National Health Statistics Reports

Number 28 ■ September 23, 2010

National Hospital Ambulatory Medical Care Survey: 2007 Outpatient Department Summary

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Abstract

Objectives—This report describes ambulatory care visits to hospital outpatient departments (OPDs) in the United States. Statistics are presented on selected hospital, patient, and visit characteristics. Selected trends in OPD utilization from 1997 through 2007, as well as items new to the 2007 survey, are presented.

Methods—The data presented in this report were collected in the 2007 National Hospital Ambulatory Medical Care Survey, a national probability sample survey of visits to emergency departments and OPDs of nonfederal short-stay and general hospitals in the United States. Sample data were weighted to produce annual national estimates.

Results-During 2007, an estimated 88.9 million visits were made to hospital OPDs in the United States: about 30.0 visits per 100 persons. Females (36.7 per 100 persons) had higher OPD visit rates than males (23.0 visits per 100 persons). Black or African-American persons (58.4 visits per 100 persons) had higher OPD visit rates than white persons (26.5 visits per 100 persons). Visit rates to OPD clinics for preventive care were highest for children under 1 year of age (39.4 per 100 persons). About a third of all OPD visits (33.2%) were made by patients having Medicaid or the State Children's Health Insurance Program (SCHIP) as an expected source of payment. Medicaid or SCHIP was the source of payment for more than half (56.3%) of OPD visits made by children under age 18. The rate of preventive care visits for patients with Medicaid or SCHIP as an expected source of payment (23.1 per 100 persons) was at least four times higher than for patients having other payment sources (3.3–4.9 per 100 persons). About 82.9% of visits were made by established patients and 17.1% were made by new patients. In 2007, visits to OPDs by new and established patients averaged 5.9 visits during the past 12 months. Essential hypertension was the leading primary diagnosis at OPD visits. Moderate to severe blood pressure elevations were seen more frequently in visits by non-Hispanic or non-Latino patients than Hispanic patients and in visits by black patients compared with white patients.

Keywords: outpatient department visits • diagnoses • injury • medications

Introduction

The National Hospital Ambulatory Medical Care Survey (NHAMCS) has been gathering, analyzing, and disseminating information about hospital outpatient departments (OPDs) and emergency departments (EDs) since 1992. NHAMCS and the National Ambulatory Medical Care Survey (NAMCS) are part of the ambulatory component of the National Health Care Surveys, a family of surveys that measure health care utilization across various types of providers. More information about the National Health Care Surveys is available from: http://www.cdc.gov/nchs/nhcs.htm.

NHAMCS and NAMCS data have been used in articles examining topics of interest in public health and health services research. For a list of publications, visit: http://www.cdc.gov/nchs/data/ahcd/publist9-10-10.pdf. In addition to the OPD report, other reports highlight visits to EDs (1) and physician offices (2). Annual reports are available from: http://www.cdc.gov/nchs/ahcd/ahcd_reports.htm, and public-use data files are available from: http://www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm. These and other products can be obtained from the





Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS) at 1–800–232-4636, from the Ambulatory and Hospital Care Statistics Branch at 301–458–4600, or by e-mail at: CDCINFO@cdc.gov.

Ambulatory medical care is the predominant method of providing health care services in the United States and occurs in a wide variety of settings (3). In 2007, OPD visits accounted for 7% of ambulatory care visits. This report presents the most current nationally representative data on OPD care in the United States. Information about OPD utilization during 2007, and selected trend data, are presented. NHAMCS is the longest continuously running, nationally representative survey of hospital ED and OPD utilization.

An OPD is a hospital facility where nonurgent ambulatory medical care is provided under the supervision of a physician. The following types of clinics are included in NHAMCS: general medicine; surgery; pediatrics; obstetrics and gynecology; substance abuse; and specialty clinics, such as psychiatry and neurology. Clinic types excluded from NHAMCS in 2007 include ambulatory surgery, chemotherapy, employee health service, renal dialysis, methadone maintenance, and radiology.

OPD clinics fill an important niche in the health care delivery system in the United States, providing both safety-net primary care and specialty care. Although one in eight persons in the United States relied on Medicaid or the State Children's Health Insurance Program (SCHIP), about one in three OPD visits were by Medicaid or SCHIP recipients in 2006 (4,5). OPD clinics are a major source of ambulatory preventive care for Medicaid patients and of specialty care for people with other types of insurance. In addition to serving heavier caseloads of black or African-American persons, OPDs handle cases that require intense use of services, such as HIV, alcohol and substance abuse, and congenital anomalies (5). OPD visits have greater mentions of diagnostic screening services being ordered or provided than

physician office visits (6,7). Additional information about OPD utilization is available from the NCHS Ambulatory Health Care website at: http://www.cdc.gov/nchs/ahcd.htm.

NHAMCS includes detailed questions on chronic diseases, including a checklist of chronic conditions, participation in disease management programs, and diagnostic and screening service items that parallel the listed chronic conditions. The survey also collects the status (new or continued) of each medication, as well as information on health education and nonmedication treatment.

Methods

This report presents data on OPD visits in terms of hospital, patient, and visit characteristics. These data are from the 2007 NHAMCS—a national probability sample survey of nonfederal general and short-stay hospitals conducted by NCHS' Division of Health Care Statistics. The survey was conducted from January 1, 2007, through December 30, 2007. The multistage design involves sampling geographic primary sampling units (PSUs), hospitals that have EDs or OPDs within PSUs, clinics within OPDs, and then patient visits within emergency service areas in EDs and clinics in OPDs. Within EDs, types of emergency service areas included general, adult, pediatric, fast track, psychiatric, and trauma. The sample of 112 PSUs comprised a probability subsample of PSUs used in the 1985-1994 National Health Interview Surveys (NHIS). In 2007, a sample of 482 hospitals was selected from a sampling frame constructed from hospitals listed in the 1991 Verispan Hospital Database updated using hospital data from Verispan, L.L.C. (Yardley, Pennsylvania): specifically, its "Healthcare Market Index, Updated July 15, 2006" and its "Hospital Market Profiling Solution, Second Quarter, 2006." (These products were formerly known as the SMG Hospital Database.) Using the 2006 data to update the 2007 sample allowed the inclusion of hospitals that had opened or changed

their eligibility status since the previous sample was updated for 2003.

Hospital staffs or field representatives from the U.S. Census Bureau completed a patient record form (PRF) for a sample of visits during a 4-week reporting period. Of the sample of 482 hospitals selected for the 2007 NHAMCS, 252 were in scope and had eligible OPDs, and 214 of these OPDs responded (OPD-level response rate of 84.9% unweighted and 82.5% weighted for the probability of selection). A total of 932 of the 1,069 clinics within the participating OPDs responded and provided 34,473 PRFs. Of these 932 clinics, 911 responded fully or adequately by providing at least half of their expected forms (clinic-level response rate of 85.2% unweighted and 74.4% weighted). The overall response rate, which is the product of the response rates of the OPDs and clinics, was 72.4% unweighted and 61.3% weighted. A detailed discussion of methodology can be found in the Technical Notes section. A sample of the 2007 Outpatient Department Patient Record Form is provided at the end of this report.

In this report, the determination of statistical inference is based on the two-tailed t-test. The Bonferroni inequality was used to establish the critical value for statistically significant differences (0.05 level of significance) based on the number of possible comparisons within a particular variable (or combination of variables) of interest. A weighted least-squares regression analysis was used to determine the significance of trends at the 0.05 level. 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 does not mean that the difference was tested and found to be not significant.

Results

OPD utilization

- In 2007, there were approximately 88.9 million visits to OPDs, for a rate of 30.0 visits per 100 persons (Table 1), which was unchanged since 1997 (28.9 per 100 persons) (8).
- About 69.1% of OPD visits were made to voluntary nonprofit hospitals, while 28.4% of visits occurred in nonfederal government (i.e., state, county, or city) hospitals (Table 1). About 48.4% of OPD visits occurred in teaching hospitals.

Clinic characteristics

 General medicine clinics, including internal medicine, family practice, and primary care clinics, represented 54.7% of all OPD visits (Table 1).

Patient characteristics

- In 2007, the visit rate to OPDs was highest for infants under 1 year of age (74.9 visits per 100 persons) (Table 2).
- The female visit rate was higher than the rate for males overall, driven by differences in the 15–44-year-old age groups (Table 2).
- In 2007, patient race was missing for 15.8% of visits and patient ethnicity was missing for 23.0% of visits; missing data for these two variables were imputed. In this report, all tables presenting patient race or ethnicity include visit estimates based on both imputed and reported race and ethnicity, as well as estimates based on reported data only. In general, there were no statistically significant differences between race or ethnicity distributions or percentages based on "imputed plus reported" data and those based on reported data only, unless specifically indicated. For example, Table 3 presents the age distributions of visits by race based on imputed plus reported cases and those based on reported cases only. Comparison of these two distributions yielded no statistically significant differences. Similarly, the distribution of visits by

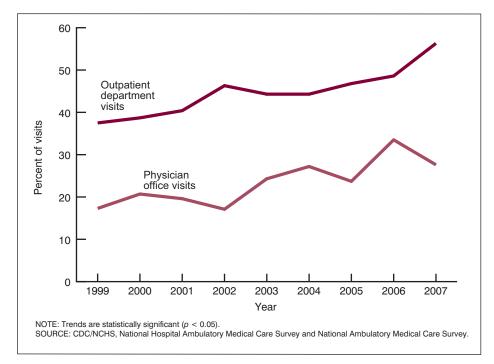


Figure 1. Percentage of visits by children under age 18 years to hospital outpatient departments and physician offices with Medicaid or the State Children's Health Insurance Program as the primary expected source of payment: United States, 1999—2007

Hispanic or Latino patients among imputed plus reported cases and reported cases only was also statistically similar. Note that all race or ethnicity comparisons that follow use the imputed plus reported figures unless otherwise stated.

- Visit rates for black persons were higher than for persons of any other race (Table 3). The highest visit rates were among black persons aged 45 and over (78.4 visits per 100 persons aged 45–64; 83.4 visits per 100 persons aged 65–74; and 96.7 visits per 100 persons aged 75 and over).
- Private insurance was listed as an expected source of payment for 39.9% of OPD visits. Medicaid or SCHIP was listed as an expected source of payment for 33.2% of OPD visits, and Medicare was listed as an expected source of payment for 17.6% of OPD visits (Table 4).
- Since 1999, SCHIP has made health insurance available to low-income children not otherwise eligible to be covered by Medicaid. In 2007, Medicaid or SCHIP was the primary source of payment for 56.3% of OPD visits by children.

Since 1999, the overall percentage of OPD visits by children under age 18 relying on either Medicaid or SCHIP increased 50%. Physician office visits by children relying on either Medicaid or SCHIP increased 56% during the same time period, but the relative caseload remained higher in OPDs than in physician offices (Figure 1). (Note that Figure 1 uses primary source of payment because from 1997 through 2004 only one source of payment was collected.)

Continuity of care

• More than half of OPD visits (55.3%) were to a provider other than the patient's primary care provider (PCP). The majority of "new patient" visits were to non-PCPs (82.5%), and 52.6% of these new visits had been referred by another provider, representing a 44% increase since 2006 (36.6%) (6). Information on whether the patient had been referred for the visit was only asked for non-PCP visits and for visits with unknown PCP status. Among these visits, referral information was

- missing for 25.4% of visits. In 37.4% of all visits, the clinic served as the patient's PCP (Table 5).
- More than one-half of visits to pediatric (56.3%) and general medicine (52.7%) clinics were to patients' PCPs (Table 6).
- Established patients (those with previous visits to the OPD clinic) made 82.9% of OPD visits (calculated from Table 5). Only 43.1% of visits by these patients were to their PCPs. New patients accounted for 17.1% of visits to OPD clinics (calculated from Table 5).
- Starting in 2007, the number of visits made by established patients during the past 12 months has been collected as a continuous variable instead of as a categorical variable, as was done in 2006. Despite this change, the distribution of current and past visits made by new and established patients in 2007 was similar to the 2006 distribution (Table A); that is, about four in five visits were made by patients with two or more visits to the OPD during the past 12 months, and for one in five visits, the sampled visit was the only visit to the OPD during the past 12 months. The distribution of all visits to OPDs during the past 12 months was highly skewed. The median number of visits was 3.0, while the mean was 5.6 visits (Table A).

Reason for visit

- From the patient's perspective, the most frequently mentioned principal reason for the visit was to monitor the progress of ongoing treatment or followup not otherwise specified (7.0%), followed by general medical examination (5.9%). The most frequently mentioned reasons related to a symptomatic problem were cough (2.2%) or throat symptoms (1.8%). Diabetes mellitus (1.7%) and hypertension (1.1%) were the most frequent reasons related to a specific disease (Table 7).
- In contrast to the patient's reason for the visit, the "major reason for visit" represents the provider's assessment of the reason for the visit. The intent

- of this item is to provide a better picture of OPD visits by classifying them into the following general categories: an acute problem of less than 3 months onset, a routine visit for a chronic problem, a flare-up of a chronic problem, a pre- or postsurgery visit, or a preventive care visit. Acute problems composed 31.4% of overall visits but accounted for 43.0% of visits by children under age 15. Routine chronic problems accounted for 33.5% of all visits, but for persons aged 65 and over, routine chronic problems represented approximately one-half of all visits. White patients had a higher proportion of visits for acute problems compared with black patients. Preventive care was the major reason for visit for one in five visits (21.2%); these visits include routine prenatal, well-baby, screening, insurance, and general medical exams (Table 8).
- Visit rates to OPD clinics for preventive care were highest for children under age 1 (39.4 per 100 infants, compared with 3.3–8.7 per 100 persons in age categories 1 year and older). The female preventive care visit rate (9.2 visits per 100 females) was almost triple the rate for males (3.4 per 100 males). The preventive care visit rate for black persons (14.6 per 100 persons) was nearly triple the rate for all other races. Hispanic or Latino persons had a preventive care visit rate (11.1 per 100 persons) that was twice the rate

for non-Hispanic or non-Latino persons (5.5 per 100 persons). Medicaid or SCHIP patients used the OPD for preventive care services at a rate four or more times higher than those with other types of payment sources (Table 9).

Primary diagnosis at visit

- The supplementary classification, used for diagnoses not classifiable as to injury or illness, was the most frequently listed major *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM) disease category (20.6%) (Table 10). The category includes general medical examination, routine prenatal examination, health supervision of an infant or child, and other diagnoses not classifiable as to injury or illness.
- The six most frequently recorded diagnoses were essential hypertension (3.8%); routine infant or child health check (3.7%); diabetes mellitus (3.4%); malignant neoplasms (3.1%); normal pregnancy (2.9%); and acute upper respiratory infection, excluding pharyngitis (2.7%) (Table 11).
- An estimated 11.0 million OPD visits
 were related to injury, poisoning, or
 adverse effects of medical treatment,
 representing 12.4% of all OPD visits
 and yielding a rate of 3.7 visits per
 100 persons (Table 12). Injury rates
 were statistically similar for females
 and males for the age groups shown.
 Most age groups had similar rates,

Table A. Average, median, and percent distribution of number of hospital outpatient department visits, by new and established patients during the past 12 months: United States, 2006–2007

Number of visits during past 12 months ¹	2006	2007			
Average	2	5.6			
Median	2	3.0			
	Percent distribution				
Total	100.0	100.0			
1	20.1	21.9			
2–3	27.4	29.4			
4–6	25.9	24.0			
7 or more	26.5	24.6			

^{. .} Category not applicable.

¹Includes current visit for both new and established patients.

²Because number of visits was a categorical variable in 2006, average and median could not be computed. SOURCE: CDC/NCHS. National Hospital Ambulatory Medical Care Survey.

- but the rate for those under age 15 had significantly lower rates than the 15–24, 25–44, and 45–64 year age groups. The injury rate for black patients (6.1 visits per 100 persons) was higher than among patients of white (3.4 visits per 100 persons) or other (2.5 visits per 100 persons) races.
- Table 13 describes the distribution of visits for injury, poisoning, or adverse effects of medical treatment by intent. In 2007, the majority of injury-related visits were the result of unintentional injuries, accounting for 7.3 million of the 11 million injury-related visits. There were 991,000 visits for adverse effects of medical care, which include both surgical complications and adverse effects of medications, as well as 457,000 visits with intentional injuries.

Chronic conditions

• The presence of chronic conditions was based on the checklist of chronic conditions and reported diagnoses. During data editing, unmarked chronic condition items were edited to be present when comparable diagnoses were reported. In 2007, 51.4% of OPD visits were made by patients with one or more chronic conditions. Hypertension was the most frequent condition (24.1%), followed by hyperlipidemia (11.8%), diabetes (11.5%), and depression (11.3%) (Table 14). Visits by patients with chronic conditions increased with age. A higher percentage of visits by females indicated depression, obesity, and osteoporosis, whereas a higher percentage of visits by males indicated ischemic heart disease, chronic obstructive pulmonary disease, and chronic renal failure.

Services provided

• Diagnostic or screening services were ordered or provided by hospital staff during 89.1% of OPD visits in 2007. Weight (68.8%) and blood pressure (64.8%) were the most frequent vital signs recorded. Complete blood count (CBC) (13.2%), lipids or cholesterol

- (7.0%), and glucose (6.1%) were the most frequently ordered blood tests. Urinalysis was ordered or provided at 9.2% of visits and imaging at 18.2% of visits (Table 15).
- Based on guidelines contained in the "Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure" (8), in adults where blood pressure (BP) was recorded, BP was in the moderately high range (140-159 mm Hg systolic, or 90-99 mm Hg diastolic) in 20.4% of visits and in the severely high range (160 mm Hg or greater systolic or 100 mm Hg or greater diastolic) in 7.5% of visits. Moderate to severe BP elevations were seen more frequently in visits by patients aged 45 or older than in younger patients. Moderate to severe BP elevations were also seen more frequently in visits by non-Hispanic or non-Latino patients than in Hispanic patients and in visits by black patients compared with white patients (Table 16).
- Health education was documented at 44.1% of OPD visits during 2007. Counseling or education related to diet or nutrition (13.5%) and exercise (7.9%) was documented most frequently (Table 17).
- From 1997 to 2007, documented counseling for tobacco use increased from 2.5% to 3.8% of visits (9).
- Nonmedication treatment was ordered or provided at 23.8% of visits during 2007. Psychotherapy was ordered or provided at 4.5% of visits and other mental health services at 3.8% of visits (Table 18).

Medications

- Medications were prescribed, provided, or continued at 65.0 million OPD visits (Table 19). From 1997 through 2007, visits with medications increased from 60.8% to 73.2% (9).
 Of the visits with medications, 71.5% had multiple drugs prescribed, provided, or continued (calculated from Table 19).
- From 1997 to 2007, visits with six or more medications prescribed,

- provided, or continued more than tripled, from 4.7% to 17.1% (9).
- A "drug mention" is documentation in a patient's record of a drug provided, prescribed, or continued at a visit (up to eight per visit). There were a total of 224.9 million drug mentions, for an average of 253.0 drug mentions per 100 visits (Table 20). On average, there were 3.5 drug mentions per drug visit (calculated from Table 20).
- Beginning in 2006, implementation of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 (P.L. 108-173) gave many Medicare enrollees access to prescription drug coverage through stand-alone prescription drug plans offered by private insurers (10). Although the percentage of drug visits by elderly patients using Medicare and private insurance as payment sources increased between 2005 and 2006, the comparable percentage in 2007 (32.1%) was not statistically different from the 2006 percentage (31.6%) (6). Since 1997, the rate at which drugs were prescribed or provided at visits for elderly Medicare patients increased by 73%, from 201.4 per 100 visits in 1997 to 348.9 in 2007 (Figure 2). For this analysis, drug mentions were limited to six drug mentions because the number of drug mentions abstracted changed from six to eight in 2005.
- Since the 2006 survey year, drug data have been processed according to the Multum Lexicon database (for additional information, visit: http:// www.multum.com/Lexicon.htm). Based on Multum terminology, the leading therapeutic drug categories were analgesics (12.7%), which includes narcotic and nonnarcotic analgesics as well as nonsteroidal anti-inflammatory drugs (NSAIDs); followed by antidepressants (4.8%); antihyperlipidemic agents (4.4%); and antidiabetic agents (4.0%) (Table 21). Please note that Multum therapeutic categories are not comparable with the therapeutic classification used prior to 2006 (see Technical Notes).

- In 2007, 68.4% of all drug mentions were continued prescriptions and 26.8% were new prescriptions; for 4.9% of drug mentions, this information was unknown (Table 22).
- In Multum terminology, "drug name" represents a unique combination of active ingredients. In 2007, the leading drug names mentioned were aspirin (2.8%); ibuprofen (2.1%); lisinopril, an angiotensin-converting enzyme inhibitor (2.0%); albuterol, a bronchodilator (1.9%); and hydrochlorothiazide, a diuretic (1.8%) (Table 22). Among the most frequently occurring drug names, those most often listed as new medications for the patient were lidocaine, amoxicillin, azithromycin, ibuprofen, acetaminophen, and acetaminophen-hydrocodone. Note that drug names may include both generic and nongeneric formulations. For example, "acetaminophenhydrocodone" includes the brand name of drugs entered on the PRF (Vicodin, Lortab, etc.) as well as generic acetaminophen-hydrocodone products. Because of the diversity of vitamin products and lack of known specific components of many multivitamins, they are excluded from Table 22.

Providers seen and visit disposition

- Patients saw a physician at 74.4% of visits. They saw a registered nurse or licensed practical nurse at 47.4% of visits. Patients were attended by a mental health provider at 3.6% of visits (Table 23). No physician was seen at 22.7 million OPD visits.
- Patients were attended by a nonphysician clinician (physician assistant or nurse practitioner/ midwife) at 17.5% of visits (data not shown). Since 1997, the percentage of visits attended solely by a physician has not changed, but the percentage of visits attended solely by a nonphysician clinician increased by 145%, from 5.6% to 13.7% in 2007 (data not shown).
- In almost two-thirds of OPD visits (69.7%), patients were told to return

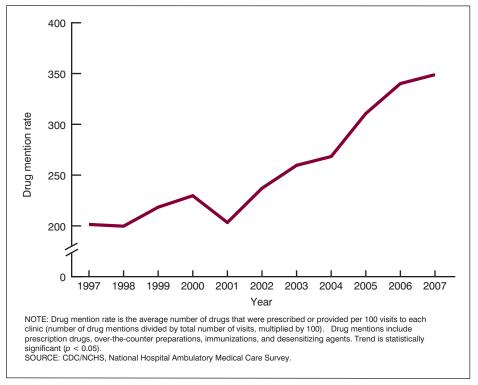


Figure 2. Rate of drugs mentioned per 100 outpatient department visits for patients aged 65 years and over with Medicare as the primary expected source of payment: United States, 1997–2007

to the clinic by appointment. "Return to the clinic PRN (as needed)" accounted for the disposition at 22.1% of visits, and "referred to other physician" accounted for the disposition at 14.0% of visits. Less than 1% of visits resulted in hospital admission (0.6%) or referral to the ED (0.5%) (Table 24).

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Table 1. Number, percent distribution, and annual rate of outpatient department visits, with corresponding standard errors, by hospital characteristics and clinic type: United States, 2007

Hospital characteristic and clinic type	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year ^{1,2}	(Standard error of rate)
All visits	88,894	(9,792)	100.0		30.0	(3.3)
Ownership						
Voluntary	61,444	(8,599)	69.1	(5.3)	20.7	(2.9)
Government	25,233	(5,127)	28.4	(5.2)	8.5	(1.7)
Proprietary	*2,217	(1,660)	*2.5	(1.8)	*0.7	(0.6)
Teaching status						
Teaching hospital	43,047	(7,046)	48.4	(5.5)	14.5	(2.4)
Nonteaching hospital ³	45,847	(6,800)	51.6	(5.5)	15.5	(2.3)
Geographic region						
South	27,676	(6,416)	31.1	(5.6)	25.6	(5.9)
Midwest	27,668	(5,141)	31.1	(5.0)	42.4	(7.9)
Northeast	22,789	(4,763)	25.6	(4.7)	42.3	(8.8)
West	10,761	(2,473)	12.1	(2.8)	15.6	(3.6)
Metropolitan status ⁴						
MSA	73,183	(8,752)	82.3	(4.7)	29.4	(3.5)
Non-MSA	15,711	(4,611)	17.7	(4.7)	33.3	(9.8)
Clinic type ⁵						
General medicine ⁶	48,625	(6,070)	54.7	(2.7)	16.4	(2.0)
Surgery	12,842	(2,479)	14.4	(2.2)	4.3	(0.8)
Substance abuse or other ⁷	9,748	(1,669)	11.0	(1.7)	3.3	(0.6)
Pediatrics	9,480	(1,736)	10.7	(1.5)	3.2	(0.6)
Obstetrics and gynecology	8,200	(1,049)	9.2	(8.0)	2.8	(0.4)

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹ Visit rates are based on the July 1, 2007, set of estimates of the civilian noninstitutionalized population of the United States as developed by the Population Division, U.S. Census Bureau.

²Population estimates by metropolitan statistical area (MSA) status are based on estimates of the civilian noninstitutionalized population of the United States as of July 1, 2007, from the 2007 National Health Interview Survey, National Center for Health Statistics, compiled according to the December 2006 Office of Management and Budget definitions of core-based statistical areas. For more information on metropolitan statistical definitions, see: http://www.census.gov/population/www/metroareas/metrodef.html.

³In 2007, nonteaching hospitals included hospitals with unknown or blank teaching status because this information could not be separately identified. In prior years, the percentage unknown or blank was small.

⁴MSA is metropolitan statistical area.

⁵Only clinics under the supervision of a physician were included. Clinics specializing in radiology, laboratory sevices, physical rehabilitation, or other ancillary services were excluded.

⁶Includes family practice, primary care, and internal medicine clinics.

⁷Other clinic type includes psychiatric, mental health, and miscellaneous specialty clinics.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 2. Number, percent distribution, and annual rate of outpatient department visits, with corresponding standard errors, by patient age and sex: United States, 2007

Patient characteristic	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year ¹	(Standard error of rate)
All visits	88,894	(9,792)	100.0		30.0	(3.3)
Age						
Under 15 years	15,976	(2,147)	18.0	(1.7)	26.3	(3.5)
Under 1 year	3,187	(439)	3.6	(0.3)	74.9	(10.3)
1–4 years	4,689	(632)	5.3	(0.5)	28.5	(3.8)
5–14 years	8,099	(1,182)	9.1	(1.0)	20.2	(2.9)
15–24 years	10,613	(1,201)	11.9	(0.5)	25.6	(2.9)
25–44 years	22,672	(2,542)	25.5	(0.9)	27.8	(3.1)
15–64 years	25,707	(3,121)	28.9	(1.2)	33.8	(4.1)
65 years and over	13,926	(2,081)	15.7	(1.2)	38.4	(5.7)
65–74 years	7,815	(1,178)	8.8	(0.7)	40.9	(6.2)
75 years and over	6,111	(951)	6.9	(0.7)	35.7	(5.5)
Sex and age						
Female	55,494	(6,260)	62.4	(0.9)	36.7	(4.1)
Under 15 years	7,649	(1,041)	8.6	(0.8)	25.7	(3.5)
15–24 years	7,423	(823)	8.4	(0.4)	36.2	(4.0)
25–44 years	15,646	(1,801)	17.6	(0.7)	38.0	(4.4)
45–64 years	15,951	(2,014)	17.9	(0.8)	40.8	(5.2)
65–74 years	4,756	(757)	5.4	(0.5)	46.0	(7.3)
75 years and over	4,069	(633)	4.6	(0.4)	39.2	(6.1)
Male	33,399	(3,683)	37.6	(0.9)	23.0	(2.5)
Under 15 years	8,327	(1,137)	9.4	(0.9)	26.8	(3.7)
15–24 years	3,190	(427)	3.6	(0.2)	15.2	(2.0)
25–44 years	7,026	(846)	7.9	(0.5)	17.4	(2.1)
45–64 years	9,755	(1,172)	11.0	(0.6)	26.4	(3.2)
65–74 years	3,059	(473)	3.4	(0.3)	34.9	(5.4)
75 years and over	2,043	(344)	2.3	(0.3)	30.2	(5.1)

^{...} Category not applicable.

¹Visit rates are based on the July 1, 2007, set of estimates of the civilian noninstitutionalized population of the United States, as developed by the Population Division, U.S. Census Bureau.

Table 3. Number, percent distribution, and annual rate of outpatient department visits, with corresponding standard errors, by patient race and age and by ethnicity: United States, 2007

		Rep	oorted plus impu	ted race or ethr	nicity				Reported race	or ethnicity only	1	
Patient characteristic	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year ¹	(Standard error of rate)	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year ¹	(Standard error of rate)
All visits	88,894	(9,792)	100.0		30.0	(3.3)						
Race and age ²⁻⁵												
Reported race	74,851	(8,494)	84.2	(2.7)	25.3	(2.9)	74,851	(8,494)	100.0		25.3	(2.9)
Imputed (missing) race	14,043	(2,874)	15.8	(2.7)	4.7	(1.0)						
White	62,815	(8,053)	70.7	(3.2)	26.5	(3.4)	52,950	(7,041)	70.7	(3.6)	22.3	(3.0)
Under 15 years	10,845	(1,569)	12.2	(1.2)	23.4	(3.4)	8,263	(1,281)	11.0	(1.2)	17.8	(2.8)
15–24 years	7,275	(978)	8.2	(0.5)	22.6	(3.0)	5,961	(866)	8.0	(0.6)	18.6	(2.7)
25–44 years	15,991	(2,059)	18.0	(1.0)	24.8	(3.2)	13,532	(1,819)	18.1	(1.1)	21.0	(2.8)
45–64 years	18,070	(2,390)	20.3	(1.2)	28.7	(3.8)	15,709	(2,125)	21.0	(1.2)	24.9	(3.4)
65–74 years	5,920	(1,064)	6.7	(0.7)	36.2	(6.5)	5,177	(965)	6.9	(0.8)	31.7	(5.9)
75 years and over	4,714	(836)	5.3	(0.6)	31.2	(5.5)	4,307	(801)	5.8	(0.7)	28.5	(5.3)
Black or African American	21,815	(3,369)	24.5	(3.1)	58.4	(9.0)	18,268	(3,069)	24.4	(3.4)	48.9	(8.2)
Under 15 years	4,203	(792)	4.7	(0.8)	45.3	(8.5)	3,218	(559)	4.3	(0.7)	34.7	(6.0)
15–24 years	2,763	(400)	3.1	(0.4)	44.7	(6.5)	2,244	(331)	3.0	(0.4)	36.3	(5.3)
25–44 years	5,523	(811)	6.2	(0.8)	53.0	(7.8)	4,646	(726)	6.2	(8.0)	44.6	(7.0)
45–64 years	6,585	(1,358)	7.4	(1.3)	78.4	(16.2)	5,906	(1,326)	7.9	(1.5)	70.4	(15.8)
65–74 years	1,483	(364)	1.7	(0.4)	83.4	(20.5)	1,282	(359)	1.7	(0.4)	72.1	(20.2)
75 years and over	1,258	(365)	1.4	(0.4)	96.7	(28.0)	*971	*(297)	*1.3	*(0.4)	*74.6	*(22.8)
Asian	2,116	(366)	2.4	(0.4)	15.9	(2.7)	1,752	(320)	2.3	(0.4)	13.2	(2.4)
Native Hawaiian or Other Pacific		, ,		,		,		, ,		, ,		,
Islander	*324	*(113)	*0.4	*(0.1)	*61.4	*(21.5)	*300	*(112)	*0.4	*(0.1)	*56.8	*(21.2)
American Indian or Alaska Native	*589	*(247)	*0.7	*(0.3)	*20.4	*(8.6)	*493	*(243)	*0.7	*(0.3)	*17.1	*(8.4)
Multiple races	*1,235	*(489)	*1.4	*(0.5)	*25.7	*(10.2)	*1,087	*(477)	*1.5	*(0.6)	*22.6	*(9.9)
Ethnicity ^{2,3,6,7}												
Reported ethnicity	68,443	(7,999)	77.0	(3.8)	23.1	(2.7)	68,443	(7,999)	100.0		23.1	(2.7)
Imputed (missing) ethnicity	20,451	(4,194)	23.0	(3.8)	6.9	(1.4)						
Hispanic or Latino	14,169	(2,065)	15.9	(2.1)	31.5	(4.6)	10,883	(1,712)	15.9	(2.4)	24.2	(3.8)
Not Hispanic or Latino	74,725	(8,945)	84.1	(2.1)	29.7	(3.6)	57,560	(7,415)	84.1	(2.4)	22.9	(3.0)

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹ Visit rates are based on the July 1, 2007, set of estimates of the civilian noninstitutionalized population of the United States as developed by the Population Division, U.S. Census Bureau.

²The race groups White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and Multiple Races include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to the Office of Mangement and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and is lower than what is typically found for self-reported race in household surveys.

³For 2007, race data were missing for 15.8% of visits and ethnicity data were missing for 23.0% of visits. Readers are therefore advised to treat these data with caution. Estimates based on imputed race and ethnicity data are shown separately from comparison estimates using unimputed data. Missing race and ethnicity were imputed using a hot deck approach, rather than the previously used cold deck strategy. The imputation process is described more fully in the 2007 public-use file documentation (available from: http://www.cdc.gov/nchs/ahcd.htm). Research is currently under way to evaluate further changes to the imputation strategy for use with 2008 data.

⁴Includes race that was reported directly by outpatient departments and imputed values for the 15.8% of visits for which race was not reported.

⁵Calculations are based on 74,851 visits (in thousands), with race reported directly by outpatient departments. The 15.8% of visits for which race was missing are excluded from the denominator so that readers could compare differences between estimates that include and exclude imputed race values.

⁶Includes ethnicity that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which ethnicity was not reported.

⁷Calculations are based on 68,443 visits (in thousands) with ethnicity reported directly by outpatient departments. The 23.0% of visits for which race was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

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

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 4. Number and percentage of outpatient department visits, with corresponding standard errors, by expected source(s) of payment: United States, 2007

Expected source of payment	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits	88,894	(9,792)		
Private insurance	35,453	(5,228)	39.9	(3.1)
Medicaid or SCHIP ²	29,469	(3,666)	33.2	(2.5)
Medicare	15,673	(2,215)	17.6	(1.2)
Medicare and Medicaid ³	2,694	(608)	3.0	(0.6)
No insurance ⁴	8,303	(1,853)	9.3	(1.9)
Self-pay	5,563	(993)	6.3	(0.9)
No charge or charity	*2,844	(1,263)	*3.2	(1.4)
Workers' compensation	910	(258)	1.0	(0.2)
Other	4,568	(1,023)	5.1	(0.9)
Unknown or blank	3,905	(850)	4.4	(0.9)

[.] Category not applicable.

NOTES: Numbers may not add to totals because of rounding. More than one category could be indicated.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 5. Number and percent distribution of outpatient department visits, with corresponding standard errors, by selected visit characteristics, according to prior-visit status: United States, 2007

Prior-visit status, primary care provider (PCP), ¹ and referral status	Number of visits in thousands ¹	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits	88,894	(9,792)	100.0	
Visit to PCP	33,212	(4,791)	37.4	(3.0)
Visit to non-PCP ²	49,191	(5,835)	55.3	(3.0)
Referred for this visit	20,060	(3,265)	22.6	(2.5)
Not referred for this visit	19,973	(2,925)	22.5	(2.6)
Unknown if referred ³	9,158	(1,508)	10.3	(1.3)
Unknown if PCP visit ^{2,3}	6,492	(1,501)	7.3	(1.6)
Established patient				
All visits	73,719	(8,512)	100.0	
Visit to PCP	31,791	(4,630)	43.1	(3.1)
Visit to non-PCP ²	36,679	(4,573)	49.8	(3.0)
Referred for this visit	12,080	(2,443)	16.4	(2.4)
Not referred for this visit	17,232	(2,586)	23.4	(2.9)
Unknown if referred ³	7,366	(1,241)	10.0	(1.3)
Unknown if PCP visit ^{2,3}	5,250	(1,298)	7.1	(1.6)
New patient				
All visits	15,175	(1,853)	100.0	
Visit to PCP	1,421	(219)	9.4	(1.6)
Visit to non-PCP ²	12,512	(1,729)	82.5	(2.5)
Referred for this visit	7,980	(1,283)	52.6	(4.7)
Not referred for this visit	2,741	(764)	18.1	(4.3)
Unknown if referred ³	1,791	(392)	11.8	(2.2)
Unknown if PCP visit ^{2,3}	1,242	(244)	8.2	(1.5)

[.] Category not applicable.

^{...} Category not applicable.

* Figure does not meet standards of reliability or precision.

¹Combined total exceeds "all visits" because more than one source of payment may be reported per visit.

²SCHIP is State Children's Health Insurance Program.

³Visits in this category are included in both the Medicaid or SCHIP and Medicare categories.

⁴Having only self-pay, no charge, or charity as payment sources.

¹Patient's PCP as indicated by a positive response to the question, "Is this clinic the patient's primary care provider?"

²Referral status was asked only for visits to non-PCPs and visits with unknown PCP status. Among these visits, referral information was unknown for 25.4% of visits.

³The unknown category includes blanks.

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

Table 6. Percent distribution of outpatient department visits, with corrresponding standard errors, by primary care provider and referral status, according to type of clinic: United States, 2007

			Visit to non-PCP ³									
Type of clinic ¹	Total	Visit to PCP ²		for	erred this sit	for	eferred this sit	Unkr i refer	f		nown if CP ^{3,4}	
	Percent distribution (standard error of percent)											
All visits	100.0	37.4	(3.0)	22.6	(2.5)	22.5	(2.6)	10.3	(1.3)	7.3	(1.6)	
General medicine ⁵	100.0	52.7	(4.1)	13.2	(2.1)	18.5	(3.2)	7.3	(1.6)	8.3	(2.1)	
Surgery	100.0	*3.9	(1.3)	51.8	(6.3)	26.8	(4.8)	*13.1	(3.5)	4.4	(1.3)	
Pediatrics	100.0	56.3	(8.4)	*24.7	(7.2)	9.0	(2.2)	*4.4	(2.1)	5.7	(1.6)	
Obstetrics and gynecology	100.0	18.8	(4.0)	22.1	(4.5)	32.0	(4.2)	18.7	(4.0)	8.4	(1.6)	
Substance abuse and other ⁶	100.0	*2.3	(1.5)	29.1	(5.3)	41.6	(5.0)	*20.1	(4.8)	*6.8	(1.9)	

^{*} Figure does not meet standards of reliability or precision.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 7. Number and percent distribution of outpatient department visits, with corresponding standard errors, by the 20 principal reasons for visit most frequently mentioned by patients: United States, 2007

Principal reason for visit mentioned by patient and RVC code ¹	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standare error of percent)
All visits	88,894	(9,792)	100.0	
Progress visit, not otherwise specified	6,188	(1,019)	7.0	(1.1)
General medical examination	5,221	(752)	5.9	(0.6)
renatal examination, routine	2,694	(425)	3.0	(0.4)
ough	1,923	(312)	2.2	(0.3)
ledication, other and unspecified kinds T115	1,818	(332)	2.0	(0.3)
symptoms referable to throat	1,588	(273)	1.8	(0.3)
viabetes mellitus	1,474	(306)	1.7	(0.3)
Vell-baby examination	1,372	(203)	1.5	(0.2)
ack symptoms	1,359	(217)	1.5	(0.2)
Stomach pain, cramps, and spasms	1,347	(228)	1.5	(0.2)
Counseling, not otherwise specified	1,323	(306)	1.5	(0.3)
Postoperative visit	1,306	(228)	1.5	(0.2)
Synecological examination	1,111	(275)	1.2	(0.3)
lypertension	979	(208)	1.1	(0.2)
ow back symptoms	929	(233)	1.0	(0.2)
leadache, pain in head	855	(125)	1.0	(0.1)
Earache or ear infection	852	(165)	1.0	(0.1)
Chest pain and related symptoms	850	(200)	1.0	(0.2)
sychotherapy T410	*843	*(279)	*0.9	*(0.3)
kin rash	828	(141)	0.9	(0.1)
Ill other reasons	54,036	(6,548)	60.8	(1.6)

^{...} Category not applicable.

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

¹ Only clinics under the supervision of a physician were included. Clinics specializing in radiology, laboratory services, physical rehabilitation, or other ancillary services were excluded.

²PCP is patient's primary care provider, as indicated by a positive response to the question, "Is this clinic the patient's primary care provider?"

³Referral status was asked only for visits to non-PCPs and visits with unknown PCP status. Among these visits, referral information was unknown for 25.4% of visits.

⁴The unknown category includes blanks.

⁵Includes family practice, primary care, and internal medicine clinics.

⁶Other clinic types include psychiatric, mental health, and miscellaneous specialty clinics.

^{*} Figure does not meet standards of reliablity or precision.

¹Based on "A Reason for Visit Classification for Ambulatory Care" (11) (RVC).

Table 8. Number and percent distribution of outpatient department visits, with corresponding standard errors, by provider-assessed major reason for visit, according to selected patient and visit characteristics: United States, 2007

Patient or visit characteristic	Total number of visits in thousands	Total percent		ute olem	prol	onic olem tine	pro	ronic blem reup	post-s or i	e- or surgery njury owup		entive re ¹		nown olank
				Pe	rcent dis	tribution	(standa	rd error o	of percer	nt)				
All visits	88,894	100.0	31.4	(2.0)	33.5	(2.0)	6.5	(0.5)	4.7	(0.5)	21.2	(1.5)	*2.7	(1.2)
Age														
Under 15 years	15,976	100.0	43.0	(3.6)	18.7	(3.3)	6.0	(1.3)	1.9	(0.5)	27.7	(2.8)	*2.7	(1.1)
Under 1 year	3,187	100.0	36.2	(2.9)	*6.0	(2.1)	2.9	(8.0)		*	52.5	(3.6)		*
1–4 years	4,689	100.0	45.3	(3.7)	12.6	(3.4)	6.4	(1.6)	*2.1	(0.7)	30.2	(3.1)	*3.4	(2.1)
5–14 years	8,099	100.0	44.3	(4.8)	27.2	(3.8)	7.0	(1.9)	2.0	(0.5)	16.5	(2.3)	*3.0	(1.2)
15–24 years	10,613	100.0	34.7	(2.8)	18.5	(2.3)	6.6	(0.9)	3.8	(0.7)	34.0	(2.7)	*2.4	(0.9)
25–44 years	22,672	100.0	31.8	(2.2)	30.4	(2.3)	6.3	(0.6)	5.0	(0.6)	23.7	(1.9)	*2.8	(1.4)
45–64 years	25,707	100.0	26.7	(2.0)	42.9	(2.3)	7.4	(0.7)	5.6	(0.6)	14.3	(1.7)	*3.0	(1.5)
65 years and over	13,926	100.0	23.4	(2.5)	49.8	(3.8)	5.7	(0.6)	6.5	(0.9)	12.7	(2.5)	*1.9	(8.0)
65–74 years	7,815	100.0	22.5	(2.4)	49.5	(3.3)	6.2	(0.7)	7.1	(1.2)	12.9	(2.1)	*1.8	(0.7)
75 years and over	6,111	100.0	24.5	(3.1)	50.2	(4.8)	5.0	(0.9)	5.7	(1.0)	12.6	(3.6)	*2.0	(0.9)
Sex														
Female	55,494	100.0	30.0	(1.9)	32.1	(1.9)	6.0	(0.6)	4.2	(0.4)	25.1	(1.4)	*2.6	(1.2)
Male	33,399	100.0	33.7	(2.3)	35.9	(2.4)	7.4	(0.6)	5.5	(0.6)	14.7	(2.1)	*2.8	(1.1)
Race ^{2,3}														
Reported race	74,851	100.0	30.7	(2.2)	35.6	(1.9)	6.8	(0.6)	5.1	(0.5)	19.7	(1.2)	*2.1	(0.9)
Imputed (missing) race	14,043	100.0	35.2	(3.6)	22.7	(4.3)	4.7	(8.0)	2.6	(0.5)	29.3	(4.8)	*5.5	(2.5)
Reported plus imputed ⁴														
White	62,815	100.0	33.5	(2.2)	33.4	(2.2)	6.5	(0.6)	4.7	(0.5)	19.5	(1.8)	*2.4	(0.9)
Black or African American	21,815	100.0	24.9	(2.6)	35.8	(3.2)	6.4	(0.8)	4.5	(0.6)	25.0	(1.6)	*3.3	(1.8)
Other ⁵	4,264	100.0	33.4	(3.8)	24.2	(2.3)	6.7	(1.2)	5.7	(0.8)	27.0	(2.9)	*3.0	(1.8)
Reported only ⁶														
White	52,950	100.0	32.9	(2.4)	35.5	(2.1)	6.9	(0.6)	5.1	(0.6)	17.8	(1.5)	*1.8	(0.6)
Black or African American	18,268	100.0	24.0	(3.0)	38.0	(3.5)	6.8	(1.0)	4.8	(0.6)	23.4	(1.5)	*2.9	(1.8)
Other ⁵	3,632	100.0	31.2	(4.2)	25.0	(2.6)	6.5	(1.1)	6.4	(0.9)	28.1	(3.1)	*2.8	(1.8)
Ethnicity ^{2,3}														
Reported ethnicity	68,443	100.0	31.1	(2.2)	35.9	(2.0)	6.6	(0.5)	4.8	(0.4)	20.1	(1.3)	1.6	(0.4)
Imputed (missing)	20,451	100.0	32.4	(4.5)	25.6	(4.1)	6.1	(1.1)	*4.6	(1.4)	25.0	(4.8)	*6.3	(3.7)
Reported plus imputed ⁷														
Hispanic or Latino	14,169	100.0	25.4	(1.7)	25.0	(2.6)	4.9	(0.7)	4.4	(0.7)	35.2	(2.7)	*5.0	(2.6)
Not Hispanic or Latino	74,725	100.0	32.5	(2.2)	35.1	(2.2)	6.8	(0.6)	4.8	(0.5)	18.5	(1.4)	*2.2	(0.9)
Reported only ⁸														
Hispanic or Latino	10,883	100.0	24.8	(1.7)	25.2	(2.8)	5.0	(0.9)	4.6	(0.7)	36.4	(2.6)	*4.1	(2.0)
Not Hispanic or Latino	57,560	100.0	32.2	(2.5)	37.9	(2.2)	6.9	(0.6)	4.8	(0.5)	17.0	(1.1)	1.1	(0.2)
Expected source of payment9														
Private insurance	35,453	100.0	36.7	(2.6)	32.2	(2.3)	6.6	(0.7)	4.5	(0.9)	17.8	(1.9)	*2.2	(8.0)
Medicaid or SCHIP ¹⁰	29,469	100.0	29.3	(2.6)	31.3	(2.8)	6.1	(0.6)	4.1	(0.5)	27.4	(1.8)	*1.9	(0.6)
Medicare	15,673	100.0	24.1	(2.4)	49.2	(3.4)	6.1	(0.7)	6.0	(0.9)	12.3	(2.4)	*2.3	(1.0)
No insurance ¹¹	8,303	100.0	30.4	(2.4)	32.9	(2.7)	8.5	(1.0)	5.1	(1.0)	20.8	(1.9)	*2.3	(1.0)
Other ¹²	8,249	100.0	25.6	(3.2)	32.4	(5.4)	5.0	(1.0)	5.4	(1.5)	24.1	(4.9)	*7.5	(4.4)

^{*} Figure does not meet standards of reliability or precision.

^{. . .} Category not applicable.

¹ Includes routine prenatal, general medical, well-baby, screening, and insurance examinations (see question 4c in the Patient Record Form).

²For 2007, race data were missing for 15.8% of visits, and ethnicity data were missing for 23.0% of visits. Readers are therefore advised to treat these data with caution. Estimates based on imputed race and ethnicity data are shown separately from comparison estimates using unimputed data. Missing race and ethnicity were imputed using a hot deck approach rather than the previously used cold deck strategy. The imputation process is described more fully in the 2007 public-use file documentation (available from: http://www.cdc.gov/nchs/ahcd.htm). Research is currently under way to evaluate further changes to the imputation strategy for use with 2008 data.

³The race groups White, Black or African American, and Other include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to the Office of Management and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and lower than what is typically found for self-reported race in household surveys.

⁴Includes race that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which race was not reported.

⁵Includes visits by Asians, Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons with more than one race.

⁶Calculations are based on 74,851 visits (in thousands) with race reported directly by outpatient departments. The 15.8% of visits for which race was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed race values.

⁷Includes ethnicity that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which ethnicity was not reported.

⁸Calculations are based on 68,443 visits (in thousands) with ethnicity reported directly by outpatient departments. The 23.0% of visits for which ethnicity was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

⁹Combined total of individual sources exceeds "all visits" because more than one source of insurance may be reported per visit.

¹⁰SCHIP is State Children's Health Insurance Program.

¹¹Having only self-pay, no charge, or charity as payment sources.

¹²Other includes workers' compensation, unknown or blank, and payments not classified elsewhere.

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

Table 9. Number, percentage, and annual rate of preventive care outpatient department visits, with corrresponding standard errors, by selected patient and visit characteristics: United States, 2007

Patient or visit characteristic	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)	Number of preventive care visits per 100 persons per year ¹	(Standard error of rate)
All preventive care visits ²	18,849	(2,545)	100.0		6.4	(0.9)
Age						
Under 15 years	4,427	(631)	23.5	(2.3)	7.3	(1.0)
Under 1 year	1,674	(239)	8.9	(0.9)	39.4	(5.6)
1–4 years	1,417	(211)	7.5	(0.9)	8.6	(1.3)
5–14 years	1,336	(231)	7.1	(0.8)	3.3	(0.6)
15–24 years	3,611	(473)	19.2	(1.5)	8.7	(1.1)
25–44 years	5,364	(787)	28.5	(1.2)	6.6	(1.0)
45-64 years	3,672	(694)	19.5	(2.0)	4.8	(0.9)
55 years and over	1,775	(412)	9.4	(1.4)	4.9	(1.1)
Sex and age						
Female	13,938	(1,852)	73.9	(2.8)	9.2	(1.2)
Under 15 years	2,218	(314)	11.8	(1.1)	7.5	(1.1)
15–24 years	3,285	(435)	17.4	(1.5)	16.0	(2.1)
25–44 years	4,582	(645)	24.3	(1.7)	11.1	(1.6)
45–64 years	2,612	(547)	13.9	(2.0)	6.7	(1.4)
65 years and over	1,241	(278)	6.6	(0.9)	6.0	(1.3)
Male	4,911	(917)	26.1	(2.8)	3.4	(0.6)
Under 15 years	2,209	(330)	11.7	(1.2)	7.1	(1.1)
15–24 years	326	(71)	1.7	(0.3)	1.6	(0.3)
25–44 years	*781	(271)	*4.1	(1.1)	*1.9	(0.7)
45–64 years	1,060	(247)	5.6	(0.9)	2.9	(0.7)
65 years and over	*535	(169)	*2.8	(0.7)	*3.4	(1.1)
	000	(100)	2.0	(0.7)	0.1	(1.1)
Race ^{3,4}						
Reported	14,735	(1,880)	78.2	(4.9)	5.0	(0.6)
Imputed (missing) Reported plus imputed ⁵ :	*4,114	(1,237)	*21.8	(4.9)	*1.4	(0.4)
White	12,239	(2,118)	64.9	(4.2)	5.2	(0.9)
Black or African American	5,461	(836)	29.0	(3.9)	14.6	(2.2)
Other ⁶ Reported only ⁷ :	1,150	(250)	6.1	(1.3)	5.3	(1.2)
White	9,441	(1,591)	64.1	(4.5)	4.0	(0.7)
Black or African American	4,274	(664)	29.0	(4.2)	11.4	(1.8)
Other ⁶	1,021	(236)	6.9	(1.5)	4.7	(1.1)
Ethnicity ^{3,4}						
Reported	13,737	(1,625)	72.9	(6.7)	4.6	(0.5)
Imputed (missing) Reported plus imputed ^a :	*5,112	(1,714)	*27.1	(6.7)	*1.7	(0.6)
Hispanic or Latino	4,988	(891)	26.5	(3.7)	11.1	(2.0)
Not Hispanic or Latino	13,861	(2,088)	73.5	(3.7)	5.5	(0.8)
Reported only ⁹						
Hispanic or Latino	3,965	(748)	28.9	(4.2)	8.8	(1.7)
Not Hispanic or Latino	9,772	(1,290)	71.1	(4.2)	3.9	(0.5)

See footnotes at end of table.

Table 9. Number, percentage, and annual rate of preventive care outpatient department visits, with corrresponding standard errors, by selected patient and visit characteristics: United States, 2007—Con.

Patient or visit characteristic	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)	Number of preventive care visits per 100 persons per year ¹	(Standard error of rate)
Expected source of payment ¹⁰						
Medicaid or SCHIP ¹¹	8,086	(1,044)	42.9	(4.0)	23.1	(3.0)
Private insurance	6,313	(1,330)	33.5	(4.0)	3.3	(0.7)
Medicare	1,932	(447)	10.3	(1.4)	4.9	(1.1)
No insurance ¹²	1,728	(412)	9.2	(2.0)	4.0	(1.0)
Other ¹³	1,977	(571)	10.5	(2.3)		

[.] Category not applicable.

¹ Visit rates for age, sex, race, and ethnicity are based on the July 1, 2007, set of estimates of the civilian noninstitutional population of the United States as developed by the Population Division, U.S. Census Bureau. Visit rates by source(s) of payment are based on the 2007 National Health Interview Survey estimates of health insurance.

²Preventive care includes routine prenatal, general medical, well-baby, screening, and insurance examinations (see question 4c in the Patient Record Form).

³For 2007, race data were missing for 15.8% of all visits, and ethnicity data were missing for 23.0% of all visits. Readers are therefore advised to treat these data with caution. Estimates based on imputed race and ethnicity data are shown separately from comparison estimates using unimputed data. Missing race and ethnicity data in the National Hospital Ambulatory Medical Care Survey have traditionally been imputed using a cold deck method, and the procedure was improved for use with estimates beginning with 2006 survey data. The imputation process is described more fully in the 2007 public-use file documentation (available from: http://www.cdc.gov/nchs/ahcd.htm). Research is currently under way to evaluate further changes to the imputation strategy for use with 2008 data

⁴All race categories include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to the Office of Mangement and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. However, the percentage of visit records with multiple races indicated is small and lower than what is typically found for self-reported race.

⁵Includes race that was reported directly by outpatient departments, as well as imputed values for the 21.8% of preventive care visits for which race was not reported.

⁶Includes Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and multiple races.

⁷Calculations are based on 14,735 preventive care visits (in thousands) with race reported directly by outpatient departments. The 21.8% of preventive care visits for which race was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed race values.

⁸Includes ethnicity that was reported directly by outpatient departments, as well as imputed values for the 27.1% of preventive care visits for which ethnicity was not reported.

⁹Calculations are based on 13,737 preventive care visits (in thousands) with ethnicity reported directly by outpatient departments. The 27.1% of preventive care visits for which ethnicity was missing are excluded from the demoninator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

10 Total exceeds "all visits" because more than one source of payment may be reported per visit.

¹¹SCHIP is State Children's Health Insurance Program.

¹²Having only self-pay, no charge, or charity as payment sources. The visit rate was calculated, using "uninsured" as the denominator, from the 2007 estimates of health insurance coverage from the National Health Interview Survey.

¹³Includes workers' compensation, unknown or blank, and sources not classified elsewhere.

Table 10. Number and percent distribution of outpatient department visits, with corresponding standard errors, by primary diagnosis: United States, 2007

Major disease category and ICD-9-CM code range ¹	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits	88,894	(9,792)	100.0	
nfectious and parasitic diseases	2,448	(375)	2.8	(0.3)
Neoplasms	3,588	(917)	4.0	(0.8)
Endocrine, nutritional, metabolic diseases, and immunity disorders 240–279	5,521	(704)	6.2	(0.6)
Mental disorders	7,768	(1,328)	8.7	(1.5)
Diseases of the nervous system and sense organs	6,054	(913)	6.8	(0.7)
Diseases of the circulatory system	7,929	(1,694)	8.9	(1.5)
Diseases of the respiratory system	7,998	(1,098)	9.0	(0.8)
Diseases of the digestive system	3,030	(632)	3.4	(0.6)
Diseases of the genitourinary system	3,555	(466)	4.0	(0.3)
Diseases of the skin and subcutaneous tissue	2,628	(448)	3.0	(0.4)
Diseases of the musculoskeletal system and connective tissue 710–739	5,989	(1,034)	6.7	(8.0)
Symptoms, signs, and ill-defined conditions	5,289	(601)	5.9	(0.4)
njury and poisoning	4,470	(689)	5.0	(0.6)
Supplementary classification ²	18,339	(2,316)	20.6	(1.3)
Il other diagnoses ³	3,726	(653)	4.2	(0.5)
Jnknown ⁴	562	(135)	0.6	(0.2)

^{. . .} Category not applicable.

¹Based on International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM) (12).

²Includes general medical examination, routine prenatal examination, health supervision of an infant or child, and other diagnoses not classifiable to injury or illness.

Includes diseases of the blood and blood-forming organs (280–289); complications of pregnancy, childbirth, and the puerperium (630–677); congenital anomalies (740–759); certain conditions originating in perinatal period (760–779); and entries not codable to the ICD–9–CM (e.g., illegible entries, left against medical advice, transferred, entries of of "none," no diagnoses) (V99).

Table 11. Number and percent distribution of outpatient department visits, with corresponding standard errors, by primary diagnosis group: United States, 2007

Primary diagnosis group and ICD-9-CM code range ¹	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits	88,894	(9,792)	100.0	
Essential hypertension	3,397	(630)	3.8	(0.5)
Routine infant or child health check	3,297	(511)	3.7	(0.4)
Diabetes mellitus	3,045	(426)	3.4	(0.4)
Malignant neoplasms	2,748	(753)	3.1	(0.7)
Normal pregnancy ²	2,617	(379)	2.9	(0.4)
Acute upper respiratory infections, excluding pharyngitis	2,372	(366)	2.7	(0.3)
pinal disorders	2,210	(435)	2.5	(0.4)
Arthropathies and related disorders	2,048	(468)	2.3	(0.4)
Heart disease, excluding ischemic 391–392.0,393–398,402,404,415–416,420–429	*1,746	(527)	2.0	(0.5)
Psychoses, excluding major depressive disorder 290–295,296.0–296.1,296.4–299	1,715	(330)	1.9	(0.4)
Complications of pregnancy, childbirth, and the puerperium ³	1,583	(406)	1.8	(0.4)
Specific procedures and aftercare	1,577	(235)	1.8	(0.2)
General medical examination	*1,542	(482)	1.7	(0.5)
Asthma	1,408	(338)	1.6	(0.4)
Rheumatism, excluding back	1,276	(229)	1.4	(0.2)
Otitis media and eustachian tube disorders	1,231	(228)	1.4	(0.2)
Najor depressive disorder	1,191	(268)	1.3	(0.3)
Orug dependence amd nondependence abuse of drugs	*1,165	(612)	*1.3	(0.7)
Chronic sinusitis	1,157	(295)	1.3	(0.3)
Gynecological examination ⁴	1,077	(244)	1.2	(0.2)
All other diagnoses ⁵	50,493	(5,624)	56.8	(1.3)

^{...} Category not applicable.

NOTES: SE is standard error. Numbers may not add to totals because of rounding.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 12. Number, percent distribution, and annual rate of outpatient department visits related to injury, poisoning, or adverse effects of medical treatment, with corresponding standard errors, by selected patient characteristics: United States, 2007

Patient characteristic	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year	(Standard error in rate) ¹
All injury-related visits ²	10,999	(1,428)	100.0		3.7	(0.5)
Age						
Under 15 years	1,521	(265)	13.8	(1.7)	2.5	(0.4)
Under 1 year	*117	(35)	1.1	(0.3)	*2.7	(0.8)
1–4 years	404	(82)	3.7	(0.6)	2.5	(0.5)
5–14 years	1,000	(196)	9.1	(1.4)	2.5	(0.5)
15–24 years	1,684	(267)	15.3	(0.9)	4.1	(0.6)
25–44 years	3,429	(581)	31.2	(2.7)	4.2	(0.7)
45–64 years	3,202	(415)	29.1	(2.0)	4.2	(0.5)
65 years and over	1,163	(202)	10.6	(1.3)	3.2	(0.6)
65–74 years	625	(114)	5.7	(0.7)	3.3	(0.6)
75 years and over	538	(104)	4.9	(8.0)	3.1	(0.6)

See footnotes at end of table.

^{*} Figure does not meet standards of reliability or precision.

¹Based on International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) (12). However, certain codes have been combined in this table to better describe the utilization of ambulatory care services.

²Among visits by female patients, 4.7% (SE = 0.6) were for normal pregnancy.

³Among visits by female patients, 2.9% (SE = 0.6) were for complications of pregnancy, childbirth, and the puerperium.

⁴Among visits by female patients, 1.9% (SE = 0.4) were for gynecological examination.

⁵Includes all other diagnoses not listed above, as well as unknown or blank diagnoses (0.6%, SE = 0.2).

Table 12. Number, percent distribution, and annual rate of outpatient department visits related to injury, poisoning, or adverse effects of medical treatment, with corresponding standard errors, by selected patient characteristics: United States, 2007—Con.

Patient characteristic	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year	(Standard error in rate) ¹
Sex and age						
Female	5,393	(705)	49.0	(1.5)	3.6	(0.5)
Under 15 years	684	(129)	6.2	(0.9)	2.3	(0.4)
15–24	681	(127)	6.2	(0.8)	3.3	(0.6)
25–44	1,624	(278)	14.8	(1.3)	3.9	(0.7)
45–64	1,699	(234)	15.4	(1.2)	4.3	(0.6)
65–74	332	(63)	3.0	(0.5)	3.2	(0.6)
75 years and over	372	(73)	3.4	(0.6)	3.6	(0.7)
Male	5,606	(762)	51.0	(1.5)	3.9	(0.5)
Under 15 years	837	(149)	7.6	(1.0)	2.7	(0.5)
15–24	1,002	(177)	9.1	(0.8)	4.8	(0.8)
25–44	1,805	(326)	16.4	(1.8)	4.5	(0.8)
45–64	1,503	(204)	13.7	(1.2)	4.1	(0.6)
65–74	293	(64)	2.7	(0.5)	3.3	(0.7)
75 years and over	*166	(51)	1.5	(0.4)	*2.5	(0.8)
Race ^{3,4}						
Reported	9,201	(1,297)	83.7	(3.5)	3.1	(0.4)
Imputed (missing)	1,797	(423)	16.3	(3.5)	0.6	(0.1)
White	8,163	(1,213)	74.2	(3.1)	3.4	(0.5)
Black or African American	2,293	(370)	20.8	(3.1)	6.1	(1.0)
Other ⁶	543	(142)	4.9	(1.1)	2.5	(0.7)
Reported only ⁷		, ,		, ,		, ,
White	6,825	(1,112)	74.2	(3.5)	2.9	(0.5)
Black or African American	1,903	(342)	20.7	(3.6)	5.1	(0.9)
Other ⁶	473	(139)	5.1	(1.3)	2.2	(0.6)
Ethnicity ^{3,4}						
Reported	8,050	(1,211)	73.2	(5.3)	2.7	(0.4)
mputed (missing)	2,949	(695)	26.8	(5.3)	1.0	(0.2)
Reported plus imputed ⁸		• •		• •		
Hispanic or Latino	1,215	(178)	11.0	(1.6)	2.7	(0.4)
Not Hispanic or Latino	9,784	(1,356)	89.0	(1.6)	3.9	(0.5)
Reported only ⁹						
Hispanic or Latino	861	(149)	10.7	(2.0)	1.9	(0.3)
Not Hispanic or Latino	7,189	(1,169)	89.3	(2.0)	2.9	(0.5)

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹Visits rates for age, sex, race, and ethnicity are based on the July 1, 2007 set of estimates of the civilian noninstitutionalized population of the United States as developed by the Population Division, U.S. Census Bureau.

²Injury-related visits included injury, poisoning, or adverse effects of medical treatment based on item 2 of the patient record form. Injury visits represent 12.4% (standard error = 1.0) of all outpatient department visits.

³For 2007, race data were missing for 15.8% of visits, and ethnicity data were missing for 23.0% of visits. Readers are therefore advised to treat these data with caution. Estimates based on imputed race and ethnicity data are shown separately from comparison estimates using unimputed data. Missing race and ethnicity data in the National Hospital Ambulatory Medical Care Survey have traditionally been imputed using a cold deck method, and the procedure was improved for use with estimates beginning with 2006 survey data. The imputation process is described more fully in the 2007 public-use file documentation (available from: http://www.cdc.gov/nchs/ahcd.htm). Research is currently under way to evaluate further changes to the imputation strategy for use with 2008 data.

⁴The race groups White, Black or African American, and Other include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to the Office of Mangement and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and lower than what is typically found for self-reported race in household surveys.

⁵Includes race that was reported directly by the outpatient departments, as well as imputed values for the 15.8% of visits for which race was not reported.

⁶Includes visits by Asians, Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons with more than one race.

⁷Calculations are based on 9,202 visits (in thousands) with race reported directly by the outpatient departments. The 15.8% of visits for which race was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed race values.

⁸Includes ethnicity that was reported directly by outpatient departments, as well as imputed values for the 23.0% of visits for which ethnicity was not reported.

⁹Calculations are based on 8,050 visits (in thousands) with ethnicity reported directly by outpatient departments. The 23.0% of visits for which ethnicity was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

Table 13. Number and percent distribution of outpatient department visits related to injury, poisoning, or adverse effects of medications, with corresponding standard errors, by intent: United States, 2007

Intent	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)
all injury-related visits	10,999	(1,428)	100.0	
nintentional injury or poisoning	7,286	(1,160)	66.2	(3.1)
medicinal drug	991	(148)	9.0	(1.2)
Itentional injury or poisoning ¹	457	(112)	4.2	(8.0)
jury or poisoning of undetermined intent ²	2,264	(262)	20.6	(2.4)

^{. . .} Category not applicable.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 14. Number and percent distribution of outpatient department visits, with corresponding standard errors, by selected chronic conditions according to patient age and sex: United States, 2007

						Patient	age					Patie	nt sex	
Chronic condition ¹	Tot	al	Und 45 ye		45–€ year		65– yea		75 y and		Fem	nale	Ма	ıle
				Num	ber of visi	ts in the	ousands (standar	d error ir	n thousa	ınds)			
All visits	88,894	(9,792)	49,261 ((5,305)	25,707 (3,121)	7,815 ((1,178)	6,111	(951)	55,494	(6,260)	33,399	(3,683
					Percei	nt of vis	its (stand	ard erro	or of perc	cent)				
All visits	100.0		100.0		100.0		100.0		100.0		100.0		100.0	
One or more chronic conditions	51.4	(1.8)	32.4	(1.4)	71.0	(2.1)	80.1	(2.4)	85.1	(2.8)	50.9	(1.8)	52.3	(2.4)
None	45.9	(1.9)	64.0	(1.8)	26.9	(2.0)	19.2	(2.4)	13.3	(2.6)	46.3	(1.9)	45.1	(2.4
Blank	*2.7	(0.9)	*3.6	(1.2)	*2.1	(0.7)	*0.7	(0.2)	1.5	(0.5)	*2.8	(1.0)	*2.6	(0.9)
Hypertension	24.1	(1.9)	7.3	(0.7)	39.6	(2.7)	53.1	(2.9)	57.0	(3.8)	23.6	(1.9)	24.9	(2.1)
Hyperlipidemia	11.8	(1.1)	2.7	(0.4)	19.1	(1.6)	32.0	(2.4)	28.9	(2.4)	11.4	(1.0)	12.5	(1.4)
Diabetes	11.5	(0.7)	4.4	(0.4)	18.2	(1.4)	27.6	(1.9)	19.5	(1.8)	11.3	(8.0)	11.8	(0.9)
Depression	11.3	(0.9)	9.4	(0.9)	15.7	(1.3)	9.6	(1.3)	11.0	(2.2)	12.5	(0.9)	9.3	(1.1)
Arthritis	9.5	(1.0)	3.7	(0.5)	14.3	(1.4)	22.7	(2.8)	19.5	(2.6)	10.1	(1.0)	8.5	(1.2)
Asthma	7.4	(0.6)	8.5	(0.9)	6.7	(0.6)	4.8	(0.9)	4.8	(8.0)	7.7	(0.7)	6.8	(0.7)
Obesity	7.2	(0.6)	5.6	(0.5)	10.9	(1.0)	8.0	(1.2)	4.0	(0.9)	8.1	(8.0)	5.8	(0.5)
Cancer	6.0	(8.0)	2.4	(0.4)	7.8	(1.2)	14.5	(2.4)	16.8	(2.8)	5.7	(8.0)	6.5	(0.9)
Chronic obstructive pulmonary disease	3.2	(0.3)	1.2	(0.2)	4.7	(0.5)	6.6	(0.9)	9.4	(1.2)	2.7	(0.3)	4.1	(0.5)
Ischemic heart disease	3.1	(0.6)	*0.5	(0.2)	4.0	(0.9)	9.5	(1.4)	11.9	(2.3)	2.2	(0.5)	4.6	(0.9)
Congestive heart failure	2.1	(0.4)	*0.5	(0.2)	3.1	(8.0)	5.9	(8.0)	6.4	(8.0)	1.6	(0.2)	3.0	(0.8)
Osteoporosis	1.7	(0.2)	*0.2	(0.1)	1.9	(0.3)	6.1	(1.0)	7.9	(1.3)	2.4	(0.3)	0.6	(0.1)
Cerebrovascular disease	1.2	(0.2)	0.3	(0.1)	1.6	(0.3)	3.7	(0.7)	4.1	(8.0)	1.1	(0.2)	1.4	(0.2)
Chronic renal failure	1.1	(0.1)	0.3	(0.1)	1.4	(0.2)	3.7	(0.6)	2.9	(8.0)	0.8	(0.2)	1.6	(0.3)

^{...} Category not applicable.

¹Includes assault, self-inflicted, and other causes of violence.

²Includes illegible entries and blanks.

^{*} Figure does not meet standards of reliability or precision.

¹Presence of chronic conditions was based on the checklist of chronic conditions and reported diagnoses.

Table 15. Number and percentage of outpatient department visits, with corresponding standard errors, by diagnostic and screening services ordered or provided: United States, 2007

Diagnostic/screening service ordered or provided	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
Diagnostioning control ordered of provided	mododindo	anododinac)	OI VIOLE	porooniy
Il visits	88,894	(9,792)		
One or more diagnostic or screening services ordered or provided	79,186	(9,226)	89.1	(1.5)
one	8,683	(1,279)	9.8	(1.4)
lank	*1,024	(381)	*1.2	(0.4)
Examination				
kin	13.362	(3,254)	15.0	(3.0)
elvic	6,264	(1,089)	7.0	(0.9)
reast	4,414	(710)	5.0	(0.6)
ectal	1,691	(370)	1.9	(0.0)
		, ,		. ,
epression screening	1,195	(354)	1.3	(0.4)
Vital sign				
Veight	61,180	(7,328)	68.8	(2.3)
lood pressure	57,565	(7,009)	64.8	(2.2)
emperature	46,207	(5,885)	52.0	(3.0)
leight	40,198	(5,423)	45.2	(3.2)
Blood test				
BC ²	11,755	(1,798)	13.2	(1.4)
ipids or cholesterol	6,206	(1,230)	7.0	(1.0)
lucose	5,381	(969)	6.1	(0.9)
lectrolytes	4,762	(990)	5.4	(0.9)
lgbA1C ³	3,403	(783)	3.8	(0.8)
SA ⁴	1,107	(268)	1.2	(0.0)
other blood test	12,863	(1,882)	14.5	(1.3)
Other test	,	,		,
Irinalysis (UA)	8,207	(1,476)	9.2	(1.3)
EKG or ECG ⁵		* ' '	*3.4	, ,
	*3,031	(1,043)		(1.1)
ap test ⁶	2,860	(462)	5.2	(0.6)
Liquid-based ⁶	1,298	(360)	2.3	(0.6)
Unspecified ⁶	816	(167)	1.5	(0.2)
Conventional ⁶	746	(147)	1.3	(0.2)
hlamydia test	1,261	(226)	1.4	(0.2)
pirometry or pulmonary function test	*965	(368)	*1.1	(0.4)
iopsy	866	(217)	1.0	(0.2)
regnancy test ⁶	834	(141)	1.5	(0.2)
IPV DNA test ^{6,7}	*564	(248)	*1.0	(0.5)
Other test or service	15,045	(2,178)	16.9	(1.8)
Imaging				
ny imaging ⁸	16,192	(2,527)	18.2	(1.5)
X-ray	6,420	(961)	7.2	(0.8)
Other ultrasound	3,355	(767)	3.8	(0.6)
Mammography	2,932	(828)	3.3	(0.8)
CT scan	1,685	(286)	1.9	(0.2)
MRI	1,526	(378)	1.7	(0.2)
Echocardiogram.	957	(194)	1.1	(0.3)
		, ,		
Bone mineral density	487 *167	(122)	0.5	(0.1)
PET scan	*167	(66)	*0.2	(0.1)
Other imaging	1,013	(282)	1.1	(0.3)

^{...} Category not applicable.

* Figure does not meet standards of reliability or precision.

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

²CBC is complete blood count.

³HgbA1C is glycohemoglobin test.

⁴PSA is prostate specific antigen test.

⁵EKG or ECG is electrocardiogram.

⁶Denominator for percentage is female visits.

⁷HPV is human papillomavirus; DNA is deoxyribonucleic acid.

⁸CT is computed tomography; MRI is magnetic resonance imaging; PET is positron emission tomography.

Table 16. Number and percent distribution of initial blood pressure measurements for adults aged 18 years and over at outpatient department visits where blood pressure was recorded, with corresponding standard errors, by selected patient characteristics: United States, 2007

						Initial b	lood pres	sure ¹				
Characteristic		Total	Lo	ow	Noi	rmal		ldly gh		erately gh		erely
				F	Percent di	istribution	(standard	d error of	percent)			
All visits ²	50,285	100.0	7.1	(0.5)	24.3	(1.0)	40.8	(0.8)	20.4	(8.0)	7.5	(0.5)
Age												
18–24 years	5,720	100.0	12.3	(1.0)	39.4	(2.1)	38.8	(1.8)	8.9	(1.3)		,
25–44 years	16,000	100.0	9.0	(1.0)	32.5	(1.5)	39.2	(1.3)	14.7	(1.2)	4.6	(0.5)
45–64 years	18,191	100.0	4.4	(0.5)	18.5	(1.2)	43.0	(1.2)	24.5	(1.0)	9.6	(0.9)
65N74 years	5,916	100.0	5.4	(1.3)	13.7	(1.4)	40.9	(1.9)	29.2	(2.1)	10.8	(1.1)
75 years and over	4,458	100.0	6.4	(1.2)	13.1	(1.6)	39.5	(2.6)	27.4	(2.2)	13.6	(2.2)
Sex												
Female	33,452	100.0	8.6	(0.7)	27.4	(1.3)	38.3	(1.0)	19.1	(0.9)	6.8	(0.5)
Male	16,833	100.0	4.1	(0.5)	18.1	(1.2)	45.8	(1.3)	23.1	(0.9)	8.9	(0.8)
Race ^{3,4}												
Reported	43,178	100.0	7.0	(0.5)	23.9	(1.1)	41.1	(0.8)	20.4	(8.0)	7.7	(0.6)
Imputed (missing)	7,107	100.0	7.5	(1.1)	26.5	(2.7)	39.2	(1.9)	20.7	(2.5)	6.2	(0.8)
Reported plus imputed ⁵ :												
White	34,287	100.0	7.2	(0.6)	24.6	(1.0)	41.8	(0.9)	19.4	(0.9)	7.0	(0.5)
Black	13,573	100.0	6.4	(0.8)	22.0	(1.9)	39.7	(1.2)	23.0	(1.2)	8.9	(1.0)
Asian	1,307	100.0	6.9	(1.6)	37.0	(3.8)	30.7	(3.2)	19.2	(3.6)		,
Other ⁶	1,118	100.0	10.9	(2.4)	26.8	(3.4)	35.6	(3.1)	20.6	(4.3)		,
Reported only ⁷ :								. ,		. ,		
White	29,301	100.0	7.2	(0.6)	24.5	(1.1)	42.2	(1.0)	19.0	(0.9)	7.0	(0.6)
Black	11,794	100.0	6.2	(8.0)	20.7	(1.9)	40.0	(1.4)	23.7	(1.2)	9.5	(1.1)
Asian	1,101	100.0	7.7	(1.8)	38.7	(4.1)	27.0	(2.6)	19.3	(4.0)		,
Other ⁶	*983	100.0	10.5	(2.6)	28.5	(3.7)	34.2	(2.7)	20.5	(4.8)		,
Ethnicity ^{3,4}												
Reported	39,642	100.0	7.3	(0.6)	24.8	(1.2)	40.6	(0.9)	19.8	(0.8)	7.6	(0.6)
Imputed (missing)	10,643	100.0	6.3	(0.8)	22.3	(1.7)	41.6	(1.3)	22.9	(1.9)	6.9	(0.9)
Hispanic or Latino	7,441	100.0	9.6	(1.1)	30.2	(2.0)	39.6	(2.2)	15.6	(1.6)	5.1	(0.8)
Not Hispanic or Latino	42,844	100.0	6.6	(0.5)	23.2	(1.0)	41.0	(0.8)	21.3	(0.8)	7.9	(0.6)
Reported only ⁹ :	•			. ,		` '		. ,		. ,		. ,
Hispanic or Latino	5,749	100.0	10.5	(1.2)	31.3	(2.6)	38.5	(2.8)	15.2	(1.8)	4.5	(1.0)
Not Hispanic or Latino	33,893	100.0	6.7	(0.6)	23.7	(1.3)	40.9	(1.0)	20.5	(0.9)	8.1	(0.7)

^{*} Figure does not meet standards of reliability or precision.

NOTES: SE is standard error. Numbers may not add to totals because of rounding.

¹Blood pressure levels were categorized using the following hierarchical definitions: severely high blood pressure is 169 mm Hg systolic or above or 100 mm Hg diastolic or above; moderately high blood pressure is 140–159 mm Hg systolic or 90–99 mm Hg diastolic; mildly high blood pressure is 120–139 mm Hg systolic or 80–89 mm Hg diastolic; low blood pressure is less than 100 mm Hg systolic or less than 60 mmHg diastolic; normal blood pressure is 100–119 mm Hg systolic and 60–79 mm Hg diastolic. Blood pressure classification was based on the "Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure" (8).

²Visits where blood pressure was recorded represent 71.9% (SE = 2.3) of all outpatient department visits made by adults (ages 18 years and over). In 38.4% (SE = 2.4) of visits by children (ages 0–17), a blood pressure was recorded.

³For 2007, race data were missing for 15.8% of visits, and ethnicity data were missing for 23.0% of visits. Readers are therefore advised to treat these data with caution. Estimates based on imputed race and ethnicity data are shown separately from comparison estimates using unimputed data. Missing race and ethnicity data in the National Hospital Ambulatory Medical Care Survey have traditionally been imputed using a cold deck method, and the procedure was improved for use with estimates beginning with 2006 survey data. The imputation process is described more fully in the 2007 public-use file documentation (available from: http://www.cdc.gov/nchs/ahcd.htm). Research is currently under way to evaluate further changes to the imputation strategy for use with 2008 data.

⁴The race groups White, Black or African American, Asian, and Other include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to the Office of Mangement and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and lower than what is typically found for self-reported race in household surveys.

⁵Includes race that was reported directly by outpatient departments, as well as imputed values for the 15.8% of visits for which race was not reported

⁶Includes Native Hawaiians and Other Pacific Islanders, American Indians or Alaska Natives, and persons of more than one race

⁷Calculations are based on 43,178,000 visits with race that were reported directly by outpatient departments. The 15.8% of visits for which race was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed race values.

⁸Includes ethnicity that was reported directly by outpatient departments, and imputed values for the 23.0% of visits for which ethnicity was not reported.

⁹Calculations are based on 39,642,000 visits with ethnicity that was reported directly by outpatient departments. The 23.0% of visits for which ethnicity was missing are excluded from the denominator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

Table 17. Number and percentage of outpatient department visits, with corresponding standard errors, by health education services ordered or provided: United States, 2007

Health education service ordered or provided	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits	88,894	(9,792)		
One or more health education services listed	39,174	(4,996)	44.1	(3.6)
None	47,391	(6,493)	53.3	(3.6)
Blank	*2,329	(1,244)	*2.6	(1.4)
Diet or nutrition	11,998	(2,024)	13.5	(1.7)
Exercise	7,033	(1,585)	7.9	(1.4)
Injury prevention	3,563	(1,029)	4.0	(1.0)
Tobacco use or exposure	3,374	(592)	3.8	(0.5)
Stress management	3,159	(804)	3.6	(0.8)
Neight reduction	3,159	(520)	3.6	(0.5)
Growth/development	3,054	(543)	3.4	(0.5)
Asthma education	1,397	(363)	1.6	(0.4)
Other health education	25,457	(4,077)	28.6	(3.6)

^{. . .} Category not applicable.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 18. Number and percentage of outpatient department visits, with corresponding standard errors, by nonmedication treatments ordered or provided: United States, 2007

Nonmedication treatment ordered or provided	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits	88,894	(9,792)		
One or more nonmedication treatment listed	21,149	(2,502)	23.8	(1.9)
None	63,583	(7,712)	71.5	(2.3)
Blank	*4164	(1,282)	4.7	(1.4)
Psychotherapy	4,043	(838)	4.5	(1.0)
Vound care	2,870	(446)	3.2	(0.4)
Orthopedic care	2,007	(387)	2.3	(0.4)
Physical therapy	1,787	(349)	2.0	(0.4)
excision of tissue	*1,681	(553)	*1.9	(0.6)
Durable medical equipment	1,095	(211)	1.2	(0.2)
Complementary alternative medicine	*549	(386)	*0.6	(0.4)
Home health care	*497	(193)	*0.6	(0.2)
Speech/occupational therapy	357	(102)	0.4	(0.1)
Radiation therapy	*127	(57)	*0.1	(0.1)
lospice care	*	*		
Other mental health counseling	3,378	(752)	3.8	(0.8)
Other surgical procedure	3,781	(983)	4.3	(1.0)
Other nonsurgical procedure	5,745	(819)	6.5	(0.7)

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹Combined total of individual services exceeds "all visits" because more than one service may be reported per visit.

^{*} Figure does not meet standards of reliability or precision.

¹Combined total of individual treatments exceeds "all visits" because more than one treatment may be reported per visit.

Table 19. Number and percent distribution of outpatient department visits, with corresponding standard errors, by medication therapy and number of medications provided or prescribed: United States, 2007

Medication therapy ¹	Number of visits in thousands ¹	(Standard error in thousands)	Percent distribution	(Standard error of percent)
Il visits	88,894	(9,792)	100.0	
isits with mention of medication ²	65,033	(7,729)	73.2	(1.9)
isits without mention of medication	23,861	(2,743)	26.8	(1.9)
Number of medications provided or prescribed				
Il visits	88,894	(9,792)	100.0	
	23,861	(2,743)	26.8	(1.9)
	18,538	(2,108)	20.9	(1.0)
	12,879	(1,521)	14.5	(0.6)
	8,491	(1,015)	9.6	(0.3)
	5,703	(698)	6.4	(0.3)
	4,213	(587)	4.7	(0.3)
	3,656	(551)	4.1	(0.4)
	3,129	(545)	3.5	(0.4)
	8,423	(1,530)	9.5	(1.1)

^{...} Category not applicable.

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

²Also called "drug visits."

Table 20. Number and percent distribution of drug visits and drug mentions and percentage of visits with drug mentions and drug mention rates per 100 visits, with corresponding standard errors, by type of clinic: United States, 2007

		Drug	visits ¹		Drug mentions ²							
Clinic type	Number in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Percent of visits with drug mentions ³	(Standard error of percent)	Drug mention rate ⁴	(Standard error of rate)
All visits	65,033	(7,729)	100.0		224,872	(30,291)	100.0		73.2	(1.9)	253.0	(13.0)
General medicine ⁵	39,288	(5,168)	60.4	(2.7)	146,431	(21,734)	65.1	(3.3)	80.8	(2.0)	301.1	(16.6)
Surgery	7,815	(1,933)	12.0	(2.4)	*29,154	(8,815)	*13.0	(3.2)	60.9	(5.6)	227.0	(36.1)
Pediatrics	6,763	(1,241)	10.4	(1.5)	18,196	(3,933)	8.1	(1.6)	71.3	(3.2)	191.9	(14.8)
Obstetrics and gynecology	5,150	(724)	7.9	(8.0)	10,583	(1,806)	4.7	(0.7)	62.8	(2.9)	129.1	(14.7)
Substance abuse and other ⁶	6,018	(875)	9.3	(1.3)	20,509	(2,966)	9.1	(1.3)	61.7	(5.7)	210.4	(27.6)

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹Visits at which one or more drugs were prescribed or provided.

²A drug mention is documentation in a patient's record of a drug provided, prescribed, or continued at a visit (up to eight per visit).

³Percentage of visits to the clinic that included one or more drugs provided or prescribed (number of drug visits by number of clinic visits multiplied by 100).

⁴Average number of drugs that were provided or prescribed per 100 visits to each clinic (number of drug mentions divided by total number of visits multiplied by 100).

⁵Includes family practice, primary care, and internal medicine clinics.

⁶Other includes psychiatric, mental health, and miscellaneous specialty clinics.

Table 21. Number and percentage of the 20 most frequently mentioned therapeutic drug categories at outpatient department visits, with corresponding standard errors: United States, 2007

Therapeutic drug category ¹	Number of occurrences in thousands ¹	(Standard error in thousands)	Percent of drug mentions ²	(Standard error of percent)
unalgesics ³	28,457	(4,016)	12.7	(0.6)
ntidepressants	10,700	(1,594)	4.8	(0.3)
ntihyperlipidemic agents	9,873	(1,601)	4.4	(0.3)
ntidiabetic agents	8,887	(1,238)	4.0	(0.3)
nxiolytics, sedatives, and hypnotics	8,174	(1,300)	3.6	(0.3)
iuretics	8,028	(1,505)	3.6	(0.4)
eta-adrenergic blocking agents	7,958	(1,515)	3.5	(0.4)
ronchodilators	7,737	(1,207)	3.4	(0.4)
ntiplatelet agents	7,506	(1,493)	3.3	(0.4)
nticonvulsants	7,113	(940)	3.2	(0.2)
ngiotensin-converting enzyme inhibitors	6,820	(1,270)	3.0	(0.3)
roton pump inhibitors	6,233	(996)	2.8	(0.2)
ermatological agents	6,006	(1,226)	2.7	(0.3)
ntihistamines	5,712	(788)	2.5	(0.2)
ntiemetic or antivertigo agents	5,222	(1,251)	2.3	(0.4)
ral vaccines	4,480	(618)	2.0	(0.2)
alcium channel blocking agents	3,854	(755)	1.7	(0.2)
inerals and electrolytes	3,839	(790)	1.7	(0.2)
drenal cortical steroids	3,776	(579)	1.7	(0.2)
ntipsychotics	3,471	(590)	1.5	(0.2)

¹Based on Multum Lexicon second-level therapeutic drug category (see: http://www.multum.com/Lexicon.htm).

²Based on an estimated 224,872,000 drugs provided or prescribed at outpatient department visits in 2007.

³Includes narcotic and nonnarcotic analgesics and nonsteroidal anti-inflammatory drugs.

Table 22. Number, percent distribution, and therapeutic drug category for the 20 drug names most frequently mentioned at outpatient department visits, by new or continued drug status, with corresponding standard errors: United States, 2007

	Number of	(Standard		(Standard	Percent distribution (standard error of percent)				d error o			
Drug name ¹	mentions in thousands	error in thousands)	Percent distribution	error of percent)	Total	N	ew	Continued		ed Unknown		Therapeutic drug category ²
All drug mentions	224,872	(30,291)		100.0	100.0	26.8	(2.9)	68.4	(3.2)	*4.9	(1.9)	
Aspirin	6,229	(1,261)	2.8	(0.3)	100.0	5.0	(1.2)	91.0	(1.9)	*4.0	(1.3)	Analgesics or antiplatelet agents
Ibuprofen	4,654	(675)	2.1	(0.2)	100.0	57.6	(4.8)	36.1	(4.0)	*6.4	(3.8)	Analgesics
Lisinopril	4,522	(992)	2.0	(0.3)	100.0	4.8	(1.1)	92.2	(2.1)	*3.0	(1.6)	Angiotensin-converting enzyme inhibitors
Albuterol	4,188	(607)	1.9	(0.2)	100.0	19.9	(3.1)	73.5	(4.1)	*6.6	(3.4)	Bronchodilators
Hydrochlorothiazide	4,084	(853)	1.8	(0.3)	100.0	5.6	(1.4)	89.4	(2.8)	*5.0	(2.6)	Diuretics
Metoprolol	4,060	(899)	1.8	(0.3)	100.0	8.2	(1.3)	89.7	(1.6)	*2.1	(1.0)	Beta-adrenergic blocking agents
Atorvastatin	3,439	(587)	1.5	(0.2)	100.0	4.5	(1.1)	90.9	(2.5)	*4.6	(2.3)	Antihyperlipidemic agents
Acetaminophen-hydrocodone	2,992	(586)	1.3	(0.2)	100.0	38.2	(5.6)	59.2	(5.8)	*2.6	(1.0)	Analgesics
Furosemide	2,960	(589)	1.3	(0.2)	100.0	6.2	(1.4)	89.4	(2.0)	*4.4	(1.5)	Diuretics
Metformin	2,887	(485)	1.3	(0.1)	100.0	9.1	(2.1)	85.9	(3.2)	*5.0	(2.5)	Antidiabetic agents
Acetaminophen	2,868	(434)	1.3	(0.1)	100.0	55.5	(3.9)	41.8	(3.9)	*2.7	(1.3)	Analgesics
Simvastatin	2,729	(678)	1.2	(0.2)	100.0	*3.6	(1.1)	94.4	(1.6)	*2.0	(1.1)	Antihyperlipidemic agents
Levothyroxine	2,698	(451)	1.2	(0.1)	100.0	*4.2	(1.5)	90.5	(3.0)	*5.3	(2.7)	Thyroid drugs
Atenolol	2,427	(531)	1.1	(0.1)	100.0	5.6	(1.7)	88.2	(3.5)	*6.3	(3.0)	Beta-adrenergic blocking agents
Warfarin	2,152	(504)	1.0	(0.2)	100.0	*2.4	(0.9)	96.7	(1.1)	*0.9	(0.5)	Anticoagulants
Esomeprazole	2,028	(584)	0.9	(0.2)	100.0	10.6	(2.8)	87.9	(3.1)	*1.5	(0.6)	Proton pump inhibitors
Amoxicillin	2,006	(359)	0.9	(0.1)	100.0	83.5	(4.5)	*13.0	(4.2)	*3.6	(1.5)	Penicillins
Amlodipine	1,842	(317)	0.8	(0.1)	100.0	9.2	(2.5)	84.7	(3.4)	*6.1	(2.7)	Calcium channel blocking agents
Azithromycin	1,816	(297)	0.8	(0.1)	100.0	83.0	(4.3)	13.6	(3.6)	*3.5	(2.7)	Macrolide derivatives
Lidocaine	*1,806	(918)	*0.8	(0.4)	100.0	85.7	(8.0)	*7.9	(4.1)	*6.4	(4.7)	Antiarrhythmic agents or local injectable anesthetics
All other	162,487	(21,638)	72.3	(1.4)	100.0	28.8	(3.1)	66.1	(3.3)	*5.2	(1.9)	

^{...} Category not applicable.

^{*} Figure does not meet standards of reliability or precision.

¹Based on Multum Lexicon terminology, drug name reflects the active ingredient(s) of a drug provided or prescribed.

²Based on Multum Lexicon second-level therapeutic drug category (see: http://www.multum.com/lexicon.htm).

Table 23. Number and percentage of outpatient department visits, with corresponding standard errors, by providers seen: United States, 2007

Type of provider	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits	88,894	(9,792)		
ny physician	66,172	(7,512)	74.4	(2.9)
.N. or L.P.N. ²	42,111	(6,018)	47.4	(4.2)
urse practitioner or midwife	9,696	(2,115)	10.9	(1.8)
hysician assistant	5,956	(1,250)	6.7	(1.2)
lental health provider	3,163	(767)	3.6	(0.9)
Other provider	18,834	(2,582)	21.2	(2.4)

^{. .} Category not applicable.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

Table 24. Number and percentage of outpatient department visits, with corresponding standard errors, by visit disposition: United States, 2007

Disposition	Number of visits in thousands ¹	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits	88,894	(9,792)		
Return at specified time	61,969	(7,054)	69.7	(2.3)
Return if needed, PRN ²	19,602	(2,635)	22.1	(2.0)
Referred to other physician	12,453	(1,833)	14.0	(1.5)
No followup planned	4,447	(934)	5.0	(0.9)
Telephone followup planned	1,565	(412)	1.8	(0.4)
Admitted to hospital	527	(102)	0.6	(0.1)
Refer to emergency department	482	(112)	0.5	(0.1)
Other disposition	*1,641	(668)	*1.8	(0.6)
Blank	*1,838	(1,264)	*2.1	(1.4)

^{...} Category not applicable.

¹Combined total of individual providers exceeds "all visits" because more than one provider may be reported per visit.

²R.N. is registed nurse; L.P.N. is licensed practical nurse.

^{*} Figure does not meet standards of reliablity or precision.

¹Combined total of individual dispositions exceeds "all visits" because more than one disposition may be reported per visit.

²PRN is "as needed."

Technical Notes

Data source

NHAMCS data collection is authorized under Section 306 of the Public Health Service Act (42 U.S.C. 242k). Participation is voluntary. The U.S. Census Bureau was responsible for data collection. Data collected in NHAMCS are consistent with the Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA). No personally identifying information, such as patient's name, address, or social security number, is collected in NHAMCS. All information collected is held in the strictest confidence, as required by law (Section 308(d) of the Public Health Service Act (42 U.S.C. 242m (d))) and the Confidential Information Protection and Statistical Efficiency Act (Title 5 of P.L. 107–347). Approval for the NHAMCS protocol was renewed by the NCHS Research Ethics Review Board in February 2007. Waivers of the requirements to obtain informed consent from patients and to obtain patient authorization for release of patient medical record data by health care providers were granted.

The target universe of NHAMCS is in-person visits made in the United States to EDs and OPDs of nonfederal short-stay hospitals (hospitals with an average stay of fewer than 30 days) and those whose specialty is general (medical or surgical) or children's general. EDs that operate 24 hours a day are considered within the scope of the ED component; EDs that operate fewer than 24 hours are included in the OPD component of NHAMCS (13).

Data processing and coding

Data processing and medical coding were performed by SRA International, Inc. (Durham, North Carolina). As part of the quality assurance procedure, a 10% quality control sample of survey records was independently keyed and coded. Coding error rates ranged between 0.3% and 1.1%, for various survey items.

Verbatim medical data collected in the survey were coded as follows:

- Patient's reason for visit. The
 patient's main complaint, symptom,
 or reason for visiting the OPD was
 coded according to "A Reason for
 Visit Classification for Ambulatory
 Care" (11). Up to three reasons could
 be coded per visit.
- *Diagnosis*. Hospital staff were asked to record the primary diagnosis and up to two additional diagnoses associated with the patient's reason for the current visit. The text of the diagnoses was then coded according to ICD-9-CM (12).
- Medications, including immunizations. Hospital staff were instructed to record all new or continued medications ordered, supplied, or administered at the visit. This included prescription and nonprescription preparations, immunizations, desensitizing agents, and anesthetics. In this survey, recorded medications are referred to as "drug mentions" and are coded according to a classification system developed at NCHS (14). As used in NHAMCS, the term "drug" is interchangeable with the term "medication." The term "prescribing" is used broadly to mean ordering or providing any medication, whether prescription or over-the-counter. Visits with one or more drug mentions are termed "drug visits" in NHAMCS. Medications, including immunizations, were coded using the Multum Lexicon, a proprietary drug classification system used by NCHS beginning with the 2006 ambulatory care reports. Therapeutic classification of drugs is based on the Multum Lexicon's second-level therapeutic categories, including any drug mentions coded at third-level therapeutic categories (see http://www.multum.com/Lexicon.htm). Drugs may have more than one therapeutic application. Although Multum allows up to five therapeutic categories per drug, in this report a maximum of four therapeutic categories for each drug is examined because the number of drugs with

five therapeutic categories is small. Generic ingredients of drug mentions were coded according to the drug_id nomenclature included in Multum.

Estimation

Because of the complex multistage design of NHAMCS, a sample weight is computed for each sampled visit that takes all stages of design into account. The survey data are inflated or weighted to produce unbiased national annual estimates. The visit weight includes four basic components: inflation by reciprocals of selection probabilities, adjustment for nonresponse, population ratio adjustments, and weight smoothing. Starting in 2004, changes were made to the nonresponse adjustment factor to account for the seasonality of the reporting period. Extra weights for nonresponding hospitals were shifted to responding hospitals in reporting periods within the same quarter of the year. The shift in nonresponse adjustment did not significantly affect any of the overall annual estimates. Detailed information on NHAMCS estimation can be found elsewhere (15).

The standard error is primarily a measure of the sampling variability that occurs by chance because only a sample rather than an entire universe is surveyed. Estimates of the sampling variability for this report were calculated using Taylor approximations in SUDAAN, which take into account the complex sample design of NHAMCS. A description of the software and its approach has been published (16). The standard errors of statistics presented in this report are included in each table.

Nonsampling errors

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, these errors were kept to a minimum by procedures built into the operation of the survey. To

eliminate ambiguities and encourage uniform reporting, attention was given to the phrasing of items, terms, and definitions. Also, most data items and survey procedures were pretested. Quality control procedures and consistency and edit checks reduced errors in data coding and processing.

Nonresponse rates and imputation

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

Weighted item nonresponse rates (i.e., if the item was left blank or the unknown box was marked) were 5.0% or less for all data items, with the following exceptions: use of tobacco (38.8%); "Are you the patient's primary care provider (PCP)?" (7.3%); among non-PCP visits and visits with unknown PCP status, whether the patient had been referred there (25.4%); enrollment in a disease management program (64.1%); and stage of cancer (54.3%). Item nonresponse could not be determined for

the following data items: height, weight, temperature, and blood pressure; the form requests these values but does not indicate whether they were missing from the medical record.

For some items, missing values were imputed by randomly assigning a value from a PRF with similar characteristics. Imputations were performed for the following variables: birth year (1.1%); sex (0.5%); race (15.8%); ethnicity (23.0%); whether the patient had been seen in this clinic before (3.7%); and, if so, how many visits were made to the clinic in the last 12 months (12.9%). Weighted imputation rates are shown.

Imputation for birth year, sex, seen before, and number of past visits was based on geographic region, OPD volume by clinic type, and three-digit ICD-9-CM code for primary diagnosis. A new method was used to impute race and ethnicity. Race and ethnicity assignments were based, where possible, on diagnosis and patient's locality (ZIP Code or state and county of residence). A hot deck approach (i.e., filling in missing values on incomplete records using values from similar but complete records of the same dataset) was employed, rather than the previously used cold deck strategy (i.e., filling in missing values on incomplete records using values from similar but complete records of the dataset from the previous year), except in cases where a matching record could not be obtained from the current data. When race or ethnicity data could not be assigned using patient locality, the new method attempted to impute within the same facility wherever possible. Failing that, imputation was based on diagnosis, hospital, and clinic, and, as a last resort, on a randomly selected record. An internal NCHS evaluation study found that this approach more correctly identified patients' race and ethnicity than did the previous method. Further refinements to the imputation strategy are being studied for future use. Because of the high percentages of missing data for race and ethnicity in 2007, readers are advised to treat these data with caution. In the tables, both imputed and

nonimputed race and ethnicity data are presented.

Using the tables

The tables in this report present only the first-listed reason for visit and first-listed diagnosis. Note that estimates differing in ranked order may not be significantly different from each other. For items related to diagnostic and screening services, procedures, providers seen, and disposition, hospital staff were asked to check all of the applicable categories for each item. Therefore, multiple responses could be coded for each visit.

Estimates are not presented if they are based on fewer than 30 cases in the sample data; only an asterisk (*) appears in the tables. 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. Estimates based on 30 or more cases include an asterisk if the RSE of the estimate exceeds 30%.

Estimates of OPD 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 figures calculated from rounded data

Population estimates

Several of the tables in this report present rates of OPD visits per population. The population figures used in calculating these rates are based on Census Bureau monthly postcensal estimates of the civilian noninstitutional population of the United States as of July 1, 2007. These population estimates are based on postcensal estimates from Census 2000 and are available from the U.S. Census Bureau.

Estimates presented in the tables and figures for specific race categories reflect visits where only a single race was reported. Denominators used in computing estimates of visit rates by expected source of payment were obtained from the 2007 National Health

Interview Survey (NHIS). Individuals reporting multiple insurance categories in NHIS were counted in each category they reported, except for Medicaid and SCHIP, which were combined into a single category.

			Form Approved OMB No. 09	920-0278 Exp. Date 08/31/2009 CDC 64.135
FORM NHAMCS-100(OPD) (9-28-2006)	U.S. DEPARTMENT OF Economics and Statistics	Administration	ATIENT RECORD NO.:	
, ,	U.S. CENS ACTING AS DATA COLLECTION U.S. Department of Health and F	SUS BUREAU N AGENT FOR THE Iuman Services		
	Centers for Disease Control National Center for F	and Prevention lealth Statistics	ATIENT'S NAME:	
NATIONAL HOSPITAL AMBULATOR' 2007 OUTPATIENT DEPARTME				
Assurance of confidentiality – A establishment will be held confidential	All information which woul	d permit identific	ation of an individual, a pr	ractice, or an
disclosed or released to other persons accordance with section 308(d) of the	or used for any other pu Public Health Service Ac	rpose without co	onsent of the individual or).	the establishment in
	(Provider: Detach			
Please keep (X) marks inside of boxes → 🇷 Correct	✗ Incorrect			
	TIENT INFORMATIO			2. INJURY/POISONING/ ADVERSE EFFECT
A. Date of visit Month Day Year d. Sex 1 Female 2	☐ Male	for this visit	urce(s) of payment Mark (X) all that apply.	Is this visit related to any
e. Ethnicity	e. Ethnicity 1 Hispanic or Latino			of the following? 1 Unintentional injury/poisoning
2 Not Hispanie	2 ☐ Not Hispanic or Latino			2 ☐ Intentional injury/poisoning
f. Race – Mark (X) one or more.	5 ☐ Self-pay 6 ☐ No charg	ne/Charity	3 ☐ Injury/poisoning – unknown intent
2 Black/Africa	n American	7 ☐ Other 8 ☐ Unknow		4 Adverse effect of medical/
C. Date of birth Month Day Year 3 ASIAN 4 Native Haw Other Pacifi		h. Tobacco use)	surgical care or adverse effect of medicinal drug
	idian/Alaska Native	1 Not curre	ent 3 🗌 Unknown	5 None of the above
3. REASON FOR VISIT			CONTINUITY OF C	ARE
Patient's complaint(s), symptom(s), or other reason(s) for this visit – Use patient's own words.	a. Is this clinic the patient's primary		as the patient been seen this clinic before?	c. Major reason for this visit
(1) Most important:	care provider?	1 1	Yes, established patien	_ '
	1 Yes –SKIP to	nem 4b.	How many past visits in the last 12 months?	2 ☐ Chronic problem, routine 3 ☐ Chronic problem, flare-up
(2) Other:	3 ☐ Unknown } Was patient re	ferred	Exclude this visit.	4 Pre-/Post-surgery
	for this visit?	lerred	Visits	5 ☐ Preventive care (e.g., routine prenatal,
(3) Other:	1 Yes 2 No	2 [1 ∐ Unknown ☑ No, new patient	well-baby, screening, insurance, general exams)
	3 Unknow	1	•	
	PROVIDER'S DIAGNO b. Regardless	of the diagnose		c. Status of patient
a. As specifically as possible, list diagnoses related to this visit including chronic conditions. (1) Primary diagnosis:	does the pa	tient now have -	 Mark (X) all that apperent of the properties of the	nidemia disease management
(1) Filliary diagnosis.	2 Asthma	dise	ase 11 Hyperte	nsion program for any of the conditions marked in 5b.
(2) Other:	0	u 6 ☐ Chro	onic renal heart di	sease Cordenity enrolled
(0)	2 🗆 Regio	onal 7 CO	PD 14 Osteop	orosis enroll at this visit
(3) Other:	3 ☐ Dista 4 ☐ Unkn			SKIP 4 Unknown
6. VITAL SIGNS		7. DIAGNOS	TIC/SCREENING S	
	lark (X) all ordered or pro	ovided at this vis		ther tests:
OR	Examinations:	15 Other in	naging	Specify site
(2) Weight	Pelvic		mplete blood count) 26	EKG/ÉCG
lh loz	I ☐ Rectal □ Skin	18 Glucose	28	r ☐ HPV DNA test s ☐ Pap test - conventional
OR	Depression screening maging:	19 ☐ HgbA1C 20 ☐ Lipids/C		Pap test - liquid-based Pap test - unspecified
ka am	⁷ □ X-ray B □ Bone mineral density	21 PSA (pro	ostate specific antigen)	☐ Pregnancy test
(4) 5	CT scan	Scope: 23 Scope p	32	P ☐ Spirometry/Pulmonary function test ☐ Urinalysis (UA)
	Other ultrasound Mammography	(e.g., col	onoscopy) - Specify 🗾 34	Other exam/test/service - Specify
	3 □ MRI			
8. HEALTH EDUCATION Mark (X) all ordered or provided at this visit.	Mark (X) all ordered o		MEDICATION TREA	TMENT Procedures:
1 ☐ NONE 7 ☐ Stress	1 NÓNE	. 8[Speech/Occupational therapy	14 Other non-surgical procedures – Specify
2 Asthma education management 8 Tobacco use/	2 Complementary a medicine (CAM) 3 Durable medical		Psychotherapy	oposity y
3 Diet/Nutrition Exposure 4 Exercise 9 Weight reduction	4 Home health care	9 .	Other mental health counseling	15 Other surgical procedures –
5 Growth/Development 10 Other	5 ☐ Hospice care 6 ☐ Physical therapy	12 [Excision of tissue Orthopedic care	Specify
6 ☐ Injury prevention 10. MEDICATIONS & IMN	7 Radiation therapy	/ 13 [Wound care	42 VISIT DISPOSITION
Include Rx and OTC drugs, immunizations, all	ergy shots,		11. PROVIDERS Mark (X) all	12. VISIT DISPOSITION Mark (X) all that apply.
NONE anesthetics, chemotherapy, and dietary supplied, administered or continued	ements that were	New Continued	providers seen at	□ No show 6 □ Return at specified time
(1)	_	1 2	1	being seen 7 La Telephone follow-up
(2)		1 2 2	2 Physician	planned 8 Refer to
(3)		1 2 2	3 Nurse	needed, PRN department
(4)			Midwife	other hospital physician 10 Other
(5)			4 ☐ RN/LPN 5 ☐ Mental health	
(6) (7)			provider 6 Other	
		- 20	o 🗆 Other	

Acknowledgments

This report was prepared in the Division of Health Care Statistics. Qiyuan Pan in the Technical Services Branch contributed to the description of the sampling procedures. The report was edited by Barbara J. Wassell and Laura Drescher, CDC/NCHM/Division of Creative Services, Writer-Editor Services Branch. It was typeset by Zung T. Le, and the figures were produced by Dorothy Day, NCHS/OD, Office of Information Services, Information Design and Publishing Branch.

Suggested citation

Hing E, Hall MJ, Ashman JJ, Xu J. National Hospital Ambulatory Medical Care Survey: 2007 Outpatient Department Summary. National health statistics reports; no 28. Hyattsville, MD: National Center for Health Statistics. 2010.

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DHHS Publication No. (PHS) 2010–1250 CS214471 T37106 (09/2010)

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