

---

# National Health Statistics Reports

---

Number 28 ■ September 23, 2010

## National Hospital Ambulatory Medical Care Survey: 2007 Outpatient Department Summary

by Esther Hing, M.P.H.; Margaret J. Hall, Ph.D.; Jill J. Ashman, Ph.D.; and Jianmin Xu, M.S.;  
Division of Health Care Statistics

### Abstract

*Objectives*—This report describes ambulatory care visits to hospital outpatient departments (OPDs) in the United States. Statistics are presented on selected hospital, 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](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](http://www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm). These and other products can be obtained from the



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



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](mailto: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

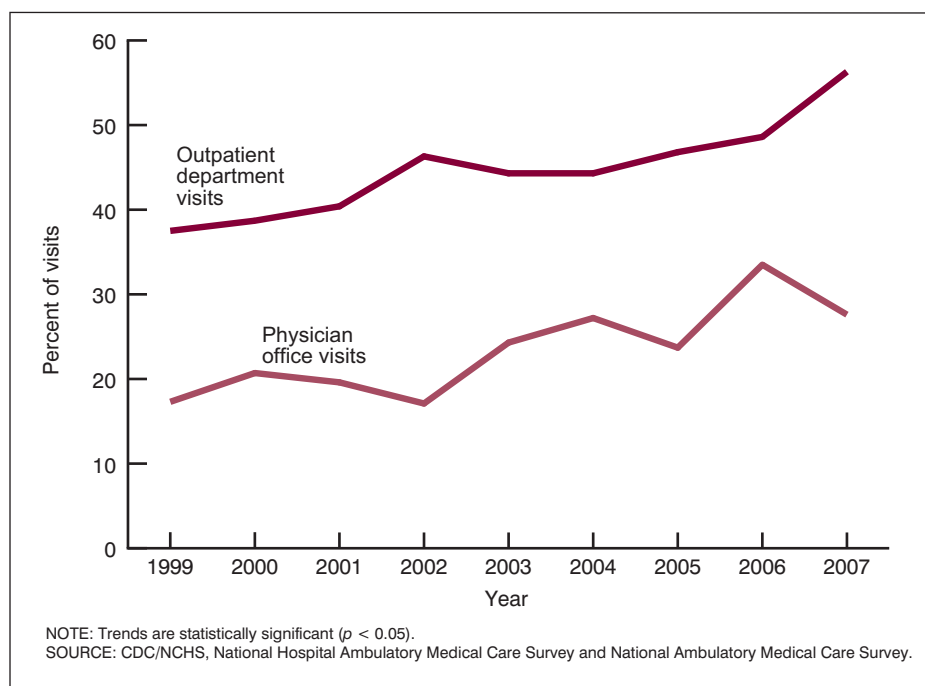
- In 2007, there were approximately 88.9 million visits to OPDs, for a rate of 30.0 visits per 100 persons (Table 1), which was unchanged since 1997 (28.9 per 100 persons) (8).
- About 69.1% of OPD visits were made to voluntary nonprofit hospitals, while 28.4% of visits occurred in nonfederal government (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 post-surgery 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 <sup>1</sup>	2006	2007
Average . . . . .	5.6 <sup>2</sup>	5.6
Median . . . . .	3.0 <sup>2</sup>	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.  
<sup>1</sup>Includes current visit for both new and established patients.  
<sup>2</sup>Because 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,

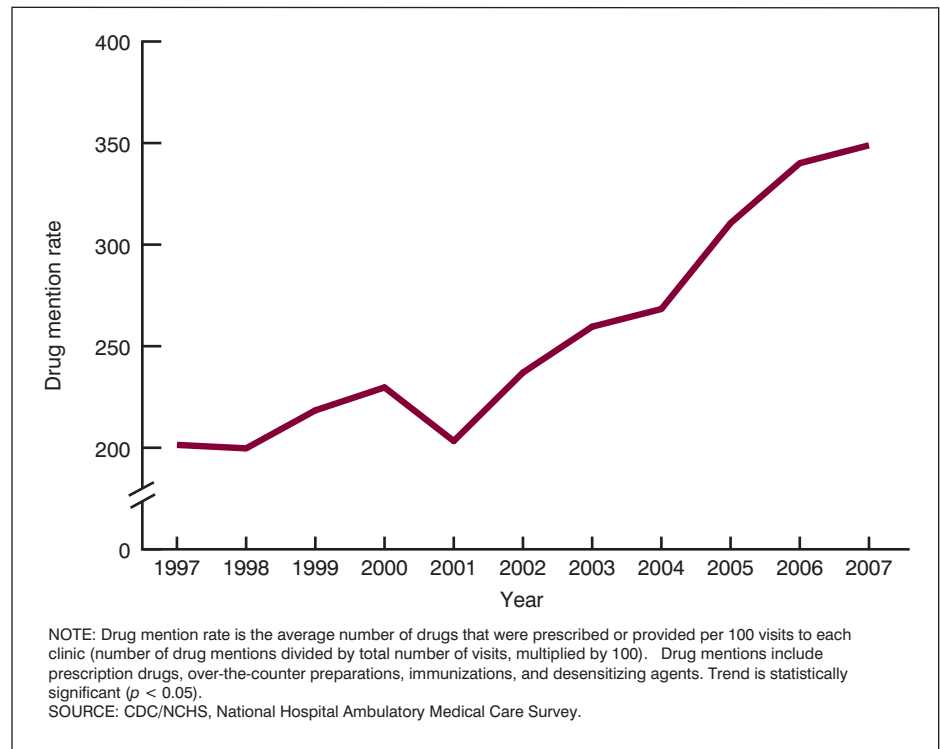
provided, or continued more than tripled, from 4.7% to 17.1% (9).

- 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, “acetaminophen–hydrocodone” 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).

## References

1. Niska R, Bhuiya F, Xu J. National Hospital Ambulatory Medical Care Survey: 2007 emergency department summary. National health statistics reports; no 26. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr026.pdf>.
2. Hsiao J, Cherry DK, Beatty P, Rechtsteiner EA. National Ambulatory Medical Care Survey: 2007 summary. National health statistics report; no 27. Hyattsville, MD: National Center for Health Statistics. 2010. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr027.pdf>.
3. Pleis JR, Lucas JW. Summary health statistics for U.S. adults: National Health Interview Survey, 2007. National Center for Health Statistics. Vital Health Stat 10(240). 2009. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_240.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_240.pdf).
4. National Center for Health Statistics. Health, United States, 2006, with chartbook on trends in the health of Americans. Hyattsville, MD. 2006. Available from: <http://www.cdc.gov/nchs/data/hus/hus06.pdf>.
5. Schappert SM, Rechtsteiner EA. Ambulatory medical care utilization estimates for 2006. National health statistics reports; no 8. Hyattsville, MD: National Center for Health Statistics. 2008. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr008.pdf>.
6. Hing E, Hall MJ, Xu J. National Hospital Ambulatory Medical Care Survey: 2006 outpatient department summary. National health statistics reports; no 4. Hyattsville, MD: National Center for Health Statistics. 2008. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr004.pdf>.
7. Cherry DK, Hing E, Woodwell DA, Rechtsteiner EA. National Ambulatory Medical Care Survey: 2006 summary. National health

- statistics reports; no 3. Hyattsville, MD: National Center for Health Statistics. 2008. Available from: <http://www.cdc.gov/nchs/data/nhsr/nhsr003.pdf>.
8. Chobanian AV, Bokris GL, Black HR, et al. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *Hypertension* 42(6):1206–52. 2003.
9. McCaig LF. National Hospital Ambulatory Medical Care Survey: 1997 outpatient department summary. Advance data from vital and health statistics; no 307. Hyattsville, MD: National Center for Health Statistics. 1999. Available from: <http://www.cdc.gov/nchs/data/ad/ad307.pdf>.
10. Catlin A, Cowan C, Hartman M, Heffler S. National health spending in 2006: A year of change for prescription drugs. *Health Affairs* 27(1):14–29. 2008.
11. Schneider D, Appleton L, McLemore T. A reason for visit classification for ambulatory care. National Center for Health Statistics. *Vital Health Stat* 2(78). 1979. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_078.pdf](http://www.cdc.gov/nchs/data/series/sr_02/sr02_078.pdf).
12. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Centers for Medicare & Medicaid Services. Official version: International classification of diseases, ninth revision, clinical modification, sixth edition. DHHS Pub No (PHS) 06–1260. 2006
13. McCaig LF, McLemore T. Plan and operation of the National Hospital Ambulatory Medical Care Survey. National Center for Health Statistics. *Vital Health Stat* 1(34). 1994. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_01/sr01\\_034acc.pdf](http://www.cdc.gov/nchs/data/series/sr_01/sr01_034acc.pdf).
14. Koch H, Campbell WH. The collection and processing of drug information: National Ambulatory Medical Care Survey, United States, 1980. National Center for Health Statistics. *Vital Health Stat* 2(90). 1982. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_090.pdf](http://www.cdc.gov/nchs/data/series/sr_02/sr02_090.pdf).
15. National Center for Health Statistics. Public-use data file documentation: 2007 National Hospital Ambulatory Medical Care Survey. Hyattsville, MD. Available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NHAMCS/doc07.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHAMCS/doc07.pdf).
16. SUDAAN, release 9.0.1 [computer software]. Research Triangle Park, NC: Research Triangle Institute. 2005.

**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 <sup>1,2</sup>	(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 <sup>3</sup> . . . . .	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 <sup>4</sup>						
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 <sup>5</sup>						
General medicine <sup>6</sup> . . . . .	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 <sup>7</sup> . . . . .	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	(0.8)	2.8	(0.4)

... Category not applicable.

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

<sup>1</sup>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.

<sup>2</sup>Population 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>.

<sup>3</sup>In 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.

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

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

<sup>6</sup>Includes family practice, primary care, and internal medicine clinics.

<sup>7</sup>Other 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 <sup>1</sup>	(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)
45–64 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.

<sup>1</sup>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.

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

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

**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**

Patient characteristic	Reported plus imputed race or ethnicity						Reported race or ethnicity only					
	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Number of visits per 100 persons per year <sup>1</sup>	(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 <sup>1</sup>	(Standard error of rate)
All visits . . . . .	88,894	(9,792)	100.0	...	30.0	(3.3)	...	...	...	...	...	...
Race and age <sup>2-5</sup>												
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	(0.8)	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 <sup>2,3,6,7</sup>												
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.

<sup>1</sup>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.<sup>2</sup>The race groups White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and Multiple Races include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to 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 is lower than what is typically found for self-reported race in household surveys.<sup>3</sup>For 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.<sup>4</sup>Includes race that was reported directly by outpatient departments and imputed values for the 15.8% of visits for which race was not reported.<sup>5</sup>Calculations 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.<sup>6</sup>Includes ethnicity that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which ethnicity was not reported.<sup>7</sup>Calculations 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 <sup>1</sup>	(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 <sup>2</sup> . . . . .	29,469	(3,666)	33.2	(2.5)
Medicare . . . . .	15,673	(2,215)	17.6	(1.2)
Medicare and Medicaid <sup>3</sup> . . . . .	2,694	(608)	3.0	(0.6)
No insurance <sup>4</sup> . . . . .	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.

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

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

<sup>2</sup>SCHIP is State Children's Health Insurance Program.

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

<sup>4</sup>Having only self-pay, no charge, or charity as payment sources.

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), <sup>1</sup> and referral status	Number of visits in thousands <sup>1</sup>	(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 <sup>2</sup> . . . . .	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 <sup>3</sup> . . . . .	9,158	(1,508)	10.3	(1.3)
Unknown if PCP visit <sup>2,3</sup> . . . . .	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 <sup>2</sup> . . . . .	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 <sup>3</sup> . . . . .	7,366	(1,241)	10.0	(1.3)
Unknown if PCP visit <sup>2,3</sup> . . . . .	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 <sup>2</sup> . . . . .	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 <sup>3</sup> . . . . .	1,791	(392)	11.8	(2.2)
Unknown if PCP visit <sup>2,3</sup> . . . . .	1,242	(244)	8.2	(1.5)

... Category not applicable.

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

<sup>2</sup>Referral 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.

<sup>3</sup>The unknown category includes blanks.

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

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

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

Type of clinic <sup>1</sup>	Total	Visit to PCP <sup>2</sup>	Visit to non-PCP <sup>3</sup>			
			Referred for this visit	Not referred for this visit	Unknown if referred <sup>4</sup>	Unknown if PCP <sup>3,4</sup>
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 <sup>5</sup> . . . . .	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 <sup>6</sup> . . . . .	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.

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

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

<sup>3</sup>Referral 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.

<sup>4</sup>The unknown category includes blanks.

<sup>5</sup>Includes family practice, primary care, and internal medicine clinics.

<sup>6</sup>Other clinic types include psychiatric, mental health, and miscellaneous specialty clinics.

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

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 <sup>1</sup>	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits . . . . .	88,894	(9,792)	100.0	...
Progress visit, not otherwise specified . . . . . T800	6,188	(1,019)	7.0	(1.1)
General medical examination . . . . . X100	5,221	(752)	5.9	(0.6)
Prenatal examination, routine . . . . . X205	2,694	(425)	3.0	(0.4)
Cough . . . . . S440	1,923	(312)	2.2	(0.3)
Medication, other and unspecified kinds . . . . . T115	1,818	(332)	2.0	(0.3)
Symptoms referable to throat . . . . . S455	1,588	(273)	1.8	(0.3)
Diabetes mellitus . . . . . D205	1,474	(306)	1.7	(0.3)
Well-baby examination . . . . . X105	1,372	(203)	1.5	(0.2)
Back symptoms . . . . . S905	1,359	(217)	1.5	(0.2)
Stomach pain, cramps, and spasms . . . . . S545	1,347	(228)	1.5	(0.2)
Counseling, not otherwise specified . . . . . T605	1,323	(306)	1.5	(0.3)
Postoperative visit . . . . . T205	1,306	(228)	1.5	(0.2)
Gynecological examination . . . . . X225	1,111	(275)	1.2	(0.3)
Hypertension . . . . . D510	979	(208)	1.1	(0.2)
Low back symptoms . . . . . S910	929	(233)	1.0	(0.2)
Headache, pain in head . . . . . S210	855	(125)	1.0	(0.1)
Earache or ear infection . . . . . S355	852	(165)	1.0	(0.1)
Chest pain and related symptoms . . . . . S050	850	(200)	1.0	(0.2)
Psychotherapy . . . . . T410	*843	*(279)	*0.9	*(0.3)
Skin rash . . . . . S860	828	(141)	0.9	(0.1)
All other reasons . . . . .	54,036	(6,548)	60.8	(1.6)

... Category not applicable.

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

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

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

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



**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	Acute problem	Chronic problem routine	Chronic problem flareup	Pre- or post-surgery or injury followup	Preventive care <sup>1</sup>	Unknown or blank
Percent distribution (standard error of percent)								
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 (0.8)	*. . .	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 (0.8)
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 <sup>2,3</sup>								
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 (0.8)	2.6 (0.5)	29.3 (4.8)	*5.5 (2.5)
Reported plus imputed <sup>4</sup> . . . . .								
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 <sup>5</sup> . . . . .	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 <sup>6</sup> . . . . .								
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 <sup>5</sup> . . . . .	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 <sup>2,3</sup>								
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 <sup>7</sup> . . . . .								
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 <sup>8</sup> . . . . .								
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 payment <sup>9</sup>								
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 (0.8)
Medicaid or SCHIP <sup>10</sup> . . . . .	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 <sup>11</sup> . . . . .	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 <sup>12</sup> . . . . .	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.

<sup>1</sup>Includes routine prenatal, general medical, well-baby, screening, and insurance examinations (see question 4c in the Patient Record Form).<sup>2</sup>For 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.<sup>3</sup>The 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.<sup>4</sup>Includes race that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which race was not reported.<sup>5</sup>Includes visits by Asians, Native Hawaiians or Other Pacific Islanders, American Indians or Alaska Natives, and persons with more than one race.<sup>6</sup>Calculations 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.<sup>7</sup>Includes ethnicity that was reported directly by outpatient departments and imputed values for the 23.0% of visits for which ethnicity was not reported.<sup>8</sup>Calculations 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.<sup>9</sup>Combined total of individual sources exceeds "all visits" because more than one source of insurance may be reported per visit.<sup>10</sup>SCHIP is State Children's Health Insurance Program.<sup>11</sup>Having only self-pay, no charge, or charity as payment sources.<sup>12</sup>Other includes workers' compensation, unknown or blank, and payments not classified elsewhere.

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

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

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

Patient or visit characteristic	Number of visits in thousands <sup>1</sup>	(Standard error in thousands)	Percent of visits	(Standard error of percent)	Number of preventive care visits per 100 persons per year <sup>1</sup>	(Standard error of rate)
All preventive care visits <sup>2</sup>	18,849	(2,545)	100.0	...	6.4	(0.9)
<b>Age</b>						
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)
65 years and over	1,775	(412)	9.4	(1.4)	4.9	(1.1)
<b>Sex and age</b>						
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)
<b>Race<sup>3,4</sup></b>						
Reported	14,735	(1,880)	78.2	(4.9)	5.0	(0.6)
Imputed (missing)	*4,114	(1,237)	*21.8	(4.9)	*1.4	(0.4)
Reported plus imputed <sup>5</sup> :						
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 <sup>6</sup>	1,150	(250)	6.1	(1.3)	5.3	(1.2)
Reported only <sup>7</sup> :						
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 <sup>6</sup>	1,021	(236)	6.9	(1.5)	4.7	(1.1)
<b>Ethnicity<sup>3,4</sup></b>						
Reported	13,737	(1,625)	72.9	(6.7)	4.6	(0.5)
Imputed (missing)	*5,112	(1,714)	*27.1	(6.7)	*1.7	(0.6)
Reported plus imputed <sup>8</sup> :						
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 <sup>9</sup> :						
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 corresponding standard errors, by selected patient and visit characteristics: United States, 2007—Con.**

Patient or visit characteristic	Number of visits in thousands <sup>1</sup>	(Standard error in thousands)	Percent of visits	(Standard error of percent)	Number of preventive care visits per 100 persons per year <sup>1</sup>	(Standard error of rate)
Expected source of payment <sup>10</sup>						
Medicaid or SCHIP <sup>11</sup> . . . . .	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 <sup>12</sup> . . . . .	1,728	(412)	9.2	(2.0)	4.0	(1.0)
Other <sup>13</sup> . . . . .	1,977	(571)	10.5	(2.3)	...	...

... Category not applicable.

<sup>1</sup>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.

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

<sup>3</sup>For 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.

<sup>4</sup>All 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 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. However, the percentage of visit records with multiple races indicated is small and lower than what is typically found for self-reported race.

<sup>5</sup>Includes 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.

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

<sup>7</sup>Calculations 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.

<sup>8</sup>Includes 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.

<sup>9</sup>Calculations 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 denominator so that readers can compare differences between estimates that include and exclude imputed ethnicity values.

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

<sup>11</sup>SCHIP is State Children's Health Insurance Program.

<sup>12</sup>Having 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.

<sup>13</sup>Includes workers' compensation, unknown or blank, and sources not classified elsewhere.

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

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

**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 <sup>1</sup>	Number of visits in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits . . . . .	88,894	(9,792)	100.0	. . .
Infectious and parasitic diseases . . . . . 001-139	2,448	(375)	2.8	(0.3)
Neoplasms . . . . . 140-239	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 . . . . . 290-319	7,768	(1,328)	8.7	(1.5)
Diseases of the nervous system and sense organs . . . . . 320-389	6,054	(913)	6.8	(0.7)
Diseases of the circulatory system . . . . . 390-459	7,929	(1,694)	8.9	(1.5)
Diseases of the respiratory system . . . . . 460-519	7,998	(1,098)	9.0	(0.8)
Diseases of the digestive system . . . . . 520-579	3,030	(632)	3.4	(0.6)
Diseases of the genitourinary system . . . . . 580-629	3,555	(466)	4.0	(0.3)
Diseases of the skin and subcutaneous tissue . . . . . 680-709	2,628	(448)	3.0	(0.4)
Diseases of the musculoskeletal system and connective tissue . . . . . 710-739	5,989	(1,034)	6.7	(0.8)
Symptoms, signs, and ill-defined conditions . . . . . 780-799	5,289	(601)	5.9	(0.4)
Injury and poisoning . . . . . 800-999	4,470	(689)	5.0	(0.6)
Supplementary classification <sup>2</sup> . . . . . V01-V86	18,339	(2,316)	20.6	(1.3)
All other diagnoses <sup>3</sup> . . . . .	3,726	(653)	4.2	(0.5)
Unknown <sup>4</sup> . . . . .	562	(135)	0.6	(0.2)

. . . Category not applicable.

<sup>1</sup>Based on *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) (12).

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

<sup>3</sup>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 "none," no diagnoses) (V99).

<sup>4</sup>Includes blank diagnoses.

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

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



**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 <sup>1</sup>	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 . . . . . 401	3,397	(630)	3.8	(0.5)
Routine infant or child health check . . . . . V20.2	3,297	(511)	3.7	(0.4)
Diabetes mellitus . . . . . 250	3,045	(426)	3.4	(0.4)
Malignant neoplasms . . . . . 140-208,230-234	2,748	(753)	3.1	(0.7)
Normal pregnancy <sup>2</sup> . . . . . V22	2,617	(379)	2.9	(0.4)
Acute upper respiratory infections, excluding pharyngitis . . . . . 460-461,463-466	2,372	(366)	2.7	(0.3)
Spinal disorders . . . . . 720-724	2,210	(435)	2.5	(0.4)
Arthropathies and related disorders . . . . . 710-719	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 <sup>3</sup> . . . . . 630-677	1,583	(406)	1.8	(0.4)
Specific procedures and aftercare . . . . . V50-V59.9	1,577	(235)	1.8	(0.2)
General medical examination . . . . . V70	*1,542	(482)	1.7	(0.5)
Asthma . . . . . 493	1,408	(338)	1.6	(0.4)
Rheumatism, excluding back . . . . . 725-729	1,276	(229)	1.4	(0.2)
Otitis media and eustachian tube disorders . . . . . 381-382	1,231	(228)	1.4	(0.2)
Major depressive disorder . . . . . 296.2-296.3	1,191	(268)	1.3	(0.3)
Drug dependence and nondependence abuse of drugs . . . . . 304-305	*1,165	(612)	*1.3	(0.7)
Chronic sinusitis . . . . . 473	1,157	(295)	1.3	(0.3)
Gynecological examination <sup>4</sup> . . . . . V72.3	1,077	(244)	1.2	(0.2)
All other diagnoses <sup>5</sup> . . . . .	50,493	(5,624)	56.8	(1.3)

. . . Category not applicable.

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

<sup>1</sup>Based 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.<sup>2</sup>Among visits by female patients, 4.7% (SE = 0.6) were for normal pregnancy.<sup>3</sup>Among visits by female patients, 2.9% (SE = 0.6) were for complications of pregnancy, childbirth, and the puerperium.<sup>4</sup>Among visits by female patients, 1.9% (SE = 0.4) were for gynecological examination.<sup>5</sup>Includes all other diagnoses not listed above, as well as unknown or blank diagnoses (0.6%, SE = 0.2).

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) <sup>1</sup>
All injury-related visits <sup>2</sup> . . . . .	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	(0.8)	3.1	(0.6)

See footnotes at end of table.

**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) <sup>1</sup>
<b>Sex and age</b>						
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)
<b>Race<sup>3,4</sup></b>						
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)
Reported plus imputed <sup>5</sup> . . . . .						
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 <sup>6</sup> . . . . .	543	(142)	4.9	(1.1)	2.5	(0.7)
Reported only <sup>7</sup> . . . . .						
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 <sup>6</sup> . . . . .	473	(139)	5.1	(1.3)	2.2	(0.6)
<b>Ethnicity<sup>3,4</sup></b>						
Reported . . . . .	8,050	(1,211)	73.2	(5.3)	2.7	(0.4)
Imputed (missing) . . . . .	2,949	(695)	26.8	(5.3)	1.0	(0.2)
Reported plus imputed <sup>8</sup> . . . . .						
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 <sup>9</sup> . . . . .						
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.

<sup>1</sup>Visits 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.

<sup>2</sup>Injury-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.

<sup>3</sup>For 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.

<sup>4</sup>The 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.

<sup>5</sup>Includes 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.

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

<sup>7</sup>Calculations 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.

<sup>8</sup>Includes 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.

<sup>9</sup>Calculations 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.

NOTE: Numbers may not add to totals due to rounding.

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

**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	...
Unintentional injury or poisoning . . . . .	7,286	(1,160)	66.2	(3.1)
Adverse effect of medical or surgical care or adverse effect of medicinal drug . . . . .	991	(148)	9.0	(1.2)
Intentional injury or poisoning <sup>1</sup> . . . . .	457	(112)	4.2	(0.8)
Injury or poisoning of undetermined intent <sup>2</sup> . . . . .	2,264	(262)	20.6	(2.4)

... Category not applicable.

<sup>1</sup>Includes assault, self-inflicted, and other causes of violence.

<sup>2</sup>Includes illegible entries and blanks.

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

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**

Chronic condition <sup>1</sup>	Total	Patient age				Patient sex	
		Under 45 years	45–64 years	65–74 years	75 years and over	Female	Male
Number of visits in thousands (standard error in thousands)							
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)
Percent of visits (standard error of percent)							
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 (0.8)	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 (0.8)	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 (0.8)	5.8 (0.5)
Cancer . . . . .	6.0 (0.8)	2.4 (0.4)	7.8 (1.2)	14.5 (2.4)	16.8 (2.8)	5.7 (0.8)	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 (0.8)	5.9 (0.8)	6.4 (0.8)	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 (0.8)	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 (0.8)	0.8 (0.2)	1.6 (0.3)

... Category not applicable.

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

<sup>1</sup>Presence of chronic conditions was based on the checklist of chronic conditions and reported diagnoses.

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

**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 <sup>1</sup>	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits . . . . .	88,894	(9,792)	...	...
One or more diagnostic or screening services ordered or provided . . . . .	79,186	(9,226)	89.1	(1.5)
None . . . . .	8,683	(1,279)	9.8	(1.4)
Blank . . . . .	*1,024	(381)	*1.2	(0.4)
Examination				
Skin . . . . .	13,362	(3,254)	15.0	(3.0)
Pelvic . . . . .	6,264	(1,089)	7.0	(0.9)
Breast . . . . .	4,414	(710)	5.0	(0.6)
Rectal . . . . .	1,691	(370)	1.9	(0.3)
Depression screening . . . . .	1,195	(354)	1.3	(0.4)
Vital sign				
Weight . . . . .	61,180	(7,328)	68.8	(2.3)
Blood pressure . . . . .	57,565	(7,009)	64.8	(2.2)
Temperature . . . . .	46,207	(5,885)	52.0	(3.0)
Height . . . . .	40,198	(5,423)	45.2	(3.2)
Blood test				
CBC <sup>2</sup> . . . . .	11,755	(1,798)	13.2	(1.4)
Lipids or cholesterol . . . . .	6,206	(1,230)	7.0	(1.0)
Glucose . . . . .	5,381	(969)	6.1	(0.9)
Electrolytes . . . . .	4,762	(990)	5.4	(0.9)
HgbA1C <sup>3</sup> . . . . .	3,403	(783)	3.8	(0.8)
PSA <sup>4</sup> . . . . .	1,107	(268)	1.2	(0.2)
Other blood test . . . . .	12,863	(1,882)	14.5	(1.3)
Other test				
Urinalysis (UA) . . . . .	8,207	(1,476)	9.2	(1.3)
EKG or ECG <sup>5</sup> . . . . .	*3,031	(1,043)	*3.4	(1.1)
Pap test <sup>6</sup> . . . . .	2,860	(462)	5.2	(0.6)
Liquid-based <sup>6</sup> . . . . .	1,298	(360)	2.3	(0.6)
Unspecified <sup>6</sup> . . . . .	816	(167)	1.5	(0.2)
Conventional <sup>6</sup> . . . . .	746	(147)	1.3	(0.2)
Chlamydia test . . . . .	1,261	(226)	1.4	(0.2)
Spirometry or pulmonary function test . . . . .	*965	(368)	*1.1	(0.4)
Biopsy . . . . .	866	(217)	1.0	(0.2)
Pregnancy test <sup>6</sup> . . . . .	834	(141)	1.5	(0.2)
HPV DNA test <sup>6,7</sup> . . . . .	*564	(248)	*1.0	(0.5)
Other test or service . . . . .	15,045	(2,178)	16.9	(1.8)
Imaging				
Any imaging <sup>8</sup> . . . . .	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	(0.3)
Echocardiogram . . . . .	957	(194)	1.1	(0.2)
Bone mineral density . . . . .	487	(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.

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

<sup>2</sup>CBC is complete blood count.

<sup>3</sup>HgbA1C is glycohemoglobin test.

<sup>4</sup>PSA is prostate specific antigen test.

<sup>5</sup>EKG or ECG is electrocardiogram.

<sup>6</sup>Denominator for percentage is female visits.

<sup>7</sup>HPV is human papillomavirus; DNA is deoxyribonucleic acid.

<sup>8</sup>CT is computed tomography; MRI is magnetic resonance imaging; PET is positron emission tomography.

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



**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**

Characteristic	Total	Initial blood pressure <sup>1</sup>										
		Low	Normal	Mildly high	Moderately high	Severely high						
		Percent distribution (standard error of percent)										
All visits <sup>2</sup> . . . . .	50,285	100.0	7.1 (0.5)	24.3 (1.0)	40.8 (0.8)	20.4 (0.8)	7.5 (0.5)					
<b>Age</b>												
18–24 years . . . . .	5,720	100.0	12.3 (1.0)	39.4 (2.1)	38.8 (1.8)	8.9 (1.3)	4.6 (0.5)	*				
25–44 years . . . . .	16,000	100.0	9.0 (1.0)	32.5 (1.5)	39.2 (1.3)	14.7 (1.2)	9.6 (0.9)					
45–64 years . . . . .	18,191	100.0	4.4 (0.5)	18.5 (1.2)	43.0 (1.2)	24.5 (1.0)	10.8 (1.1)					
65N74 years . . . . .	5,916	100.0	5.4 (1.3)	13.7 (1.4)	40.9 (1.9)	29.2 (2.1)	13.6 (2.2)					
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)					
<b>Sex</b>												
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)					
<b>Race<sup>3,4</sup></b>												
Reported . . . . .	43,178	100.0	7.0 (0.5)	23.9 (1.1)	41.1 (0.8)	20.4 (0.8)	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 <sup>5</sup> :												
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 <sup>6</sup> . . . . .	1,118	100.0	10.9 (2.4)	26.8 (3.4)	35.6 (3.1)	20.6 (4.3)	*					
Reported only <sup>7</sup> :												
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 (0.8)	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 <sup>6</sup> . . . . .	*983	100.0	10.5 (2.6)	28.5 (3.7)	34.2 (2.7)	20.5 (4.8)	*					
<b>Ethnicity<sup>3,4</sup></b>												
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)					
Reported plus imputed <sup>8</sup> :												
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 <sup>9</sup> :												
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.

<sup>1</sup>Blood 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).

<sup>2</sup>Visits 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.

<sup>3</sup>For 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.

<sup>4</sup>The 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 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.

<sup>5</sup>Includes 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.

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

<sup>7</sup>Calculations 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.

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

<sup>9</sup>Calculations 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.

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

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

**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 <sup>1</sup>	(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)
Weight 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.

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

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

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 <sup>1</sup>	(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)
Wound 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)
Hospice 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.

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

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

**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 <sup>1</sup>	Number of visits in thousands <sup>1</sup>	(Standard error in thousands)	Percent distribution	(Standard error of percent)
All visits . . . . .	88,894	(9,792)	100.0	...
Visits with mention of medication <sup>2</sup> . . . . .	65,033	(7,729)	73.2	(1.9)
Visits without mention of medication . . . . .	23,861	(2,743)	26.8	(1.9)
Number of medications provided or prescribed				
All visits . . . . .	88,894	(9,792)	100.0	...
0. . . . .	23,861	(2,743)	26.8	(1.9)
1. . . . .	18,538	(2,108)	20.9	(1.0)
2. . . . .	12,879	(1,521)	14.5	(0.6)
3. . . . .	8,491	(1,015)	9.6	(0.3)
4. . . . .	5,703	(698)	6.4	(0.3)
5. . . . .	4,213	(587)	4.7	(0.3)
6. . . . .	3,656	(551)	4.1	(0.4)
7. . . . .	3,129	(545)	3.5	(0.4)
8. . . . .	8,423	(1,530)	9.5	(1.1)

... Category not applicable.

<sup>1</sup>Includes prescription drugs, over-the-counter preparations, immunizations, and desensitizing agents.

<sup>2</sup>Also called "drug visits."

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

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

**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**

Clinic type	Drug visits <sup>1</sup>				Drug mentions <sup>2</sup>							
	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 <sup>3</sup>	(Standard error of percent)	Drug mention rate <sup>4</sup>	(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 <sup>5</sup> . . . . .	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	(0.8)	10,583	(1,806)	4.7	(0.7)	62.8	(2.9)	129.1	(14.7)
Substance abuse and other <sup>6</sup> . . . . .	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.

<sup>1</sup>Visits at which one or more drugs were prescribed or provided.

<sup>2</sup>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).

<sup>3</sup>Percentage 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).

<sup>4</sup>Average 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).

<sup>5</sup>Includes family practice, primary care, and internal medicine clinics.

<sup>6</sup>Other includes psychiatric, mental health, and miscellaneous specialty clinics.

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

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



**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 <sup>1</sup>	Number of occurrences in thousands <sup>1</sup>	(Standard error in thousands)	Percent of drug mentions <sup>2</sup>	(Standard error of percent)
Analgesics <sup>3</sup> . . . . .	28,457	(4,016)	12.7	(0.6)
Antidepressants . . . . .	10,700	(1,594)	4.8	(0.3)
Antihyperlipidemic agents . . . . .	9,873	(1,601)	4.4	(0.3)
Antidiabetic agents . . . . .	8,887	(1,238)	4.0	(0.3)
Anxiolytics, sedatives, and hypnotics . . . . .	8,174	(1,300)	3.6	(0.3)
Diuretics . . . . .	8,028	(1,505)	3.6	(0.4)
Beta-adrenergic blocking agents . . . . .	7,958	(1,515)	3.5	(0.4)
Bronchodilators . . . . .	7,737	(1,207)	3.4	(0.4)
Antiplatelet agents . . . . .	7,506	(1,493)	3.3	(0.4)
Anticonvulsants . . . . .	7,113	(940)	3.2	(0.2)
Angiotensin-converting enzyme inhibitors . . . . .	6,820	(1,270)	3.0	(0.3)
Proton pump inhibitors . . . . .	6,233	(996)	2.8	(0.2)
Dermatological agents . . . . .	6,006	(1,226)	2.7	(0.3)
Antihistamines . . . . .	5,712	(788)	2.5	(0.2)
Antiemetic or antivertigo agents . . . . .	5,222	(1,251)	2.3	(0.4)
Viral vaccines . . . . .	4,480	(618)	2.0	(0.2)
Calcium channel blocking agents . . . . .	3,854	(755)	1.7	(0.2)
Minerals and electrolytes . . . . .	3,839	(790)	1.7	(0.2)
Adrenal cortical steroids . . . . .	3,776	(579)	1.7	(0.2)
Antipsychotics . . . . .	3,471	(590)	1.5	(0.2)

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

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

<sup>3</sup>Includes narcotic and nonnarcotic analgesics and nonsteroidal anti-inflammatory drugs.

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

**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**

Drug name <sup>1</sup>	Number of mentions in thousands	(Standard error in thousands)	Percent distribution	(Standard error of percent)	Percent distribution (standard error of percent)						Therapeutic drug category <sup>2</sup>
					Total	New	Continued	Unknown			
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.

<sup>1</sup>Based on Multum Lexicon terminology, drug name reflects the active ingredient(s) of a drug provided or prescribed.<sup>2</sup>Based on Multum Lexicon second-level therapeutic drug category (see: <http://www.multum.com/lexicon.htm>).

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

**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 <sup>1</sup>	(Standard error in thousands)	Percent of visits	(Standard error of percent)
All visits . . . . .	88,894	(9,792)	...	...
Any physician . . . . .	66,172	(7,512)	74.4	(2.9)
R.N. or L.P.N. <sup>2</sup> . . . . .	42,111	(6,018)	47.4	(4.2)
Nurse practitioner or midwife . . . . .	9,696	(2,115)	10.9	(1.8)
Physician assistant . . . . .	5,956	(1,250)	6.7	(1.2)
Mental health provider . . . . .	3,163	(767)	3.6	(0.9)
Other provider . . . . .	18,834	(2,582)	21.2	(2.4)

... Category not applicable.

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

<sup>2</sup>R.N. is registered nurse; L.P.N. is licensed practical nurse.

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

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 <sup>1</sup>	(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 <sup>2</sup> . . . . .	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.

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

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

<sup>2</sup>PRN is "as needed."

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

## 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. 0920-0278 Exp. Date 08/31/2009 CDC 64.135

FORM <b>NHAMCS-100(OPD)</b> (9-28-2006)	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU ACTING AS DATA COLLECTION AGENT FOR THE U.S. Department of Health and Human Services Centers for Disease Control and Prevention National Center for Health Statistics	<b>PATIENT RECORD NO.:</b>  <b>PATIENT'S NAME:</b>
<b>NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY                  2007 OUTPATIENT DEPARTMENT PATIENT RECORD</b>		
Assurance of confidentiality – All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purpose of the survey and will not be disclosed or released to other persons or used for any other purpose without consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).		

(Provider: Detach and keep upper portion)

Please keep (X) marks inside of boxes →  Correct  Incorrect

<b>1. PATIENT INFORMATION</b>		<b>2. INJURY/POISONING/ADVERSE EFFECT</b>	
<b>a. Date of visit</b> Month Day Year 2 0 0 7	<b>d. Sex</b> <input type="checkbox"/> Female <input type="checkbox"/> Male	<b>g. Expected source(s) of payment for this visit – Mark (X) all that apply.</b> <input type="checkbox"/> Private insurance <input type="checkbox"/> Medicare <input type="checkbox"/> Medicaid/SCHIP <input type="checkbox"/> Worker's compensation <input type="checkbox"/> Self-pay <input type="checkbox"/> No charge/Charity <input type="checkbox"/> Other <input type="checkbox"/> Unknown	<b>Is this injury related to any of the following?</b> <input type="checkbox"/> Unintentional injury/poisoning <input type="checkbox"/> Intentional injury/poisoning <input type="checkbox"/> Injury/poisoning – unknown intent <input type="checkbox"/> Adverse effect of medical/surgical care or adverse effect of medicinal drug <input type="checkbox"/> None of the above
<b>b. ZIP Code</b> _____	<b>e. Ethnicity</b> <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino	<b>h. Tobacco use</b> <input type="checkbox"/> Not current <input type="checkbox"/> Unknown <input type="checkbox"/> Current	
<b>c. Date of birth</b> Month Day Year _____	<b>f. Race – Mark (X) one or more.</b> <input type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Asian <input type="checkbox"/> Native Hawaiian/Other Pacific Islander <input type="checkbox"/> American Indian/Alaska Native		
<b>3. REASON FOR VISIT</b>		<b>4. CONTINUITY OF CARE</b>	
<b>a. Patient's complaint(s), symptom(s), or other reason(s) for this visit – Use patient's own words.</b> (1) Most important: _____ (2) Other: _____ (3) Other: _____		<b>a. Is this clinic the patient's primary care provider?</b> <input type="checkbox"/> Yes –SKIP to item 4b. <input type="checkbox"/> No <input type="checkbox"/> Unknown Was patient referred for this visit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>b. Has the patient been seen in this clinic before?</b> <input type="checkbox"/> Yes, established patient – How many past visits in the last 12 months? Exclude this visit. _____ Visits <input type="checkbox"/> Unknown <input type="checkbox"/> No, new patient
		<b>c. Major reason for this visit</b> <input type="checkbox"/> New problem (<3 mos. onset) <input type="checkbox"/> Chronic problem, routine <input type="checkbox"/> Chronic problem, flare-up <input type="checkbox"/> Pre-/Post-surgery <input type="checkbox"/> Preventive care (e.g., routine prenatal, well-baby, screening, insurance, general exams)	
<b>5. PROVIDER'S DIAGNOSIS FOR THIS VISIT</b>			
<b>a. As specifically as possible, list diagnoses related to this visit including chronic conditions.</b> (1) Primary diagnosis: _____ (2) Other: _____ (3) Other: _____		<b>b. Regardless of the diagnoses written in 5a, does the patient now have – Mark (X) all that apply.</b> <input type="checkbox"/> Arthritis <input type="checkbox"/> Cerebrovascular disease <input type="checkbox"/> Hyperlipidemia <input type="checkbox"/> Asthma <input type="checkbox"/> CHF <input type="checkbox"/> Hypertension <input type="checkbox"/> Cancer <input type="checkbox"/> Chronic renal failure <input type="checkbox"/> Ischemic heart disease <input type="checkbox"/> In situ <input type="checkbox"/> COPD <input type="checkbox"/> Obesity <input type="checkbox"/> Local <input type="checkbox"/> Depression <input type="checkbox"/> Osteoporosis <input type="checkbox"/> Regional <input type="checkbox"/> Diabetes <input type="checkbox"/> None of the above – SKIP to item 6 <input type="checkbox"/> Distant <input type="checkbox"/> Unknown	
		<b>c. Status of patient enrollment in a disease management program for any of the conditions marked in 5b.</b> <input type="checkbox"/> Currently enrolled <input type="checkbox"/> Ordered/Advised to enroll at this visit <input type="checkbox"/> Not enrolled <input type="checkbox"/> Unknown	
<b>6. VITAL SIGNS</b>		<b>7. DIAGNOSTIC/SCREENING SERVICES</b>	
(1) Height: _____ ft _____ in OR _____ cm (2) Weight: _____ lb _____ oz OR _____ kg _____ gm (3) Temperature: _____ °C / _____ °F (4) Blood pressure: Systolic _____ Diastolic _____		Mark (X) all <b>ordered</b> or <b>provided</b> at this visit. <input type="checkbox"/> NONE <b>Examinations:</b> <input type="checkbox"/> Breast <input type="checkbox"/> PET scan <input type="checkbox"/> Pelvic <input type="checkbox"/> Other imaging <input type="checkbox"/> Rectal <input type="checkbox"/> Blood tests: <input type="checkbox"/> Skin <input type="checkbox"/> CBC (complete blood count) <input type="checkbox"/> Depression screening <input type="checkbox"/> Electrolytes <input type="checkbox"/> X-ray <input type="checkbox"/> Glucose <input type="checkbox"/> Bone mineral density <input type="checkbox"/> HgbA1C (glycohemoglobin) <input type="checkbox"/> CT scan <input type="checkbox"/> Lipids/Cholesterol <input type="checkbox"/> Echocardiogram <input type="checkbox"/> PSA (prostate specific antigen) <input type="checkbox"/> Other ultrasound <input type="checkbox"/> Other blood test <input type="checkbox"/> Mammography <input type="checkbox"/> Scope: <input type="checkbox"/> MRI <input type="checkbox"/> Scope procedure (e.g., colonoscopy) - Specify _____	
		<b>Other tests:</b> <input type="checkbox"/> Biopsy – Specify site _____ <input type="checkbox"/> Chlamydia test <input type="checkbox"/> EKG/ECG <input type="checkbox"/> HPV DNA test <input type="checkbox"/> Pap test - conventional <input type="checkbox"/> Pap test - liquid-based <input type="checkbox"/> Pap test - unspecified <input type="checkbox"/> Pregnancy test <input type="checkbox"/> Spirometry/Pulmonary function test <input type="checkbox"/> Urinalysis (UA) <input type="checkbox"/> Other exam/test/service - Specify _____	
<b>8. HEALTH EDUCATION</b>		<b>9. NON-MEDICATION TREATMENT</b>	
Mark (X) all <b>ordered</b> or <b>provided</b> at this visit. <input type="checkbox"/> NONE <input type="checkbox"/> Stress management <input type="checkbox"/> Asthma education <input type="checkbox"/> Tobacco use/Exposure <input type="checkbox"/> Diet/Nutrition <input type="checkbox"/> Weight reduction <input type="checkbox"/> Exercise <input type="checkbox"/> Other <input type="checkbox"/> Growth/Development <input type="checkbox"/> Injury prevention		Mark (X) all <b>ordered</b> or <b>provided</b> at this visit. <input type="checkbox"/> NONE <input type="checkbox"/> Speech/Occupational therapy <input type="checkbox"/> Complementary alternative medicine (CAM) <input type="checkbox"/> Psychotherapy <input type="checkbox"/> Durable medical equipment <input type="checkbox"/> Other mental health counseling <input type="checkbox"/> Home health care <input type="checkbox"/> Excision of tissue <input type="checkbox"/> Hospice care <input type="checkbox"/> Orthopedic care <input type="checkbox"/> Physical therapy <input type="checkbox"/> Wound care <input type="checkbox"/> Radiation therapy	
<b>10. MEDICATIONS &amp; IMMUNIZATIONS</b>		<b>11. PROVIDERS</b>	<b>12. VISIT DISPOSITION</b>
<input type="checkbox"/> NONE Include Rx and OTC drugs, immunizations, allergy shots, anesthetics, chemotherapy, and dietary supplements that were ordered, supplied, administered or continued during the visit.		Mark (X) all providers seen at this visit. <input type="checkbox"/> Physician <input type="checkbox"/> Physician assistant <input type="checkbox"/> Nurse practitioner/Midwife <input type="checkbox"/> RN/LPN <input type="checkbox"/> Mental health provider <input type="checkbox"/> Other	Mark (X) all that apply. <input type="checkbox"/> No show <input type="checkbox"/> Return at specified time <input type="checkbox"/> Left without being seen <input type="checkbox"/> Telephone follow-up planned <input type="checkbox"/> No follow-up planned <input type="checkbox"/> Refer to emergency department <input type="checkbox"/> Return if needed, PRN <input type="checkbox"/> Admit to hospital <input type="checkbox"/> Refer to other physician <input type="checkbox"/> Other
(1) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (2) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (3) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (4) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (5) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (6) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (7) _____ New <input type="checkbox"/> Continued <input type="checkbox"/> (8) _____ New <input type="checkbox"/> Continued <input type="checkbox"/>			

NHAMCS-100(OPD) (9-28-2006)

2007 OPD

Figure. National Hospital Ambulatory Medical Care Survey, 2007 Outpatient Department Patient Record Form

### 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.

---

#### Copyright information

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

---

#### National Center for Health Statistics

Edward J. Sondik, Ph.D., *Director*  
Jennifer H. Madans, Ph.D., *Associate Director for Science*

#### Division of Health Care Statistics

Jane E. Sisk, Ph.D., *Director*

---

U.S. DEPARTMENT OF  
HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention  
National Center for Health Statistics  
3311 Toledo Road  
Hyattsville, MD 20782

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

---

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

To receive this publication regularly, contact the National Center for Health Statistics by calling 1-800-232-4636  
E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)  
Internet: <http://www.cdc.gov/nchs>

---

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