0	...	...	...	...	...	...		
Hemostatics/antihemophilics . . . . .	64	0.0	...	...	...	...	...	12.2		
Cardiovascular-renal drugs . . . . .	11,169	0.4	...	1.9	0.8	1.6	0.8	0.4		
Cardiac glycosides . . . . .	985	0.1	...	3.6	0.9	3.3	0.8	0.7		
Antiarrhythmic agents . . . . .	266	0.0	...	5.8	...	5.1	1.5	1.7		
Antianginal agents . . . . .	945	0.0	...	3.4	0.8	2.9	1.0	1.7		
Vascular disorders, cerebral/peripheral . . . . .	425	0.0	...	4.6	3.3	3.0	1.4	...		
Agents used to treat shock/hypotension . . . . .	107	0.0	...	...	...	...	...	8.2		
Antihypertensive agents . . . . .	1,281	0.1	...	2.6	1.1	2.0	1.1	0.4		
Diuretics . . . . .	1,800	0.1	...	2.4	0.9	2.0	1.0	0.6		
Coronary vasodilators . . . . .	76	0.0	...	...	...	...	...	...		
Relaxants/stimulants, urinary tract . . . . .	346	0.0	...	7.2	7.0	...	1.8	1.0		
Calcium channel blockers . . . . .	2,265	0.1	...	2.5	0.9	2.1	0.9	0.4		

See footnotes at end of table.

**Table 20. Annual number and percent distribution of drug mentions at ambulatory care visits by therapeutic classification, with percent distribution by setting type: United States, 1999–2000—Con.**

Therapeutic classification <sup>1</sup>	Number of mentions in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Standard error in thousands			Standard error of percent				
Carbonic anhydrase inhibitors . . . . .	125	0.0	...	...	...	...	...	...
Beta blockers . . . . .	1,980	0.1	...	2.2	1.0	1.9	1.0	0.3
Alpha agonist/alpha blockers . . . . .	1,177	0.1	...	2.6	1.3	2.1	1.1	0.5
ACE <sup>2</sup> inhibitors . . . . .	2,259	0.1	...	2.1	0.9	1.8	0.9	0.4
Central nervous system . . . . .	6,782	0.3	...	2.1	0.5	2.1	0.8	0.4
Sedatives and hypnotics . . . . .	1,065	0.1	...	3.9	1.9	3.9	1.2	1.4
Antianxiety agents . . . . .	1,583	0.1	...	2.6	1.0	2.3	0.8	0.7
Antipsychotics/antimanics . . . . .	1,158	0.1	...	4.0	...	4.6	2.3	1.0
Antidepressants . . . . .	3,710	0.2	...	2.4	0.5	2.5	0.9	0.3
Anorexiants/CNS <sup>3</sup> stimulants . . . . .	813	0.1	...	4.4	...	4.6	1.4	0.3
CNS <sup>3</sup> , miscellaneous . . . . .	133	0.0	...	...	...	9.8	2.4	...
Alzheimer-type dementia . . . . .	155	0.0	...	...	...	7.7	2.4	...
Antiemetics . . . . .	406	0.0	...	...	...	...	1.4	5.6
Contrast media/radiopharmaceutical . . . . .	918	0.1	...	10.1	11.7	...	1.8	0.6
Diagnostics, radiopaque and nonradioactive . . . . .	915	0.1	...	10.4	11.8	...	1.8	0.6
Gastrointestinal agents . . . . .	3,535	0.1	...	2.3	0.5	2.4	1.0	0.8
Disorders, acid/peptic . . . . .	2,727	0.1	...	2.4	0.6	2.4	1.0	0.6
Antidiarrheals . . . . .	476	0.0	...	4.9	...	4.3	1.3	1.7
Laxatives . . . . .	492	0.0	...	4.4	1.2	4.2	1.9	1.6
Miscellaneous gastrointestinals . . . . .	556	0.0	...	5.0	...	7.5	2.1	1.7
Antispasmodics/anticholinergics . . . . .	275	0.0	...	5.7	...	...	1.5	3.2
Antacids . . . . .	224	0.0	...	4.7	...	...	1.3	4.1
Metabolic/nutrients . . . . .	5,317	0.2	...	2.0	0.7	1.8	0.9	0.4
Hyperlipidemia . . . . .	2,164	0.1	...	2.5	0.8	2.3	0.9	0.3
Vitamins/minerals . . . . .	2,173	0.1	...	2.5	0.8	2.2	1.3	0.4
Nutrition, enteral/parenteral . . . . .	321	0.0	...	...	...	...	1.7	5.2
Replenishers/regulators of electrolytes/water . . . . .	1,582	0.1	...	3.0	1.0	2.3	1.0	1.2
Calcium metabolism . . . . .	810	0.1	...	5.2	1.7	5.1	1.6	0.3
Hematopoietic growth factor . . . . .	386	0.0	...	...	...	...	5.5	...
Hormones/hormonal mechanisms . . . . .	8,317	0.3	...	2.3	0.8	2.2	0.8	0.4
Adrenal corticosteroids . . . . .	2,227	0.1	...	2.9	1.2	2.8	1.0	1.0
Androgens/anabolic steroids . . . . .	329	0.0	...	4.7	3.5	...	1.0	...
Estrogens/progestins . . . . .	2,188	0.1	...	2.2	1.1	1.9	0.9	0.3
Anterior pituitary/hypothalamic function . . . . .	118	0.0	...	...	...	...	...	...
Blood glucose regulators . . . . .	3,331	0.2	...	3.3	1.1	3.4	1.0	0.4
Thyroid/antithyroid . . . . .	2,142	0.1	...	5.1	1.1	6.0	1.2	0.5
Antidiuretics . . . . .	55	0.0	...	...	...	...	...	...
Relaxants/stimulants uterine . . . . .	140	0.0	...	...	...	...	...	...
Contraceptives . . . . .	875	0.1	...	2.6	...	1.6	1.3	0.5
Infertility . . . . .	142	0.0	...	...	...	...	...	...
Immunologics . . . . .	4,193	0.3	...	3.2	0.6	3.2	1.1	0.5
Vaccines/antisera . . . . .	3,832	0.2	...	2.4	...	2.1	1.2	0.6
Immunomodulators . . . . .	292	0.0	...	...	...	8.2	6.8	...
Allergenic extracts . . . . .	1,252	0.1	...	17.4	9.9	17.8	3.2	...
Skin/mucous membrane . . . . .	3,547	0.2	...	2.3	0.7	2.3	0.7	0.4
Antiseptics/disinfectants . . . . .	493	0.0	...	6.2	3.3	6.2	1.5	2.2
Dermatologics, miscellaneous . . . . .	843	0.0	...	3.3	0.9	3.1	0.7	0.3
Keratolytics . . . . .	158	0.0	...	...	...	8.5	...	...
Topical steroids . . . . .	1,559	0.1	...	2.9	1.3	3.0	1.1	0.4
Burn/sunburn, sunscreen/suntan products . . . . .	111	0.0	...	...	...	...	...	...
Acne products . . . . .	491	0.0	...	...	...	3.5	0.7	...
Topical anti-infectives . . . . .	1,149	0.1	...	2.7	0.7	2.3	0.9	0.6
Dermatitis/antipruritics . . . . .	126	0.0	...	...	...	...	3.0	...
Topical analgesics . . . . .	459	0.0	...	7.0	5.6	6.1	1.0	2.3
Neurologic drugs . . . . .	2,123	0.1	...	2.2	0.7	2.1	0.9	0.7
Extrapyramidal movement disorders . . . . .	368	0.0	...	5.7	...	6.0	2.5	1.1
Skeletal muscle hyperactivity . . . . .	953	0.0	...	2.8	1.2	2.0	0.8	1.3
Anticonvulsants . . . . .	1,376	0.1	...	2.9	0.7	2.8	1.4	0.6

See footnotes at end of table.

**Table 20. Annual number and percent distribution of drug mentions at ambulatory care visits by therapeutic classification, with percent distribution by setting type: United States, 1999–2000—Con.**

Therapeutic classification <sup>1</sup>	Number of mentions in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
	Standard error in thousands			Standard error of percent				
Oncolytics . . . . .	1,832	0.1	...	3.1	1.9	6.0	2.3	0.3
Antineoplastics, miscellaneous . . . . .	790	0.1	...	...	...	7.1	4.2	...
Hormonal/biological response modulators . . . . .	565	0.0	...	5.6	5.2	9.1	1.5	...
Antimetabolites . . . . .	875	0.1	...	...	...	7.2	2.7	...
Antibiotics, alkaloids, enzymes . . . . .	241	0.0	...	...	...	...	6.8	...
DNA damaging drugs . . . . .	205	0.0	...	...	...	...	6.6	...
Ophthalmics . . . . .	3,891	0.3	...	1.5	2.2	0.6	0.6	0.4
Glaucoma . . . . .	1,456	0.1	...	2.7	3.0	...	0.7	0.2
Cycloplegics/mydriatics . . . . .	1,043	0.1	...	...	3.5	...	1.6	0.5
Ocular anti-infective/anti-inflammatory . . . . .	1,554	0.1	...	2.3	3.0	...	0.8	0.6
Miscellaneous ophthalmics . . . . .	1,182	0.1	...	...	2.8	...	0.9	1.1
Decongestants/antiallergy agents . . . . .	704	0.0	...	...	12.4	...	1.4	...
Contact lens products . . . . .	65	0.0	...	...	...	...	9.2	...
Otologics . . . . .	635	0.0	...	3.6	1.3	3.2	1.2	1.5
Otic, topical (Misc) . . . . .	376	0.0	...	4.4	2.8	...	1.7	1.9
Vertigo/motion sickness/vomiting . . . . .	460	0.0	...	4.9	0.9	4.9	1.5	2.2
Relief of pain . . . . .	9,227	0.3	...	1.8	0.7	1.4	0.7	1.1
Analgesics/general . . . . .	822	0.0	...	4.7	1.6	4.4	1.6	1.5
Analgesics, narcotic . . . . .	1,777	0.1	...	2.8	1.4	2.3	0.9	2.2
Analgesics, non-narcotic . . . . .	3,254	0.1	...	1.7	0.8	1.2	0.8	1.2
Antimigraine/other headaches . . . . .	397	0.0	...	5.0	...	4.7	1.6	1.1
Arthralgias . . . . .	1,017	0.1	...	4.9	3.3	6.1	1.1	0.5
Antigout . . . . .	463	0.0	...	5.0	...	4.7	1.5	0.7
NSAID <sup>4</sup> . . . . .	3,785	0.1	...	2.2	0.9	1.7	0.8	1.1
Antiparasitics . . . . .	814	0.1	...	5.9	...	7.3	2.3	0.7
Antiprotozoals . . . . .	266	0.0	...	4.8	...	...	2.6	0.9
Scabicides/pediculicides . . . . .	118	0.0	...	...	...	...	3.7	...
Antimalarials . . . . .	676	0.0	...	...	...	9.9	3.1	...
Respiratory tract . . . . .	10,051	0.4	...	2.5	0.6	3.0	0.8	0.7
Antiasthmatics/bronchodilators . . . . .	2,999	0.1	...	3.0	0.7	3.7	0.9	1.1
Nasal decongestants . . . . .	1,451	0.1	...	3.9	2.6	3.6	1.3	0.7
Antitussives/expectorants/mucolytics . . . . .	1,620	0.1	...	2.4	0.8	1.7	1.1	0.7
Antihistamines . . . . .	3,522	0.1	...	2.6	0.6	3.0	0.8	1.1
Cold remedies . . . . .	305	0.0	...	...	...	...	2.9	...
Corticosteroid-inhalation/nasal . . . . .	2,152	0.1	...	4.2	1.5	5.0	1.2	0.3
Unclassified/miscellaneous . . . . .	2,400	0.1	...	2.8	1.0	2.1	0.7	0.7
Unclassified . . . . .	2,147	0.1	...	2.9	1.0	2.3	0.7	0.7
Pharmaceutical aids . . . . .	254	0.0	...	7.7	...	...	1.4	1.4
Homeopathic products . . . . .	448	0.0	...	9.0	4.8	11.0	1.6	...

\* Figure does not meet standard of reliability or precision.

... Category not applicable.

0.0 Quantity is greater than zero but less than 0.05.

<sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (19).<sup>2</sup>ACE is angiotensin converting enzyme.<sup>3</sup>CNS is central nervous system.<sup>4</sup>NSAID is non-steroidal anti-inflammatory drug.

NOTE: Numbers may not add to totals because of rounding and because subcategories with fewer than 30 records were omitted. Figures are annual averages.

**Table 21. Annual number and rate of the top 35 specific therapeutic classes of drug mentions at ambulatory care visits, with percentage change since 1993–94 and percentage of change accounted for by each class: United States, 1999–2000**

Therapeutic classification <sup>1</sup>	1999–2000 drug mentions	Drug mention rate <sup>2</sup>	Percent difference since 1993–94	Percent contributed to total increase
Total . . . . .	1,498,266	153.0	15.8	100.0
Antiarthritics . . . . .	68,629	7.0	10.0	2.9
Antidepressants . . . . .	59,476	6.1	43.1	10.8
Vaccines/antiserum . . . . .	54,430	5.6	-0.4	-0.1
Analgesics, non-narcotic . . . . .	53,849	5.5	4.2	0.9
Analgesics, narcotic . . . . .	53,231	5.4	25.2	5.7
Disorders, acid/peptic . . . . .	48,754	5.0	30.0	6.2
Blood glucose regulators . . . . .	45,933	4.7	46.8	9.1
Antiasthmatics/bronchodilators . . . . .	43,060	4.4	10.6	1.9
Antihistamines . . . . .	42,789	4.4	44.5	8.0
Penicillins . . . . .	41,294	4.2	-46.0	-8.0
Diuretics . . . . .	40,619	4.1	14.2	2.4
Hyperlipidemia . . . . .	36,514	3.7	67.3	10.4
ACE <sup>3</sup> inhibitors . . . . .	36,450	3.7	35.6	5.5
Calcium channel blockers . . . . .	34,021	3.5	-10.1	-1.5
Estrogens/progestins . . . . .	32,361	3.3	21.9	3.0
Adrenal corticosteroids . . . . .	31,650	3.2	19.0	2.5
Cephalosporins . . . . .	30,693	3.1	-21.7	-2.8
Topical steroids . . . . .	30,316	3.1	17.1	2.2
Vitamins/minerals . . . . .	29,910	3.1	10.0	1.3
Antianxiety agents . . . . .	27,445	2.8	13.5	1.6
Antihypertensive agents . . . . .	25,157	2.6	65.5	7.0
Beta blockers . . . . .	24,564	2.5	40.1	4.2
Replenishers/regulators of electrolytes/water . . . . .	24,318	2.5	32.5	3.3
Nasal decongestants . . . . .	23,580	2.4	-31.0	-3.1
Erythromycins/lincosamides/macrolides . . . . .	23,136	2.4	-0.4	0.0
Thyroid/antithyroid . . . . .	21,369	2.2	37.8	3.4
Corticosteroid-inhalation/nasal . . . . .	20,039	2.0	36.3	3.1
Anticonvulsants . . . . .	19,826	2.0	47.2	4.0
Antitussives/expectorants/mucolytics . . . . .	18,403	1.9	14.3	1.1
Alpha agonist/alpha blockers . . . . .	17,442	1.8	20.5	1.5
Sedatives and hypnotics . . . . .	15,994	1.6	24.6	1.7
Ocular anti-infective/anti-inflammatory . . . . .	15,925	1.6	9.7	0.7
Anticoagulants/thrombolytics . . . . .	15,005	1.5	40.7	2.6
Dermatologics, miscellaneous . . . . .	14,852	1.5	-12.9	-0.8
Topical anti-infectives . . . . .	14,627	1.5	-30.9	-1.9

<sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (19).<sup>2</sup>Drug mention rate is number of drugs per 100 visits.<sup>3</sup>ACE is angiotensin converting enzyme.

**Table 22. Annual population rates of drug mentions at ambulatory care visits for the top 20 specific therapeutic classes, by patient age and sex: United States, 1999–2000**

Therapeutic class <sup>1</sup>	Patient age in years							Sex	
	All ages	Under 15	15–24	25–44	45–64	65–74	75 and over	Female	Male
	Number of mentions per 1,000 persons <sup>2</sup>								
NSAID <sup>3</sup>	291.8	153.9	202.8	285.4	374.9	466.4	574.2	333.0	248.4
Analgesics, non-narcotic	264.4	210.2	151.2	200.2	306.6	500.0	680.3	274.9	253.3
Antidepressants	219.8	28.7	103.5	247.1	370.4	338.0	397.5	287.2	148.9
Antihistamines	199.3	184.0	150.7	184.6	231.5	265.0	259.4	245.2	151.0
Vaccines/antisera	196.5	644.5	82.5	51.2	53.8	119.7	141.8	193.9	199.3
Antiasthmatics/bronchodilators	171.5	206.0	93.1	113.2	171.7	346.1	346.9	190.2	151.9
Blood glucose regulators	168.3	5.8	15.1	69.2	302.0	683.9	618.5	174.6	161.7
Disorders, acid/peptic	166.4	23.9	39.4	109.4	259.0	521.6	591.6	188.1	143.6
Penicillins	151.3	365.6	126.1	89.7	71.9	78.6	93.0	157.7	144.6
ACE <sup>4</sup> inhibitors	147.8	*2.8	7.1	47.7	251.9	572.0	730.0	155.4	139.9
Hyperlipidemia	133.7	*1.0	*3.2	34.8	255.1	609.5	500.7	127.0	140.7
Calcium channel blockers	130.9	*1.9	*4.7	29.1	213.4	538.9	724.5	143.2	118.0
Beta blockers	122.6	*2.7	8.7	45.4	205.4	437.7	621.3	135.9	108.5
Diuretics	119.3	*4.7	2.0	21.4	149.9	475.3	882.1	139.9	97.7
Estrogens/progestins	118.6	*1.3	35.6	46.4	307.8	316.9	212.8	230.5	1.1
Adrenal corticosteroids	115.9	74.7	49.1	91.7	146.9	237.9	319.0	131.0	100.0
Cephalosporins	112.5	137.6	94.2	101.0	99.4	128.0	154.7	122.4	102.0
Analgesics, narcotic	109.8	8.2	73.8	125.5	145.3	214.8	260.0	131.4	87.1
Vitamins/minerals	109.5	27.6	122.8	104.0	106.5	280.9	244.9	165.5	50.6
Replenishers/regs of electrolytes/water balance	88.2	33.8	33.4	44.4	109.4	259.1	403.6	115.2	59.8
	Standard error of rate								
NSAID <sup>3</sup>	13.9	13.2	12.8	16.2	22.5	38.5	47.4	16.5	13.6
Analgesics, non-narcotic	11.9	14.7	9.9	11.5	17.9	39.3	48.0	12.8	13.2
Antidepressants	13.6	4.0	10.8	18.1	25.9	34.1	35.5	18.0	11.2
Antihistamines	12.9	20.5	13.6	14.6	19.0	30.9	23.8	17.5	10.3
Vaccines/antisera	14.0	58.0	10.8	5.5	6.9	18.5	23.7	14.8	16.7
Antiasthmatics/bronchodilators	11.0	24.5	10.5	11.7	14.8	34.9	43.2	14.1	10.3
Blood glucose regulators	12.2	1.5	3.7	9.3	25.4	68.4	52.2	14.2	11.9
Disorders, acid/peptic	10.0	4.2	5.1	8.9	18.3	46.3	52.7	12.5	10.3
Penicillins	8.4	25.6	10.9	7.9	6.2	11.0	15.4	8.7	9.5
ACE <sup>4</sup> inhibitors	8.3	0.9	1.8	4.6	17.5	44.9	51.8	10.2	7.9
Hyperlipidemia	7.9	0.5	1.4	4.7	17.6	47.8	42.8	9.1	8.9
Calcium channel blockers	8.3	0.8	1.6	3.3	15.3	43.6	56.4	10.0	8.1
Beta blockers	7.3	0.9	2.4	5.0	16.0	34.5	45.0	8.8	7.6
Diuretics	6.6	1.5	0.6	2.4	9.9	37.9	59.6	8.1	6.3
Estrogens/progestins	8.0	0.4	5.9	4.8	22.6	31.9	24.7	15.6	0.3
Adrenal corticosteroids	8.2	8.5	7.5	8.6	13.1	24.0	34.5	10.3	7.5
Cephalosporins	6.6	13.1	8.6	8.8	7.0	21.5	17.0	8.7	5.9
Analgesics, narcotic	6.5	1.0	9.4	7.9	11.3	23.2	22.8	8.1	6.4
Vitamins/minerals	8.0	6.0	17.5	10.7	10.6	35.1	26.7	13.3	4.9
Replenishers/regs of electrolytes/water balance	5.8	3.9	4.4	5.4	8.8	27.3	39.3	8.1	4.9

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (19).

<sup>2</sup>Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999 (with short-term projection to dates in 2000)" and are available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

<sup>3</sup>NSAID is non-steroidal anti-inflammatory drug.

<sup>4</sup>ACE is angiotensin converting enzyme.

NOTE: Figures are annual averages.



**Table 23. Annual population rates of drug mentions at ambulatory care visits for the top 20 specific therapeutic classes, by selected patient and provider characteristics: United States, 1999–2000**

Therapeutic class <sup>1</sup>	All visits	Patient race		Expected source of payment				MSA <sup>2</sup> status of provider	
		White	Black	Medicare	Medicaid	Uninsured	Private insurance	MSA	Non-MSA
Number of mentions per 1,000 persons <sup>3,4</sup>									
NSAID <sup>5</sup>	291.8	284.9	380.1	382.9	288.1	175.4	198.8	290.9	295.8
Analgesics, non-narcotic	264.4	263.9	285.7	444.4	353.7	161.6	162.2	259.4	284.3
Antidepressants	219.8	240.7	139.9	348.8	208.0	166.6	148.1	219.1	222.8
Antihistamines	199.3	203.3	180.8	184.5	224.4	92.1	171.9	199.0	200.5
Vaccines/Antisera	196.5	190.7	225.0	90.9	388.9	81.4	156.2	203.5	169.5
Antiasthmatics/bronchodilators	171.5	174.0	183.0	278.4	245.6	72.3	120.0	178.6	144.0
Blood glucose regulators	168.3	157.4	241.7	466.4	178.3	35.7	95.4	161.0	197.0
Disorders, acid/peptic	166.4	175.3	129.3	425.8	174.8	48.8	102.5	163.6	177.3
Penicillins	151.3	150.8	170.8	67.3	268.4	98.2	124.5	141.9	188.2
ACE <sup>6</sup> inhibitors	147.8	150.9	151.7	475.2	92.6	38.0	84.1	141.7	172.0
Hyperlipidemia	133.7	141.5	98.6	417.8	63.7	25.4	82.2	132.5	138.7
Calcium channel blockers	130.9	123.3	191.1	466.1	94.8	31.2	64.0	127.8	143.1
Beta blockers	122.6	127.9	98.2	377.9	66.6	30.2	72.8	119.8	133.4
Diuretics	119.3	120.6	138.6	507.8	70.7	22.6	48.2	113.1	143.9
Estrogens/progestins	118.6	129.9	65.6	193.3	65.6	42.8	99.6	114.9	133.6
Adrenal corticosteroids	115.9	120.8	100.9	213.1	102.8	51.5	85.8	113.5	125.3
Cephalosporins	112.5	117.9	103.4	108.1	133.5	84.2	86.4	105.0	141.7
Analgesics, narcotic	109.8	113.2	115.3	186.9	113.0	83.4	68.8	105.0	128.5
Vitamins/minerals	109.5	113.4	102.7	197.7	158.0	31.7	76.3	106.9	119.8
Replenishers/regs of electrolytes/water balance	88.2	91.9	90.3	253.3	63.5	30.6	53.9	84.7	101.9
Standard error of rate									
NSAID <sup>5</sup>	13.9	14.2	31.9	30.9	21.6	13.5	10.1	15.1	32.8
Analgesics, non-narcotic	11.9	13.0	21.2	30.6	33.0	11.3	19.1	11.9	36.7
Antidepressants	13.6	15.7	15.5	29.3	25.7	19.9	14.0	14.0	38.0
Antihistamines	12.9	13.2	23.5	16.2	30.2	9.6	8.0	14.1	26.5
Vaccines/antisera	14.0	14.7	37.9	13.7	58.1	15.2	11.5	16.5	28.4
Antiasthmatics/bronchodilators	11.0	11.9	18.1	26.3	26.1	8.1	6.0	12.3	19.9
Blood glucose regulators	12.2	11.8	33.8	40.0	23.5	5.4	4.4	12.8	31.7
Disorders, acid/peptic	10.0	10.9	15.0	37.5	21.5	5.8	6.8	10.8	26.5
Penicillins	8.4	8.8	22.5	8.0	23.4	8.9	8.4	8.1	27.3
ACE <sup>6</sup> inhibitors	8.3	8.8	18.3	33.4	11.9	6.3	8.8	8.2	26.1
Hyperlipidemia	7.9	8.8	12.6	29.7	8.3	6.0	3.7	8.4	23.1
Calcium channel blockers	8.3	7.9	22.7	36.8	13.9	5.3	5.6	8.4	22.8
Beta blockers	7.3	7.9	11.5	29.7	9.1	6.0	6.0	7.1	22.6
Diuretics	6.6	7.2	15.6	33.9	8.6	3.6	4.5	6.6	20.1
Estrogens/progestins	8.0	9.2	7.7	19.0	8.9	7.1	6.7	8.6	21.6
Adrenal corticosteroids	8.2	9.2	11.0	20.7	10.9	6.8	6.6	8.5	20.2
Cephalosporins	6.6	7.1	11.6	13.5	14.5	8.2	8.2	7.2	16.3
Analgesics, narcotic	6.5	7.2	13.4	13.8	11.1	7.3	8.4	7.0	16.3
Vitamins/minerals	8.0	8.7	16.5	21.7	25.5	4.7	4.1	7.9	23.6
Replenishers/regs of electrolytes/water balance	5.8	6.3	10.9	23.2	6.7	3.8	7.6	5.5	16.9

<sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1995 edition (NDC) (19).

<sup>2</sup>MSA is metropolitan statistical area.

<sup>3</sup>Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980–1999 (with short-term projection to dates in 2000)" and are available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

<sup>4</sup>Denominators for primary expected source of payment rates are from the 1999 and 2000 estimates of health insurance coverage from the *Current Population Survey*.

<sup>5</sup>NSAID is non-steroidal anti-inflammatory drug.

<sup>6</sup>ACE is angiotensin converting enzyme.

NOTE: Figures are annual averages.

# Appendix I

## Technical Notes

### Data collection

The National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) data collection is authorized under Section 308(d) of the Public Health Service Act (42 United States Code Section 306 [242K]). Participation is voluntary. A total of 2,466 in-scope, or eligible, physicians participated in the 1999 and 2000 NAMCS, which corresponds to an average response rate of 65.3 percent, and 48,129 Patient Record forms (PRFs) were collected.

The 1999 NHAMCS sample consisted of 489 hospitals. Of these, 427 were in-scope. The overall hospital response rate was 95 percent. There were 376 participating EDs that provided data for 452 emergency service areas, and 241 participating OPDs provided data for 858 clinics. The overall response rate was 92 percent for EDs and 82 percent for OPDs. The 2000 NHAMCS sample consisted of 488 hospitals. Of these, 413 were eligible to participate. The overall hospital response rate was 96 percent. There were 376 participating EDs that provided data for 446 emergency service areas, and 221 participating OPDs provided data for 829 clinics. The overall response rate was 97 percent for EDs and 91 percent for OPDs. In all, 46,725 ED PRFs and 56,997 OPD PRFs were collected from the participating hospitals.

The U.S. Census Bureau, acting as the data collection agent for both surveys, provided training to field representatives (FRs) throughout the Nation who, in turn, oversaw data collection at physician offices and hospitals. FRs contacted physicians and hospitals for induction into the surveys after NCHS mailed an advance letter notifying the providers of their selection in the survey. For the NAMCS, medical staff most often provided the information requested on the PRFs (“Appendix III”); however, in some

cases, FRs performed data abstraction from medical records. For the NHAMCS, FR abstraction was the predominant method of data collection. Neither the patient’s name nor address was collected. Confidentiality of the data collected in the survey is protected under the Privacy Act, Public Health Service Act, and Title 42 of the United States Code, Section 242m(d).

### Sampling errors

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

The standard errors that were used in tests of significance for this report were calculated using SUDAAN software. SUDAAN computes standard errors using a first-order Taylor approximation of the deviation of estimates from their expected values. A

description of the software and the approach it uses has been published (25). 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 percentage of the estimate.

Approximate RSEs for aggregate estimates may be calculated using the following general formula, where  $x$  is the aggregate of interest in thousands, and  $A$  and  $B$  are the appropriate coefficients from table I.

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

Similarly, approximate RSEs for estimates of percentages may be calculated using the following general formula, where  $p$  is the percentage of interest expressed as a proportion, and  $x$  is the denominator of the percentage in thousands, using the appropriate coefficient from table I.

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

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

**Table I. Coefficients appropriate for determining approximate relative standard errors by type of estimate and ambulatory care setting: National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, 1999–2000**

Setting and type of estimate	Coefficient for use with estimates in thousands		Lowest reliable estimate in thousands <sup>1</sup>
	A	B	
Combined settings			
Visits . . . . .	0.001441	19.799	224
Drug mentions . . . . .	0.002840	25.825	296
Physician offices			
Visits . . . . .	0.001963	46.186	525
Drug mentions . . . . .	0.003452	111.412	1,287
Outpatient departments			
Visits . . . . .	0.008124	4.591	56
Drug mentions . . . . .	0.010701	9.322	118
Emergency departments			
Visits . . . . .	0.001519	3.828	43
Drug mentions . . . . .	0.002419	9.180	105

<sup>1</sup>Estimates with relative standard errors of greater than 30 percent are considered to be unreliable. The lowest reliable estimates shown here were determined by approximating relative standard errors from the generalized variance curves for each data set. However, estimates based on fewer than 30 cases are considered to be unreliable regardless of the size of the relative standard error and have been indicated in this report with an asterisk (no number shown).

## Published and flagged estimates

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

In this report, estimates are not presented if they are based on fewer than 30 cases in the sample data; only an asterisk (\*) appears in the tables. Estimates based on 30 or more cases are asterisked only if the estimate's RSE exceeds 30 percent. Approximate RSEs were computed using a generalized variance curve and the computed curve coefficients as described above.

## Estimation

Estimates from the 1999 and 2000 NAMCS and NHAMCS were derived by multistage estimation procedures that produce essentially unbiased estimates. The estimation for NAMCS has four basic components: 1) inflation by reciprocals of the probabilities of selection; 2) adjustment for nonresponse; 3) a ratio adjustment to fixed totals; and 4) weight smoothing. The estimation for NHAMCS has three basic components: 1) inflation by reciprocals of the sampling selection probabilities; 2) adjustment for nonresponse; and 3) a population weighting ratio adjustment. The population weighting ratio adjustment for OPD estimates was replaced by an adjustment that controls for effects of rotating hospital sample panels into and out of the sample each year. (The full NHAMCS hospital sample is partitioned into 16 panels that are rotated into the sample over 16 periods of 4 weeks each so that only 13 panels are used in any single year.) The sampling weights of some OPDs were permanently trimmed to prevent single OPDs from contributing more than 15 percent of their region's total to OPD visit estimates.

## Nonsampling errors

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, these errors were kept to a minimum by procedures built into the operation of the survey. To eliminate ambiguities and encourage uniform reporting, attention was given to the phrasing of questions, terms, and definitions. Also, most data items and survey procedures were pretested. Quality control procedures and consistency and edit checks reduced errors in data coding and processing. The error rate (which includes coding and keying errors) ranged from 0.0 to 2.0 for both surveys.

*Adjustments for survey nonresponse*—Estimates from NAMCS data were adjusted to account for sample physicians who were in-scope but did not participate in the study. This adjustment was calculated to minimize the impact of nonresponse on final estimates. The weights of visits for physicians similar to the nonrespondent physicians were inflated to account for visits represented by the nonrespondent physicians. For this purpose, physicians were judged similar if they had the same specialty designation and practiced in the same primary sampling unit.

NHAMCS data were adjusted to account for two types of nonresponse. The first type of nonresponse occurred when a sample hospital refused to provide information about its ED or OPD that was publicly known to exist. In this case, the weights of visits to hospitals similar to the nonrespondent hospitals were inflated to account for visits represented by the nonrespondent hospitals. Beginning with 1998 data, hospitals were judged to be similar if they were in the same region and, except in the West, if they had the same MSA status (in an MSA vs. not in an MSA). Similarity of hospitals also required being in the same ownership control group (voluntary nonprofit vs. other). This adjustment was made separately by department type.

The second type of nonresponse occurred when a sample emergency service area (ESA) within a respondent hospital failed to provide completed PRFs for a sample of patient visits. In the ED, the weights of visits from responding ESAs were inflated to account for visits to similar nonresponding ESAs where ESAs were judged to be similar if they were in the same region. Except in the West, ESA similarity also required having the same MSA status and, in MSAs, being in the same ownership control group (voluntary nonprofit vs. other).

For the OPD, weights of visits from responding OPD clinics were inflated to account for visits to similar nonresponding OPD clinics where OPD clinics were judged to be similar if they were in the same region, clinic type, and ownership control group (voluntary nonprofit vs. other). There were six OPD clinic types: general medicine, pediatrics, surgery, obstetrics and gynecology, alcohol and/or substance abuse, and other OPD clinic. Beginning with 1998 data, formation of groups of similar clinics also considered the MSA status of the clinic (in an MSA vs. not in an MSA) with the following two exceptions: in the West, MSA status was not considered; and in non-MSA clinics in the other three regions, ownership control group (voluntary nonprofit vs. other) was not considered.

*Adjustments for item nonresponse*—Missing data for several of the items mentioned in this report were imputed by randomly assigning a value from a PRF with similar characteristics. These items include patient's birth date (used to determine age), sex, and race. In the NAMCS, imputations were based on physician specialty, geographic region, and 3-digit ICD-9-CM code for primary diagnosis. In the NHAMCS, imputations for ED data were based on ED size, geographic region, immediacy with which patient should be seen, and 3-digit ICD-9-CM code for primary diagnosis; for OPD data, imputations were based on geographic region, OPD size by clinic, and 3-digit ICD-9-CM code for primary diagnosis.

Additional information on item nonresponse for data items not included in this report and for item nonresponse

rates by setting has been published (5,6, 9–12).

## Tests of significance and rounding

In this report, the determination of statistical inference is based on the two-tailed t-test and the chi-square test. The Bonferroni inequality was used to establish the critical value for statistically significant differences (0.05 level of significance) based on the number of possible comparisons within a particular variable (or combination of variables) of interest. Terms relating to differences such as “greater than” or “less than” indicate that the difference is statistically significant. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant. Chi-square tests and logistic regression models were performed using the SUDAAN routine PROC CROSSTAB, which takes into account the complex sample designs used in the NAMCS and NHAMCS.

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

## Diagnosis and injury groupings

Physicians’ diagnoses, shown in [table 9](#) of this report, are grouped according to a classification system developed for use with NAMCS and NHAMCS data. This grouping is based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD–9–CM)* (17) and reflects the frequency of particular diagnoses occurring in the NAMCS and NHAMCS data. It is meant to provide additional detail on the diagnostic content of ambulatory care as characterized by the surveys. [Table II](#) shows the groupings used to categorize data in [table 9](#).

[Table 14](#) of this report presents data on the intent and mechanism producing injuries that resulted in ambulatory care

visits to physician offices, EDs, and OPDs. Cause of injury is collected for each sampled visit in the NAMCS and NHAMCS and is coded according to the ICD–9–CM’s “Supplementary Classification of External Causes of Injury and Poisoning.” For [table 14](#), however, the first-listed cause of injury data were regrouped to highlight the interaction between intentionality of the injury and the mechanism that actually produced the injury. [Table III](#) displays the groupings used in [table 14](#).

Estimates on injury-related visits by body part and type of injury are presented in [table 15](#). First-listed diagnosis codes were used and regrouped according to the “Barell Injury Diagnosis Matrix: Classification by Body Region and Nature of the Injury” (26). [Table IV](#) in the “Technical Notes” displays the regrouped diagnosis codes used in [table 15](#).

## Physician specialty groupings

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 (AOA). 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 presented in this report combine doctors of osteopathy with doctors of medicine, unless otherwise noted.

In this report, the data on office visits are presented using the broader categories of primary care, surgical, and medical specialties. [Table V](#) shows the specialties used to define these categories.

## 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 (27). 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. For this report, multiple race estimates are included in the “Other” race category. Estimates for specific race categories reflect visits where only a single race was reported. According to the same standards, 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.

## Population figures and rate calculation

The population figures used in computing annual visit rates by age, sex, and race for this report are shown in [table VI](#). [Table VII](#) shows the population figures used to compute annual visit rates by geographic region and MSA status. The figures represent 2-year averages of the estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000. Figures are 1990-based monthly postcensal estimates and are consistent with the downloadable series, “U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980 to 1999 (with short-term projection to dates in 2000)” available at the U.S. Census Bureau’s Web site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html).

Figures have been adjusted for net underenumeration using the 1990 National Population Adjustment Matrix.



Regional U.S. population estimates were obtained from the Division of Health Interview Statistics (DHIS), NCHS. DHIS estimates differ slightly from monthly postcensal estimates because of differences in the adjustment process.

Population estimates for 2000 could have been based on Census 2000 rather than using the post-censal 1990-based estimates provided in the 1999 and 2000 NAMCS and NHAMCS public use documentation. However, the latter estimates were chosen for consistency and averaging purposes. Research has shown that the change in visit rates due to switching from the 1990 census-based population estimates to Census 2000-based population estimates for age, sex, and race is minimal. To evaluate the effect of the change in 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. Therefore, it is reasonable to conclude that using the 1990-based estimates has little impact on observed rates and trends that cross these survey years. For more information on rate comparisons, see <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

**Table II. Reclassification of primary diagnosis codes for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data**

Primary diagnosis	ICD-9-CM code <sup>1</sup>
Infectious and parasitic diseases . . . . .	001-139
Streptococcal sore throat . . . . .	034.0
HIV infection . . . . .	042
Viral warts . . . . .	078.1
Unspecified viral and chlamydial infections . . . . .	079.9
Dermatophytosis . . . . .	110
Candidiasis . . . . .	112
Other infectious and parasitic diseases . . . . .	001-033,034.1-041.9,045.0-078.0,078.2-079.8,080-104, 111,114-139
Neoplasms . . . . .	140-239
Malignant neoplasm of colon and rectum . . . . .	153-154,197.5
Malignant neoplasm of skin . . . . .	172-173,176.0,198.2
Malignant neoplasm of breast . . . . .	174-175,198.81
Malignant neoplasm of prostate . . . . .	185
Malignant neoplasm of lymphatic and hematopoietic tissue . . . . .	176.5,196,200-208
Other malignant neoplasms . . . . .	140-152,155-171,176.1-176.4,176.6-184,186-195,197.0-197.4, 197.6-198.1,198.3-198.7,198.82-199,230-234
Benign neoplasm of skin . . . . .	216
Other benign neoplasm . . . . .	210-215,217-229
Neoplasm of uncertain behavior and unspecified nature . . . . .	235-239
Endocrine, nutritional and metabolic diseases, and immunity disorders . . . . .	240-279
Acquired hypothyroidism . . . . .	244
Other disorders of the thyroid gland . . . . .	240-243,245-246
Diabetes mellitus . . . . .	250
Disorders of lipid metabolism . . . . .	272
Obesity . . . . .	278.0
Other endocrine, nutritional and metabolic diseases and immunity disorders . . . . .	251-271,273-277,278.1-279
Diseases of the blood and blood-forming organs . . . . .	280-289
Anemias . . . . .	280-285
Other diseases of the blood and blood-forming organs . . . . .	286-289
Mental disorders . . . . .	290-319
Schizophrenic disorders . . . . .	295
Major depressive disorder . . . . .	296.2-296.3
Other psychoses . . . . .	290-294, 296.0-296.1,296.4-299
Anxiety states . . . . .	300.0
Neurotic depression . . . . .	300.4
Alcohol dependence syndrome . . . . .	303
Drug dependence and nondependent use of drugs . . . . .	304-305
Acute reaction to stress and adjustment reaction . . . . .	308-309
Depressive disorder, not elsewhere classified . . . . .	311
Attention deficit disorder . . . . .	314.0
Other mental disorders . . . . .	300.1-300.3,300.5-300.9,301-302,306-307,310,312-313,314.1-319
Diseases of the nervous system and sense organs . . . . .	320-389
Migraine . . . . .	346
Other disorders of the central nervous system . . . . .	320-326,330-337,340-345,347-349
Carpal tunnel syndrome . . . . .	354.0
Other disorders of the nervous system . . . . .	350-353,354.1-359
Retinal detachment and other retinal disorders . . . . .	361-362
Glaucoma . . . . .	365
Cataract . . . . .	366
Disorders of refraction and accommodation . . . . .	367
Conjunctivitis . . . . .	372.0-372.3
Disorders of eyelids . . . . .	373-374
Other disorders of the eye and adnexa . . . . .	360,363-364,368-369,370-371,372.4-372.9,375-379
Disorders of external ear . . . . .	380
Otitis media and Eustachian tube disorders . . . . .	381-382
Other diseases of the ear and mastoid process . . . . .	383-389

See footnotes at end of table.

**Table II. Reclassification of primary diagnosis codes for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data—Con.**

Primary diagnosis	ICD-9-CM code <sup>1</sup>
Diseases of the circulatory system . . . . .	390-459
Angina pectoris . . . . .	413
Coronary atherosclerosis . . . . .	414.0
Other ischemic heart disease . . . . .	410-412,414.1-414.9
Cardiac dysrhythmias . . . . .	427
Congestive heart failure . . . . .	428.0
Other heart disease . . . . .	391-392.0,393-398,402,404,415-416,420-426,428.1-429
Essential hypertension . . . . .	401
Cerebrovascular disease . . . . .	430-438
Diseases of the arteries, arterioles, and capillaries . . . . .	440-448
Hemorrhoids . . . . .	455
Other diseases of the circulatory system . . . . .	390,392.9,403,405,417,451-454,456-459
Diseases of the respiratory system . . . . .	460-519
Acute sinusitis . . . . .	461
Acute pharyngitis . . . . .	462
Acute tonsillitis . . . . .	463
Acute bronchitis and bronchiolitis . . . . .	466
Other acute respiratory infections . . . . .	460,464-465
Chronic sinusitis . . . . .	473
Allergic rhinitis . . . . .	477
Pneumonia . . . . .	480-486
Chronic and unspecified bronchitis . . . . .	490-491
Asthma . . . . .	493
Other chronic obstructive pulmonary disease and allied conditions . . . . .	492,494-496
Other diseases of the respiratory system . . . . .	470-472,474-476,478,487,500-519
Diseases of the digestive system . . . . .	520-579
Diseases of the teeth and supporting structures . . . . .	520-525
Gastritis and duodenitis . . . . .	535
Esophagitis . . . . .	530.1
Ulcer of stomach and small intestine . . . . .	531-534
Hernia of abdominal cavity . . . . .	550-553
Noninfectious enteritis and colitis . . . . .	555-558
Diverticula of intestine . . . . .	562
Constipation . . . . .	564.0
Irritable colon . . . . .	564.1
Anal and rectal diseases . . . . .	565-566,569.0-569.4
Disorders of the gallbladder and biliary tract . . . . .	574-576
Gastrointestinal hemorrhage . . . . .	578
Other diseases of the digestive system . . . . .	526.0-530.0,530.2-530.9,536-543,560,564.2-564.9,576-568,569.5-573.9,577,579
Diseases of the genitourinary system . . . . .	580-629
Calculus of kidney and ureter . . . . .	592
Cystitis and other disorders of the bladder . . . . .	595-596
Urinary tract infection, site not specified . . . . .	599.0
Other diseases of the urinary system . . . . .	580-589,590-591,593-594,597-598,599.1-599.9
Hyperplasia of prostate . . . . .	600
Other disorders of male genital organs . . . . .	601-608
Disorders of breast . . . . .	610-611
Inflammatory disorders of female pelvic organs . . . . .	614-616
Noninflammatory disorders of female genital organs . . . . .	620,622-624
Disorders of menstruation and abnormal bleeding . . . . .	626
Menopausal and postmenopausal disorders . . . . .	627
Other disorders of the female genital tract . . . . .	617-619,621,625,628,629
Complications of pregnancy, childbirth, and the puerperium . . . . .	630-677

See footnotes at end of table.

**Table II. Reclassification of primary diagnosis codes for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data—Con.**

Primary diagnosis	ICD-9-CM code <sup>1</sup>
Diseases of the skin and subcutaneous tissue . . . . .	680-709
Cellulitis and abscess . . . . .	681-682
Other infection of the skin and subcutaneous tissue . . . . .	680,683-686
Contact dermatitis and other eczema . . . . .	692
Psoriasis and similar disorders . . . . .	696
Other inflammatory conditions of skin and subcutaneous tissue . . . . .	690-691,693-695,697-698
Corns, callosities, and other hypertrophic and atrophic skin conditions . . . . .	700-701
Actinic and seborrheic keratosis . . . . .	702.0-702.1
Acne . . . . .	706.0-706.1
Sebaceous cyst . . . . .	706.2
Urticaria . . . . .	708
Other disorders of the skin and subcutaneous tissue . . . . .	702.8,703-705,706.3-707.9,709
Diseases of the musculoskeletal system and connective tissue . . . . .	710-739
Rheumatoid arthritis . . . . .	714.0
Osteoarthritis and allied disorders . . . . .	715
Other arthropathies and related disorders . . . . .	710-713,714.1-714.9,716
Derangements and other and unspecified joint disorders . . . . .	717-719
Intervertebral disc disorders . . . . .	722
Lumbago . . . . .	724.2
Other dorsopathies . . . . .	720-721,723.0-724.1,724.3-724.9
Peripheral enthesopathies and allied disorders . . . . .	726
Synovitis and tenosynovitis . . . . .	727.0
Myalgia and myositis, unspecified . . . . .	729.1
Other rheumatism, excluding back . . . . .	725,727.1-727.9,728,729.0,729.2-729.9
Disorders of bone and cartilage . . . . .	730-733
Other diseases of the musculoskeletal system and connective tissue . . . . .	734-739
Congenital anomalies . . . . .	740-759
Certain conditions originating in the perinatal period . . . . .	760-779
Symptoms, signs, and ill-defined conditions . . . . .	780-799
Syncope and collapse . . . . .	780.2
Convulsions . . . . .	780.3
Dizziness and giddiness . . . . .	780.4
Pyrexia of unknown origin . . . . .	780.6
Symptoms involving skin and other integumentary tissue . . . . .	782
Headache . . . . .	784.0
Epistaxis . . . . .	784.7
Abnormal heart sounds . . . . .	785.0-785.3
Dyspnea and respiratory abnormalities . . . . .	786.0
Cough . . . . .	786.2
Chest pain . . . . .	786.5
Symptoms involving urinary system . . . . .	788
Abdominal pain . . . . .	789.0
Other symptoms, signs, and ill-defined conditions . . . . .	780.0-780.1,780.5,780.7-780.9,781,783,784.1-784.6,784.8-784.9, 785.4-785.9,786.1,786.3-786.4,786.6-787,789.1-799.9
Injury and poisoning . . . . .	800-999
Fracture of radius and ulna . . . . .	813
Fracture of hand and fingers . . . . .	814-817
Fracture of lower limb . . . . .	820-829
Other fractures . . . . .	800-812,818-819
Sprains and strains of wrist and hand . . . . .	842
Sprains and strains of knee and leg . . . . .	844
Sprains and strains of ankle . . . . .	845.0
Sprains and strains of neck . . . . .	847.0
Other sprains and strains of back . . . . .	846,847.1-847.9
Other sprains and strains . . . . .	840-841,843,845.1,848
Intracranial injury, excluding those with skull fracture . . . . .	850-854
Open wound of head . . . . .	870-873
Open wound of hand and fingers . . . . .	882-883
Other open wound . . . . .	874-881,884-897
Superficial injury of cornea . . . . .	918.1
Other superficial injury . . . . .	910.0-918.0,918.2,919.9

See footnotes at end of table.



**Table II. Reclassification of primary diagnosis codes for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data—Con.**

Primary diagnosis	ICD-9-CM code <sup>1</sup>
<i>Injury and poisoning—Continued</i>	
Contusions with intact skin surfaces . . . . .	920-924
Other injuries . . . . .	830-839,860-869,900-909,925-959
Poisonings . . . . .	960-989
Other and unspecified effects of external causes . . . . .	990-995
Complications of surgical and medical care, not elsewhere classified . . . . .	996-999
<i>Supplementary classification of factors influencing health status and contact with health services</i>	
Potential health hazards related to communicable diseases . . . . .	V01-V09
Potential health hazards related to personal and family history . . . . .	V10-V19
Routine infant or child health check . . . . .	V20.2
Normal pregnancy . . . . .	V22
Postpartum care and examination . . . . .	V24
Encounter for contraceptive management . . . . .	V25
Other encounter related to reproduction . . . . .	V23-V24,V26-V28
Lens replaced by pseudophakos . . . . .	V43.1
Artificial opening status and other postsurgical states . . . . .	V44-V45
Attention to surgical dressing and sutures . . . . .	V58.3
Follow-up examination . . . . .	V67
General medical examination . . . . .	V70
Observation and evaluation for suspected conditions not found . . . . .	V71
Gynecological examination . . . . .	V72.3
Other factors influencing health status and contact with health services . . . . .	V20.0-V20.1,V21,V29.0-V43.0,V43.2-V43.8,V46-V58.2,V58.4-V66, V68-V69, V72.0-V72.2,V72.4-V82.9

<sup>1</sup>Based on the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (17).

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

Intent and mechanism of injury	Cause-of-injury code <sup>1</sup>
<i>Unintentional injuries</i>	
Falls . . . . .	E800-E869, E880-E929
Motor vehicle traffic . . . . .	E880.0-E886.9, E888
Struck against or struck accidentally by objects or persons . . . . .	E810-E819
Overexertion and strenuous movements . . . . .	E916-E917
Cutting and piercing instruments or objects . . . . .	E927
Natural and environmental factors . . . . .	E920
Poisoning by drugs, medicinal substances, biologicals, other solid and liquid substances, gases, and vapors . . . . .	E900-E909, E928.0-E928.2
Fire and flames, hot substance or object, caustic or corrosive material, and steam . . . . .	E850-E869
Machinery . . . . .	E890-E899, E924
Pedal cycle, nontraffic and other . . . . .	E919
Motor vehicle, nontraffic . . . . .	E800-E807(. 3), E820- E825(. 6), E826.1, E826.9
Other transportation . . . . .	E820-E825(.0-.5,.7-.9)
Suffocation . . . . .	E800-E807(.0-.2,.8-.9), E826(.0,.2-.8), E827- E829, E831, E833-E845
Foreign body accidentally entering eye or other orifice . . . . .	E911-E913
Firearm missile . . . . .	E914-E915
Drowning/submersion . . . . .	E922
Other and not elsewhere classified . . . . .	E830,E832,E910
Mechanism unspecified . . . . .	E846-E848, E918, E921, E923, E925-E926, E928.3, E928.8, E929.0-E929.5
<i>Intentional injuries</i>	
Assault . . . . .	E887, E928.9, E929.8, E929.9
Unarmed fight or brawl, striking by blunt or thrown object . . . . .	E950-E959, E960-E969, E970-E978, E990-E999
Cutting and piercing instrument . . . . .	E960-E969
Firearms . . . . .	E960.0, E968.2
Other mechanism . . . . .	E966
Mechanism unspecified . . . . .	E965.0-E965.4
Self-inflicted . . . . .	E960.1, E961-E964, E965.5-E965.9, E967-E968.1, E968.3-E968.8, E969
Poisoning by solid or liquid substances, gases, and vapors . . . . .	E968.9
Cutting and piercing instrument . . . . .	E950-E959
Other and unspecified mechanism . . . . .	E950-E952
Other causes of violence . . . . .	E956
Injuries of undetermined intent . . . . .	E954-E955, E957-E959
Adverse effects of medical treatment . . . . .	E970-E978, E990-E999
	E980-E989
	E870-E879, E930-E949

<sup>1</sup>Based on the "Supplementary Classification of External Causes of Injury and Poisoning," *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (17).

**Table IV. Reclassification of primary diagnosis codes by body site and type of injury for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data**

Body site and type of injury	Primary diagnosis ICD-9-CM codes
Head and neck . . . . .	800.1-800.4, 800.6-800.9, 800.03-800.05, 800.53-800.55, 801.1-801.4, 801.6-801.9, 801.03-801.05, 801.53-801.55, 803.1-803.4, 803.6-803.9, 803.03-803.05, 803.53-803.55, 804.1-804.4, 804.6-804.9, 804.03-804.05, 804.53-804.55, 850.2-850.4, 851-854, 950.1-950.3, 995.55, 800.00, 800.02, 800.06, 800.09, 801.00, 801.02, 801.06, 801.09, 803.00, 803.02, 803.06, 803.09, 804.00, 804.02, 804.06, 804.09, 800.50, 800.52, 800.56, 800.59, 801.50, 801.52, 801.56, 801.59, 803.50, 803.52, 803.56, 803.59, 804.50, 804.52, 804.56, 804.59, 850.0, 850.1, 850.5, 850.9, 800.01, 800.51, 801.01, 801.51, 803.01, 803.51, 804.01, 804.51, 951, 873.0, 873.1, 873.8, 873.9, 941.06, 959.01, 802, 830, 848.0, 848.1, 872, 873.2-873.7, 941.01, 941.03-941.05, 941.07, 950.0, 950.9, 870-871, 921, 918, 940, 941.02, 807.5-807.6, 848.2, 925.2, 953.0, 954.0, 874, 941.08, 925.1, 900, 957.0, 910, 920, 947.0, 959.09, 941.00, or 941
Fractures . . . . .	800-829
Internal organs . . . . .	860-869, 850-854, 952, or 995.55
Open wounds . . . . .	870-884 or 890-894
Superficial contusions . . . . .	910-924
Burns . . . . .	940-949
Nerves . . . . .	950-951 or 953-957
Unspecified . . . . .	959
Spine and back . . . . .	806.0-806.1, 952.0, 806.2-806.3, 952.1, 806.4-806.5, 952.2, 806.6-806.7, 952.3-952.4, 806.8-806.9, 952.8-952.9, 805.0-805.1, 839.0-839.1, 847.0, 805.2-805.3, 839.21, 839.31, 847.1, 805.4-805.5, 839.20, 839.30, 847.2, 805.6-805.7, 839.41, 839.42, 839.51-839.52, 847.3-847.4, 805.8-805.9, 839.40, 839.49, or 839.50-839.59
Fractures . . . . .	800-829
Sprains and strains . . . . .	840-848
Internal organ . . . . .	860-869, 850-854, 952, or 995.55
Torso . . . . .	807.0-807.4, 839.61, 839.71, 848.3-848.4, 926.19, 860-862, 901, 953.1, 875, 879.0, 879.1, 922.0, 922.1, 922.33, 942.01, 942.02, 863-866, 868, 902.0-902.4, 953.2, 953.5, 879.2-879.5, 922.2, 942.03, 947.3, 808, 839.69, 839.79, 846, 848.5, 926.0, 926.12, 867, 902.5, 902.81-902.82, 953.3, 877-878, 922.4, 942.05, 947.4, 809, 926.8-926.9, 954.1, 954.8-954.9, 879.6-879.7, 922.8-922.9, 911, 942.00, 942.09, 959.1, 847.9, 926.11, 876, 922.32, 922.31, or 942.04
Fractures . . . . .	800-829
Sprains and strains . . . . .	840-848
Internal organ . . . . .	860-869, 850-854, 952, or 995.55
Open wounds . . . . .	870-884 or 890-894
Superficial contusions . . . . .	910-924
Burns . . . . .	940-949
Unspecified . . . . .	959
Upper extremity . . . . .	810-812, 831, 840, 880, 887.2-887.3, 943.03-943.06, 912, 923.0, 927.0, 959.2, 813, 832, 841, 881.00-881.01, 887.0-887.1, 923.1, 927.1, 943.01-943.02, 814-817, 833-834, 842, 881.02, 882-883, 885-886, 914-915, 923.2-923.3, 927.2-927.3, 944, 959.4-959.5, 818, 884, 887.4-887.7, 903, 913, 959.3, 923.8-923.9, 927.8-927.9, 953.4, 955, 943.01, or 943.09
Fractures . . . . .	800-829
Dislocation . . . . .	830-839
Sprains and strains . . . . .	840-848
Open wounds . . . . .	870-884 or 890-894
Amputations . . . . .	885-887 or 895-897
Superficial contusions . . . . .	910-924
Crushing . . . . .	925-929
Burns . . . . .	940-949
Nerves . . . . .	950-951 or 953-957
Unspecified . . . . .	959
Lower extremity . . . . .	820, 835, 843, 924.01, 928.01, 821, 897.2-897.3, 924.00, 928.00, 945.06, 822, 836, 844.0-844.3, 924.11, 928.11, 945.05, 823-824, 897.0-897.1, 837, 845.0, 924.10, 924.21, 928.10, 928.21, 945.03-945.04, 825-826, 838, 845.1, 892-893, 895-896, 917, 924.20, 924.3, 928.20, 928.3, 945.01-945.02, 827, 844.8-844.9, 890-891, 894, 897.4-897.7, 904.0-904.8, 916, 924.4-924.5, 928.8, 928.9, 959.6-959.7, 945.00, or 945.09
Fractures . . . . .	800-829
Dislocations . . . . .	830-839
Sprains and strains . . . . .	840-848
Open wounds . . . . .	870-884 or 890-894
Superficial contusions . . . . .	910-924
Crushing . . . . .	925-929
Burns . . . . .	940-949
Unspecified . . . . .	959
Other and unspecified body sites . . . . .	828, 819, 902.87, 902.89, 953.8, 947.1-947.2, 956, 829, 839.8-839.9, 848.8-848.9, 869, 879.8-879.9, 902.9, 904.9, 919, 924.8, 924.9, 929, 946, 947.8-947.9, 948-949, 953.9, 957.1, 957.8-957.9, or 959.8-959.9
Fractures . . . . .	800-829
Dislocation . . . . .	830-839
Sprains and strains . . . . .	840-848
Open wounds . . . . .	870-884 or 890-894
Superficial contusions . . . . .	910-924
Crushing . . . . .	925-929
Burns . . . . .	940-949
Nerves . . . . .	950-951 or 953-957
Unspecified . . . . .	959

See footnotes at end of table.

**Table IV. Reclassification of primary diagnosis codes by body site and type of injury for use with National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey data—Con.**

Body site and type of injury	Primary diagnosis ICD–9–CM codes
Foreign bodies . . . . .	930–939
Poisoning . . . . .	960–989
Other and unspecified effects of external causes . . . . .	990–994
Late effects . . . . .	905–908, 909.4, 909.9, or 909.0–909.2
Early complications of trauma . . . . .	958
Child abuse . . . . .	995.50–995.54 or 995.59
Adverse effects . . . . .	909.3–909.5, 995.86–995.89, 995.0–995.4, 995.6, or 996–999
Anaphylactic shock . . . . .	995.0–995.4 or 995.6
Surgical and medical complications . . . . .	996–999
All other body sites	
Musculoskeletal . . . . .	710–739
Ill–defined symptoms . . . . .	780–799
Skin and subcutaneous tissue . . . . .	680–709
Mental disorders . . . . .	290–319
Nervous system . . . . .	320–389
Other illness . . . . .	001–289, 390–677, or 740–770
Supplementary classification . . . . .	V01–V82
Unknown . . . . .	000.00 or V99.00–V99.99

NOTE: This schematic is based on the “Barell Injury Diagnosis Matrix: Classification by Body Region and Nature of the Injury,” which uses a two-dimensional array that includes all International Classification of Diseases (ICD–9–CM) codes describing trauma. For more information about the matrix, see Barell V. et al. “An introduction to the Barell body region by nature of injury diagnosis matrix.” *Inj Prev* 2002;8:91–6. Or visit <http://www.cdc.gov/nchs/about/otheract/ice/barellmatrix.htm>.

**Table V. 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, adolescent medicine (internal medicine), geriatric medicine (internal medicine), sports medicine (internal medicine), adolescent medicine, pediatrics, pediatric sports medicine, gynecology, maternal and fetal medicine, obstetrics and gynecology, obstetrics.
Surgical specialties . . . . .	General surgery, gynecological oncology, critical care medicine (obstetrics and gynecology), hand surgery (orthopedic 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, urology, pediatric urology, ophthalmology, pediatric ophthalmology, otology/neurotology, otology, otolaryngology, pediatric otolaryngology, abdominal surgery, cardiovascular surgery, colon and rectal surgery, cardiothoracic surgery, craniofacial surgery, critical care surgery, dermatologic surgery, facial plastic surgery, head and neck surgery, hand surgery (plastic surgery), hand surgery (surgery), critical care (neurological surgery), neurological surgery, pediatric surgery (neurology), pediatric cardiothoracic surgery, pediatric surgery, plastic surgery, surgical oncology, thoracic surgery, transplant surgery, traumatic surgery, vascular surgery.
Medical specialties . . . . .	Critical care pediatrics, developmental-behavioral pediatrics, neurodevelopmental disabilities, neonatal-perinatal medicine, pediatric allergy, pediatric cardiology, pediatric endocrinology, pediatric infectious diseases, pediatric pulmonology, medical toxicology (pediatrics), pediatric emergency medicine, pediatric gastroenterology, pediatric hematology/oncology, internal medicine (pediatrics), pediatric nephrology, pediatric rehabilitation medicine, pediatric rheumatology, reproductive endocrinology, cardiovascular diseases, dermatology, psychiatry, addiction psychiatry, child psychiatry, forensic psychiatry, psychoanalysis, geriatric psychiatry, neurology, child neurology, clinical neurophysiology, neurology (diagnostic radiology), addiction medicine, aerospace medicine, allergy, allergy and immunology, allergy and immunology/diagnostic laboratory immunology, cardiac electrophysiology, clinical genetics, clinical biochemical genetics, clinical cytogenetics, clinical molecular genetics, critical care medicine, dermatological immunology/diagnostic laboratory immunology, diabetes, emergency medicine, epidemiology, endocrinology, gastroenterology, general preventive medicine, hematology, hepatology, hematology/oncology, infectious diseases, internal medicine/diagnostic laboratory immunology, immunology, interventional cardiology, legal medicine, medical management, medical genetics, medical toxicology (emergency medicine), medical toxicology (preventive medicine), medical oncology, nephrology, nutrition, occupational medicine, osteopathic manipulative medicine, pain medicine, palliative medicine, pediatric emergency medicine (emergency medicine), pediatric/diagnostic laboratory immunology, pharmaceutical medicine, public health, public health and general preventive medicine, clinical pharmacology, physical medicine and rehabilitation, pulmonary critical care medicine, pulmonary diseases, sports medicine (emergency medicine), sports medicine (physical medicine and rehabilitation), rheumatology, spinal cord injury, sleep medicine, undersea medicine, vascular medicine.

**Table VI. U.S. population estimates used in computing annual visit rates for the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, by age, race, and sex: United States, 1999–2000**

Characteristic	All ages	Under 15 years	15–24 years	25–44 years	45–64 years	65–74 years	75 years and over
All races . . . . .	272,943,591	60,274,678	38,225,543	82,256,472	59,604,833	17,773,207	14,808,859
Male . . . . .	133,080,065	30,824,777	19,239,220	40,351,914	28,826,700	8,043,307	5,794,148
Female . . . . .	139,863,526	29,449,901	18,986,323	41,904,559	30,778,133	9,729,901	9,014,711
White . . . . .	224,056,460	47,206,493	30,366,797	66,934,275	50,672,374	15,550,611	13,325,911
Male . . . . .	110,065,102	24,183,547	15,425,247	33,322,301	24,798,190	7,100,715	5,235,103
Female . . . . .	113,991,358	23,022,947	14,941,550	33,611,974	25,874,184	8,449,896	8,090,808
Black . . . . .	35,330,301	9,657,987	5,757,292	10,813,134	6,349,827	1,641,542	1,110,521
Male . . . . .	16,453,829	4,899,360	2,750,232	4,894,459	2,815,512	692,078	402,189
Female . . . . .	18,876,472	4,758,627	3,007,060	5,918,675	3,534,315	949,464	708,332
Other . . . . .	13,556,831	3,410,199	2,101,455	4,509,064	2,582,632	581,055	372,428
Male . . . . .	6,561,134	1,741,871	1,063,742	2,135,154	1,212,999	250,514	156,856
Female . . . . .	6,995,697	1,668,328	1,037,713	2,373,910	1,369,634	330,541	215,572

SOURCE: Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000.

NOTES: Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980 to 1999 (With short-term projection to dates in 2000)" available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Regional estimates were provided by the Division of Health Interview Statistics (DHIS), National Center for Health Statistics, and are based on U.S. census estimates of the civilian noninstitutionalized population as of July 1, 1999, and July 1, 2000. DHIS estimates differ slightly from monthly postcensal estimates because of differences in the adjustment process. These figures are based on the 1990 Census; they do not reflect Census 2000 counts. Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

**Table VII. U.S. population estimates used in computing annual visit rates for the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, by geographic region and metropolitan statistical area status: United States, 1999–2000**

Characteristic	Population estimate
Geographic region	
Northeast . . . . .	52,370,103
Midwest . . . . .	67,203,636
South . . . . .	96,712,390
West . . . . .	56,568,886
MSA <sup>1</sup> status	
MSA . . . . .	217,317,667
Non-MSA . . . . .	27,503,054

<sup>1</sup>MSA is metropolitan statistical area.

SOURCE: Based on U.S. Census Bureau monthly postcensal estimates of the civilian noninstitutionalized population of the United States as of July 1, 1999, and July 1, 2000.

NOTES: Figures are consistent with the downloadable series, "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980 to 1999 (With short-term projection to dates in 2000)" available at the U.S. Census Bureau Internet site: [http://www.census.gov/popest/archives/1990s/nat\\_detail.html](http://www.census.gov/popest/archives/1990s/nat_detail.html). Regional estimates were provided by the Division of Health Interview Statistics (DHIS), National Center for Health Statistics, and are based on U.S. census estimates of the civilian noninstitutionalized population as of July 1, 1999, and July 1, 2000. DHIS estimates differ slightly from monthly postcensal estimates because of differences in the adjustment process. These figures are based on the 1990 Census; they do not reflect Census 2000 counts. Figures have been adjusted for underenumeration using the 1990 National Population Adjustment Matrix.

## Appendix II

### Definition of Terms

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

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

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

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

**Emergency service area (ESA)**—An emergency service area is the smallest administrative unit of an ED where separate patient statistics are kept. It may be located on hospital grounds or operated off site by the hospital.

**Geographic region**—The 50 States and the District of Columbia are grouped for statistical purposes by the U.S. Census Bureau into four geographic regions as follows:

Region	States included
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania

Midwest Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas

South Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas

West Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii

**Hospital**—A hospital is eligible for inclusion in the NHAMCS if it has an average length of stay for all patients of less than 30 days (short-stay) or if it has a specialty of general (medical or surgical) or children's general. The survey excludes Federal hospitals, hospital units of institutions, and hospitals with less than six beds staffed for patient use.

**Injury-related visit**—A visit is considered related to an injury if “yes” was checked on the PRF in response to the question, “Is this visit injury related?” or if any of the following information was provided on the form—place of injury, cause of injury, an injury-related reason for visit, or a nature of injury diagnosis.

**Metropolitan status**—Providers are classified by their location in a metropolitan statistical area or nonmetropolitan statistical area as follows:

- **Metropolitan statistical area (MSA)**—As defined by the U.S. Office of Management and Budget, the definition of an individual MSA involves two considerations: first, a city or cities of specified population that constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with contiguous counties that are metropolitan in character so that the periphery of the

specific metropolitan area may be determined. MSAs may cross State lines. In New England, MSAs consist of cities and towns rather than counties.

- **Non-MSA**—Non-MSA areas are those not defined as MSAs.

**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.

**Office-based physician**—A physician is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) who is currently in office-based practice and who spends some time caring for ambulatory patients. The NAMCS sample excludes physicians who: are hospital-based; specialize in anesthesiology, pathology, or radiology; are federally employed; treat only institutionalized patients; or are employed full time by an institution and spend no time seeing ambulatory patients.

**Outpatient department (OPD)**—An OPD is a hospital facility where nonurgent and ambulatory medical care is provided under the supervision of a physician.

**Primary expected source of payment**—The primary expected source of payment is the source that, to the best of the provider's knowledge, describes how charges incurred during this visit will be paid.

- **Private insurance**—This category includes charges that are paid in part or in full by a private insurance company or by a health maintenance organization (HMO) plan or other prepayment plan, including independent practice associations (IPAs) and preferred provider organizations (PPOs).
- **Medicare**—This category includes charges that are 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*—This category includes charges that are paid in part or in full by a Medicaid or State Children’s Health Insurance Program (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 SCHIP programs.
- *Worker’s compensation*—This category includes programs designed to enable employees injured on the job to receive financial compensation regardless of fault.
- *Self-pay*—This category includes charges that are billed directly to the patient and will not be reimbursed by a third party. Self-pay does not include prepaid plans for which a copayment is charged.
- *No charge*—No fee is charged for these visits. This category does not include visits paid for as part of a total care package (e.g., post-operative visits included in a surgical fee, pregnancy visits for which a flat fee was charged, and HMO and prepaid systems).
- *Other*—This category includes other sources of payment not in the preceding categories, including charges paid under CHAMPUS, State and local governments, private charitable organizations, and other liability insurance.
- *Unknown*—This category includes cases for which none of the previous sources of payment categories was checked.

For the purposes of this report, visits were designated “uninsured” if either self-pay or no charge was indicated. “Other” sources included worker’s compensation, other, and unknown.

*Visit*—For NAMCS, a visit is a direct, personal exchange between an ambulatory patient and a physician or a staff member working under the physician’s supervision, for the purpose of seeking care and rendering personal health services. The NAMCS sample excludes visits where medical care was not provided (e.g., visits made to drop off specimens, pay bills, make appointments, and walkouts). For NHAMCS, a visit is a direct, personal exchange between a patient and a physician or other health care provider working under the physician’s supervision, for the purpose of seeking care and receiving personal health services.



Appendix III

Survey Instruments

**Assurance of confidentiality** - All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose without consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

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

**A**

**NATIONAL AMBULATORY MEDICAL CARE SURVEY  
1999-2000 PATIENT RECORD**

OMB No. 0920-0234  
Expires: 05/31/2001  
CDC 64.134A

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

**Assurance of confidentiality** – All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose without consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

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

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

## NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY 1999-2000 OUTPATIENT DEPARTMENT RECORD

<b>1. PATIENT'S ZIP CODE</b>  	<b>4. SEX</b> <input type="checkbox"/> Female <input checked="" type="checkbox"/> Male  <b>Is patient pregnant?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown  <input type="checkbox"/> Male	<b>5. ETHNICITY</b> <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino  <b>6. RACE – Mark (X) one or more.</b> <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Asian <input type="checkbox"/> Native Hawaiian/Other Pacific Islander <input type="checkbox"/> American Indian/Alaska Native	<b>7. WAS PATIENT REFERRED BY ANOTHER PHYSICIAN OR BY A HEALTH PLAN FOR THIS VISIT?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>8. WAS AUTHORIZATION REQUIRED FOR CARE?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>9. ARE YOU THE PATIENT'S PRIMARY CARE PHYSICIAN?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>10. PRIMARY EXPECTED SOURCE OF PAYMENT FOR THIS VISIT – Mark (X) one.</b> <input type="checkbox"/> Private insurance <input type="checkbox"/> Medicare <input type="checkbox"/> Medicaid <input type="checkbox"/> Worker's Compensation <input type="checkbox"/> Self-pay <input type="checkbox"/> No charge <input type="checkbox"/> Other <input type="checkbox"/> Unknown	<b>11. DOES PATIENT BELONG TO AN HMO?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>12. IS THIS A CAPITATED VISIT?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>13. HAS PATIENT BEEN SEEN IN THIS CLINIC BEFORE?</b> <input type="checkbox"/> Yes, established patient <input type="checkbox"/> No, new patient
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<b>14. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT</b> <i>Use patient's own words.</i>  1. Most important: _____  2. Other: _____  3. Other: _____	<b>15. MAJOR REASON FOR THIS VISIT</b> <i>Mark (X) one.</i> <input type="checkbox"/> Acute problem <input type="checkbox"/> Chronic problem, routine <input type="checkbox"/> Chronic problem, flareup <input type="checkbox"/> Pre- or post-surgery/ injury followup <input type="checkbox"/> Non-illness care (e.g., routine prenatal, general exam., well baby)	<b>16. IS THIS VISIT RELATED TO INJURY OR POISONING?</b> <i>Refers to all types of injury or poisoning, including adverse drug experiences, medical misadventures, etc.</i> <input type="checkbox"/> Yes (Answer a, b, c, and d.) <input type="checkbox"/> No (Skip to item 17.) <b>a. Place of occurrence – Mark (X) one.</b> <input type="checkbox"/> Residence <input type="checkbox"/> Other public building <input type="checkbox"/> Recreation/sports area <input type="checkbox"/> Industrial places <input type="checkbox"/> Street or highway <input type="checkbox"/> Other <input type="checkbox"/> School <input type="checkbox"/> Unknown <b>c. Is this injury work related?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <b>d. Cause of injury</b> <i>Describe events that preceded injury (e.g. reaction to penicillin, wasp sting, driver in motor vehicle traffic accident involving collision with parked vehicle, shot with a handgun during a brawl, heroin overdose, etc.)</i> _____ _____	<b>17. PHYSICIAN'S DIAGNOSES FOR THIS VISIT</b> <i>As specifically as possible, list diagnoses related to this visit including chronic conditions (e.g. depression, obesity, asthma, etc.)</i>  1. Primary diagnosis: _____  2. Other: _____  3. Other: _____
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<b>18. DIAGNOSTIC/SCREENING SERVICES – Mark (X) all ordered or provided at this visit.</b> <input type="checkbox"/> None <table style="width: 100%;"> <tr> <td style="width: 33%;"><b>EXAMINATIONS</b></td> <td style="width: 33%;"><b>TESTS AND MEASUREMENTS</b></td> <td style="width: 33%;"><b>IMAGING</b></td> </tr> <tr> <td> <input type="checkbox"/> Breast  <input type="checkbox"/> Pelvic  <input type="checkbox"/> Rectal  <input type="checkbox"/> Skin  <input type="checkbox"/> Visual acuity  <input type="checkbox"/> Glaucoma  <input type="checkbox"/> Hearing         </td> <td> <input type="checkbox"/> Blood pressure  <input type="checkbox"/> Strep test  <input type="checkbox"/> Pap test  <input type="checkbox"/> Urinalysis  <input type="checkbox"/> Pregnancy test  <input type="checkbox"/> PSA  <input type="checkbox"/> Blood lead level         </td> <td> <input type="checkbox"/> Cholesterol measure  <input type="checkbox"/> HIV serology  <input type="checkbox"/> Other STD test  <input type="checkbox"/> Hematocrit/hemoglobin  <input type="checkbox"/> Other blood test  <input type="checkbox"/> EKG         </td> </tr> </table> <input type="checkbox"/> X-Ray <input type="checkbox"/> CAT scan/MRI <input type="checkbox"/> Mammography <input type="checkbox"/> Ultrasound <b>ALL OTHER – Specify</b> <input checked="" type="checkbox"/> _____ <input type="checkbox"/> _____	<b>EXAMINATIONS</b>	<b>TESTS AND MEASUREMENTS</b>	<b>IMAGING</b>	<input type="checkbox"/> Breast <input type="checkbox"/> Pelvic <input type="checkbox"/> Rectal <input type="checkbox"/> Skin <input type="checkbox"/> Visual acuity <input type="checkbox"/> Glaucoma <input type="checkbox"/> Hearing	<input type="checkbox"/> Blood pressure <input type="checkbox"/> Strep test <input type="checkbox"/> Pap test <input type="checkbox"/> Urinalysis <input type="checkbox"/> Pregnancy test <input type="checkbox"/> PSA <input type="checkbox"/> Blood lead level	<input type="checkbox"/> Cholesterol measure <input type="checkbox"/> HIV serology <input type="checkbox"/> Other STD test <input type="checkbox"/> Hematocrit/hemoglobin <input type="checkbox"/> Other blood test <input type="checkbox"/> EKG	<b>19. THERAPEUTIC AND PREVENTIVE SERVICES</b> <i>Mark (X) all ordered or provided at this visit. Exclude medications.</i> <input type="checkbox"/> None <table style="width: 100%;"> <tr> <td style="width: 50%;"><b>COUNSELING/EDUCATION:</b></td> <td style="width: 50%;"><b>OTHER THERAPY</b></td> </tr> <tr> <td> <input type="checkbox"/> Diet/nutrition  <input type="checkbox"/> Exercise  <input type="checkbox"/> HIV/STD transmission  <input type="checkbox"/> Family planning/contraception  <input type="checkbox"/> Prenatal instructions  <input type="checkbox"/> Breast self-exam         </td> <td> <input type="checkbox"/> Tobacco use/exposure  <input type="checkbox"/> Growth/development  <input type="checkbox"/> Mental health  <input type="checkbox"/> Stress management  <input type="checkbox"/> Skin cancer prevention  <input type="checkbox"/> Injury prevention         </td> </tr> </table> <input type="checkbox"/> Psychotherapy <input type="checkbox"/> Psycho-pharmacotherapy <input type="checkbox"/> Physiotherapy <input type="checkbox"/> Complementary or alternative medicine (CAM) <b>ALL OTHER – Specify</b> <input checked="" type="checkbox"/> _____ <input type="checkbox"/> _____	<b>COUNSELING/EDUCATION:</b>	<b>OTHER THERAPY</b>	<input type="checkbox"/> Diet/nutrition <input type="checkbox"/> Exercise <input type="checkbox"/> HIV/STD transmission <input type="checkbox"/> Family planning/contraception <input type="checkbox"/> Prenatal instructions <input type="checkbox"/> Breast self-exam	<input type="checkbox"/> Tobacco use/exposure <input type="checkbox"/> Growth/development <input type="checkbox"/> Mental health <input type="checkbox"/> Stress management <input type="checkbox"/> Skin cancer prevention <input type="checkbox"/> Injury prevention	<b>20. AMBULATORY SURGICAL PROCEDURES</b> <input type="checkbox"/> None <i>List up to 2 surgical procedures actually performed at this visit. Include biopsy.</i> 1. _____ 2. _____
<b>EXAMINATIONS</b>	<b>TESTS AND MEASUREMENTS</b>	<b>IMAGING</b>										
<input type="checkbox"/> Breast <input type="checkbox"/> Pelvic <input type="checkbox"/> Rectal <input type="checkbox"/> Skin <input type="checkbox"/> Visual acuity <input type="checkbox"/> Glaucoma <input type="checkbox"/> Hearing	<input type="checkbox"/> Blood pressure <input type="checkbox"/> Strep test <input type="checkbox"/> Pap test <input type="checkbox"/> Urinalysis <input type="checkbox"/> Pregnancy test <input type="checkbox"/> PSA <input type="checkbox"/> Blood lead level	<input type="checkbox"/> Cholesterol measure <input type="checkbox"/> HIV serology <input type="checkbox"/> Other STD test <input type="checkbox"/> Hematocrit/hemoglobin <input type="checkbox"/> Other blood test <input type="checkbox"/> EKG										
<b>COUNSELING/EDUCATION:</b>	<b>OTHER THERAPY</b>											
<input type="checkbox"/> Diet/nutrition <input type="checkbox"/> Exercise <input type="checkbox"/> HIV/STD transmission <input type="checkbox"/> Family planning/contraception <input type="checkbox"/> Prenatal instructions <input type="checkbox"/> Breast self-exam	<input type="checkbox"/> Tobacco use/exposure <input type="checkbox"/> Growth/development <input type="checkbox"/> Mental health <input type="checkbox"/> Stress management <input type="checkbox"/> Skin cancer prevention <input type="checkbox"/> Injury prevention											

<b>21. MEDICATIONS/INJECTIONS</b> <i>List names of up to 6 medications that were ordered, supplied, administered or continued during this visit. Include P, and OTC medications, immunizations, allergy shots, and anesthetics.</i> <input type="checkbox"/> None 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____	<b>22. PROVIDERS SEEN THIS VISIT</b> <i>Mark (X) all that apply.</i> <input type="checkbox"/> Staff physician <input type="checkbox"/> R.N. <input type="checkbox"/> Resident/intern <input type="checkbox"/> L.P.N. <input type="checkbox"/> Other physician <input type="checkbox"/> Medical/nursing assistant <input type="checkbox"/> Physician assistant <input type="checkbox"/> Nurse practitioner <input type="checkbox"/> Other <input type="checkbox"/> Nurse midwife	<b>23. VISIT DISPOSITION – Mark (X) all that apply.</b> <input type="checkbox"/> No follow-up planned <input type="checkbox"/> Other – Specify <input checked="" type="checkbox"/> _____ <input type="checkbox"/> Return to clinic PRN <input type="checkbox"/> Return to clinic – appointment <input type="checkbox"/> Telephone follow-up planned <input type="checkbox"/> Referred to other physician/clinic <input type="checkbox"/> Returned to referring physician <input type="checkbox"/> Admitted to hospital	<b>24. TIME SPENT WITH PHYSICIAN</b> <i>If not seen by physician, enter zero</i> _____ Minutes
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**Assurance of confidentiality** - All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose without consent of the individual or the establishment in accordance with section 3605(d) of the Public Health Service Act (42 USC 242m).

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

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CDC 64.136

## NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY 1999-2000 EMERGENCY DEPARTMENT RECORD

<b>1. PATIENT'S ZIP CODE</b> <input type="text"/>	<b>4. DATE OF BIRTH</b> Month: <input type="text"/> Day: <input type="text"/> Year: <input type="text"/>	<b>7. ETHNICITY</b> 1 <input type="checkbox"/> Hispanic or Latino 2 <input type="checkbox"/> Not Hispanic or Latino	<b>9. PRIMARY EXPECTED SOURCE OF PAYMENT FOR THIS VISIT</b> Mark (X) one. 1 <input type="checkbox"/> Private insurance 2 <input type="checkbox"/> Medicare 3 <input type="checkbox"/> Medicaid 4 <input type="checkbox"/> Worker's Compensation 5 <input type="checkbox"/> Self-pay 6 <input type="checkbox"/> No charge 7 <input type="checkbox"/> Other 8 <input type="checkbox"/> Unknown	<b>10. DOES PATIENT BELONG TO AN HMO?</b> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown	<b>11. IMMEDIACY WITH WHICH PATIENT SHOULD BE SEEN</b> 1 <input type="checkbox"/> Unknown/no triage 2 <input type="checkbox"/> Less than 15 minutes 3 <input type="checkbox"/> 15 - 60 minutes 4 <input type="checkbox"/> > 1 hour - 2 hours 5 <input type="checkbox"/> > 2 hours - 24 hours	<b>12. PRESENTING LEVEL OF PAIN</b> 1 <input type="checkbox"/> Unknown 2 <input type="checkbox"/> None 3 <input type="checkbox"/> Mild 4 <input type="checkbox"/> Moderate 5 <input type="checkbox"/> Severe	<b>13. TIME SEEN BY PHYSICIAN</b> <input type="text"/> : <input type="text"/> : <input type="text"/> Military <input type="checkbox"/> AM <input type="checkbox"/> PM <input type="checkbox"/> Not seen by physician or unknown
<b>2. DATE OF VISIT</b> Month: <input type="text"/> Day: <input type="text"/> Year: <input type="text"/>	<b>5. MODE OF ARRIVAL - Mark (X) one</b> 1 <input type="checkbox"/> Ambulance (background) 2 <input type="checkbox"/> Public service (nonambulance, e.g., police, social services) 3 <input type="checkbox"/> Walk-in 4 <input type="checkbox"/> Unknown	<b>8. RACE</b> Mark (X) one or more 1 <input type="checkbox"/> White 2 <input type="checkbox"/> Black/African American 3 <input type="checkbox"/> Asian 4 <input type="checkbox"/> Native Hawaiian/Other Pacific Islander 5 <input type="checkbox"/> American Indian/Alaska Native					
<b>3. TIME OF VISIT</b> <input type="text"/> : <input type="text"/> : <input type="text"/> Military <input type="checkbox"/> AM <input type="checkbox"/> PM	<b>6. SEX</b> 1 <input type="checkbox"/> Female - Is patient pregnant? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown 2 <input type="checkbox"/> Male						

<b>14. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT</b> Use patient's own words. 1. Most important: <input style="width: 90%;" type="text"/> 2. Other: <input style="width: 90%;" type="text"/> 3. Other: <input style="width: 90%;" type="text"/>	<b>15. IS THIS VISIT RELATED TO INJURY OR POISONING?</b> Refer to all types of injury or poisoning, including adverse drug experience, medical misadventure, etc. 1 <input type="checkbox"/> Yes (Answer a, b, c, and d.) 2 <input type="checkbox"/> No (Skip to item 16). <b>a. Place of occurrence - Mark (X) one.</b> 1 <input type="checkbox"/> Residence 2 <input type="checkbox"/> Recreation/sports area 3 <input type="checkbox"/> Street or highway 4 <input type="checkbox"/> School 5 <input type="checkbox"/> Other public building 6 <input type="checkbox"/> Industrial places 7 <input type="checkbox"/> Other 8 <input type="checkbox"/> Unknown <b>c. Is this injury work related?</b> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Unknown <b>d. Cause of injury</b> Describe events that provided injury (e.g. reaction to penicillin, wasp sting, driver in motor vehicle traffic accident involving collision with parked vehicle, shot with a handgun during a brawl, heroin overdose, etc.) <input style="width: 90%;" type="text"/>	<b>16. PHYSICIAN'S DIAGNOSES FOR THIS VISIT</b> As specifically as possible, list diagnoses related to this visit (including chronic conditions (e.g. depression, obesity, asthma, etc.)). 1. Primary diagnosis: <input style="width: 90%;" type="text"/> 2. Other: <input style="width: 90%;" type="text"/> 3. Other: <input style="width: 90%;" type="text"/>
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<b>17. DIAGNOSTIC/SCREENING SERVICES - Mark (X) all ordered or provided at this visit.</b> 1 <input type="checkbox"/> None 2 <input type="checkbox"/> Mental status exam 3 <input type="checkbox"/> Blood pressure 4 <input type="checkbox"/> EKG 5 <input type="checkbox"/> Cardiac monitor 6 <input type="checkbox"/> Pulse oximetry 7 <input type="checkbox"/> Urinalysis 8 <input type="checkbox"/> Pregnancy test 9 <input type="checkbox"/> HIV serology 10 <input type="checkbox"/> Other STD test 11 <input type="checkbox"/> Blood alcohol concentration 12 <input type="checkbox"/> CBC 13 <input type="checkbox"/> Other blood test 14 <input type="checkbox"/> Other - Specify: <input style="width: 50%;" type="text"/>	<b>18. PROCEDURES - Mark (X) all provided at this visit.</b> 1 <input type="checkbox"/> None 2 <input type="checkbox"/> Endotracheal intubation 3 <input type="checkbox"/> CPR 4 <input type="checkbox"/> IV fluids 5 <input type="checkbox"/> NG to gastric lavage 6 <input type="checkbox"/> Lumbar puncture 7 <input type="checkbox"/> Bladder catheter 8 <input type="checkbox"/> Wound care 9 <input type="checkbox"/> Eye/ENT care 10 <input type="checkbox"/> Orthopedic care 11 <input type="checkbox"/> OB/GYN care 12 <input type="checkbox"/> Other - Specify: <input style="width: 50%;" type="text"/>
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<b>19. MEDICATIONS/INJECTIONS</b> List names of up to 6 medications that were ordered, supplied, administered or continued during this visit. Include Rx and OTC medications, immunizations, allergy shots, and anesthetics. <input type="checkbox"/> None 1. <input style="width: 80%;" type="text"/> 2. <input style="width: 80%;" type="text"/> 3. <input style="width: 80%;" type="text"/> 4. <input style="width: 80%;" type="text"/> 5. <input style="width: 80%;" type="text"/> 6. <input style="width: 80%;" type="text"/>	<b>20. PROVIDERS SEEN THIS VISIT - Mark (X) all that apply.</b> 1 <input type="checkbox"/> Staff physician 2 <input type="checkbox"/> Resident/Intern 3 <input type="checkbox"/> Other physician 4 <input type="checkbox"/> Physician assistant 5 <input type="checkbox"/> Nurse practitioner 6 <input type="checkbox"/> R.N. 7 <input type="checkbox"/> LP.N. 8 <input type="checkbox"/> Medical/ nursing assistant 9 <input type="checkbox"/> E.M.T. 10 <input type="checkbox"/> Other	<b>21. VISIT DISPOSITION - Mark (X) all that apply.</b> 1 <input type="checkbox"/> No followup planned 2 <input type="checkbox"/> Return to ED, P.R.N./appointment 3 <input type="checkbox"/> Referred to referring physician 4 <input type="checkbox"/> Referred out from triage without treatment 5 <input type="checkbox"/> Referred to other physician/clinic for followup 6 <input type="checkbox"/> Left before being seen 7 <input type="checkbox"/> Admitted to hospital 8 <input type="checkbox"/> Admitted to ICU/CCU 9 <input type="checkbox"/> Transferred to other facility 10 <input type="checkbox"/> DCA/died in ED 11 <input type="checkbox"/> Referred to social service 12 <input type="checkbox"/> Other - Specify: <input style="width: 50%;" type="text"/>
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# Appendix IV

**Table VIII. Adjusted odds ratios from logistic regression analysis modeling visit to each setting**

Patient and provider characteristics	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Intercept . . . . .	1.315	0.185	0.160	0.041	0.069
Patient race					
White . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Black . . . . .	0.970	<b>0.594</b>	<b>0.639</b>	<b>1.543</b>	<b>1.831</b>
Other . . . . .	1.428	0.759	0.778	0.980	0.842
Primary expected source of payment					
Medicare . . . . .	<b>0.665</b>	0.869	<b>1.303</b>	<b>1.699</b>	<b>1.712</b>
Medicaid . . . . .	<b>0.597</b>	<b>0.553</b>	0.850	<b>2.713</b>	<b>1.966</b>
Uninsured . . . . .	<b>0.399</b>	1.077	1.079	<b>1.859</b>	<b>3.150</b>
Other . . . . .	0.818	0.890	1.114	<b>1.961</b>	1.007
Private insurance . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
MSA <sup>2</sup> status of provider					
MSA . . . . .	<b>0.619</b>	1.279	<b>2.285</b>	1.168	0.794
Non-MSA . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Type of condition					
Injury . . . . .	<b>0.364</b>	<b>1.992</b>	<b>0.680</b>	<b>0.676</b>	<b>4.693</b>
Illness . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Patient age					
Under 15 years . . . . .	<b>1.878</b>	<b>0.462</b>	<b>0.411</b>	1.121	1.042
15–24 years . . . . .	1.052	<b>0.728</b>	<b>0.802</b>	<b>1.147</b>	<b>1.354</b>
25–44 years . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
45–64 years . . . . .	<b>0.774</b>	<b>1.660</b>	<b>1.234</b>	<b>0.487</b>	<b>0.632</b>
65–74 years . . . . .	<b>0.802</b>	<b>2.551</b>	1.064	0.960	<b>0.604</b>
75 years and over . . . . .	<b>0.782</b>	<b>3.012</b>	0.831	<b>0.579</b>	<b>0.441</b>
Patient sex					
Female . . . . .	<b>1.298</b>	<b>0.775</b>	<b>0.895</b>	1.046	<b>0.858</b>
Male . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Education					
Low . . . . .	<b>1.399</b>	0.839	<b>0.596</b>	1.010	<b>1.308</b>
Medium . . . . .	<b>1.210</b>	0.993	<b>0.699</b>	1.004	<b>1.235</b>
High . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Income					
Low . . . . .	<b>0.696</b>	1.013	1.036	<b>1.964</b>	<b>1.437</b>
Medium . . . . .	0.945	0.852	1.006	<b>1.355</b>	1.189
High . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Number of conditions					
1 . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
2 . . . . .	<b>1.050</b>	0.967	0.978	0.982	<b>0.856</b>
3 . . . . .	<b>1.664</b>	<b>0.499</b>	1.045	1.114	<b>0.590</b>
0 . . . . .	1.195	<b>0.361</b>	1.597	0.986	0.787

<sup>1</sup>Reference characteristic.

<sup>2</sup>MSA is metropolitan statistical area.

NOTE: Odds ratios in bold type are significant ( $p < .05$ ).

# Appendix V

**Table IX. Adjusted odds ratios from logistic regression analysis modeling visit to each setting including distance traveled and supply of providers**

Patient or provider characteristic	Primary care offices	Surgical specialty offices	Medical specialty offices	Outpatient departments	Emergency departments
Intercept . . . . .	3.110	0.105	0.105	0.030	0.132
MSA <sup>1</sup> status					
MSA . . . . .	0.832	0.953	1.482	1.023	0.810
Non-MSA . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Provider/patient proximity					
Different ZIP Code . . . . .	<b>0.540</b>	<b>1.677</b>	<b>1.795</b>	<b>1.616</b>	<b>0.881</b>
Same ZIP Code . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Rate per population					
Primary care physicians . . . . .	0.998	1.000	0.998	1.002	<b>1.002</b>
Medical specialists . . . . .	<b>1.005</b>	<b>0.986</b>	<b>0.990</b>	<b>1.006</b>	1.001
Surgical specialists . . . . .	<b>0.982</b>	<b>1.030</b>	<b>1.019</b>	1.000	0.999
Visits to the emergency department . . . . .	1.017	<b>0.874</b>	<b>0.794</b>	<b>1.069</b>	1.021

<sup>1</sup>MSA is metropolitan statistical area.

<sup>2</sup>Reference characteristic.

NOTE: Odds ratios in bold type are significant ( $p < .05$ ).

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