

Ambulatory Medical Care Utilization Estimates for 2005

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Abstract

Objective—This report presents statistics on ambulatory care visits to physician offices, hospital outpatient departments (OPDs), and hospital emergency departments (EDs) in the United States in 2005. Ambulatory medical care utilization is described in terms of patient, practice, facility, and visit characteristics.

Methods—Data from the 2005 National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS) were combined to produce averaged annual estimates of ambulatory medical care utilization.

Results—Patients in the United States made an estimated 1.2 billion visits to physician offices and hospital OPDs and EDs, a rate of 4.0 visits per person annually. Between 1995 and 2005, population visit rates increased by about 20% in primary care offices, surgical care offices, and OPDs; 37% in medical specialty offices; and 7% in EDs. The aging of the population has contributed to increased volume of visits because older patients have higher visit rates. Visits by patients 40–59 years of age represented about 28.5 percent in 2005, compared with 23.9 percent in 1995. Black persons had higher visit rates than white persons to hospital OPDs and EDs, but lower visit rates to office-based primary care and to surgical and medical specialists. In the ED, the visit rate for patients with no insurance was about twice that of those with private insurance; whereas for all types of office-based care, the visit rates were higher for privately insured persons than for uninsured persons. About 29.4 percent of all ambulatory care visits were for chronic diseases and 25.2 percent were for preventive care, including checkups, prenatal care, and postsurgical care. The leading treatment provided at ambulatory care visits was medicinal with 71.3 percent of all visits having one or more medications prescribed, up by 10% since 1995 when encounters with drug therapy represented 64.9 percent of all visits. In 2005, 2.4 billion medications were prescribed or administered at these visits.

Keywords: ambulatory care visits • diagnoses • injury • medications

Introduction

This report presents summary information on the utilization of ambulatory medical care across physician offices and hospital emergency and outpatient departments. Physician offices are further classified by the physician specialty: primary care, surgical, and medical. The tables present total visits across all settings as well as percent distributions by setting type. Data are from NAMCS and NHAMCS, which are part of the ambulatory care component of the National Health Care Survey, a family of provider-based surveys conducted by the Centers for Disease Control and Prevention's National Center for Health Statistics.

Methods

Estimates of ambulatory medical care use are based on national probability provider-based surveys of visits to nonfederal office-based physicians and EDs and OPDs of nonfederal, general, and short-stay hospitals in the 50 states and the District of Columbia. Individual reports are available that contain detailed methods and analyses by setting: **physician**



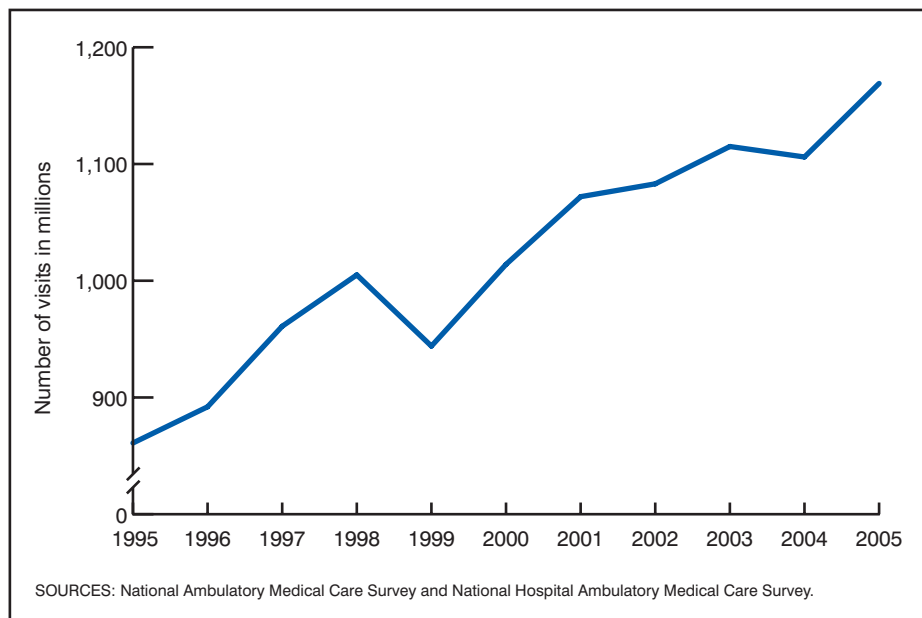


Figure 1. Trends in ambulatory care visits: United States, 1995–2005

offices (1), OPDs (2), and EDs (3).

These reports, issued annually, provide a comprehensive analysis of visits to ambulatory health care settings in the United States. Estimates of visits are made from a sample of medical record abstracts from each sampled provider during defined reporting periods weighted to provide national annual estimates. More information on the sampling design and scope of the surveys can be found at <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

Results

There were almost 1.2 billion visits to physicians' offices and hospital EDs and OPDs in the United States during 2005, up by 36% in the last 10 years (Figure 1). Between 1995 and 2005, population visit rates increased by about 20% in primary care offices, surgical care offices, and OPDs; 37% in medical specialty offices; and 7% in EDs (Figure 2).

Table 1 presents the 2005 estimates of ambulatory care by setting and patient and geographic demographics.

Table 2 presents visit rates per 100 persons in the civilian noninstitutional U.S. population. Table 3 presents the general kinds of conditions seen, whereas Table 4 presents the leading primary diagnoses for ambulatory care visits, which account for over one-half of all visits. Table 5 presents the number of medications prescribed (both new and continued) at the visits, and Table 6 presents the leading therapeutic classes of the drugs prescribed.

One-half of ambulatory medical care visits (49.0 percent) were to primary care physicians in office-based practices. The rest were to surgical specialists (17.1 percent) and medical specialists (16.3 percent) in office-based practices, and EDs (9.9 percent) and OPDs (7.7 percent) in nonfederal general and short-stay hospitals. The aging of the population has contributed to increased volume of visits because the visit rates are generally higher (excluding infants) for older patients. Visits by patients 40–59 years of age represented about 28.5 percent in 2005, compared with 23.9 percent in 1995 (Figure 3). Starting at age 50, more than one-half of visits were by patients who made three or more visits to their provider in a year and averaged more than two drug prescriptions at each visit (data not shown).

Visit rates for persons with no insurance for the care provided (i.e., expected payment from solely self-pay,

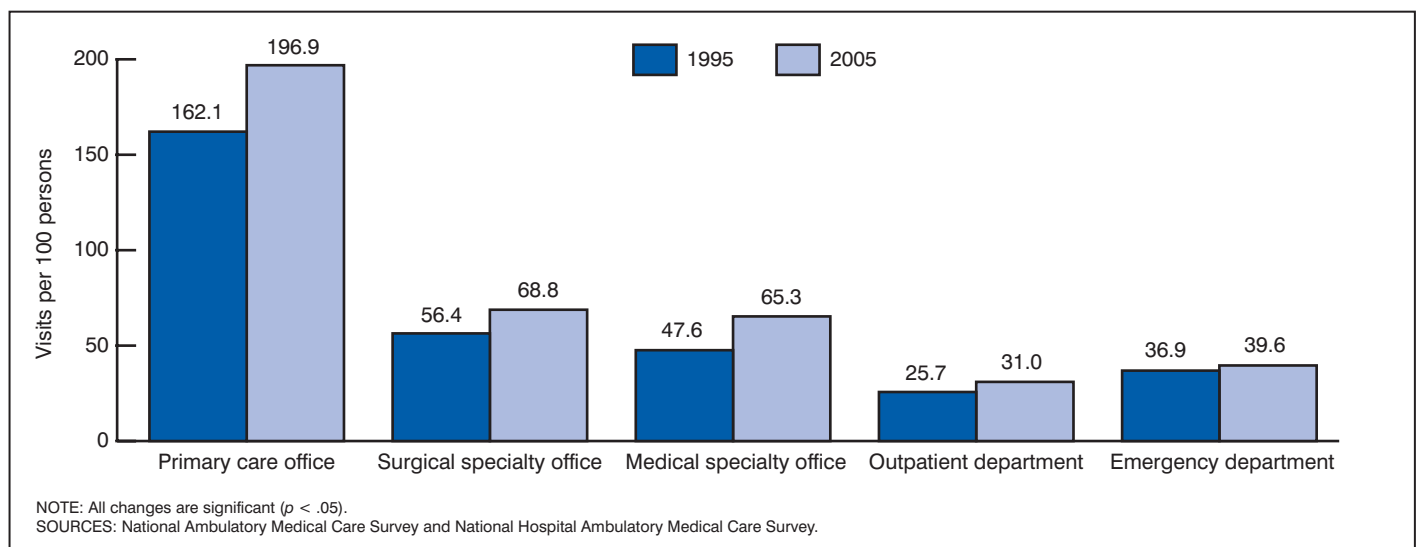


Figure 2. Visit rates by setting type: United States, 1995 and 2005

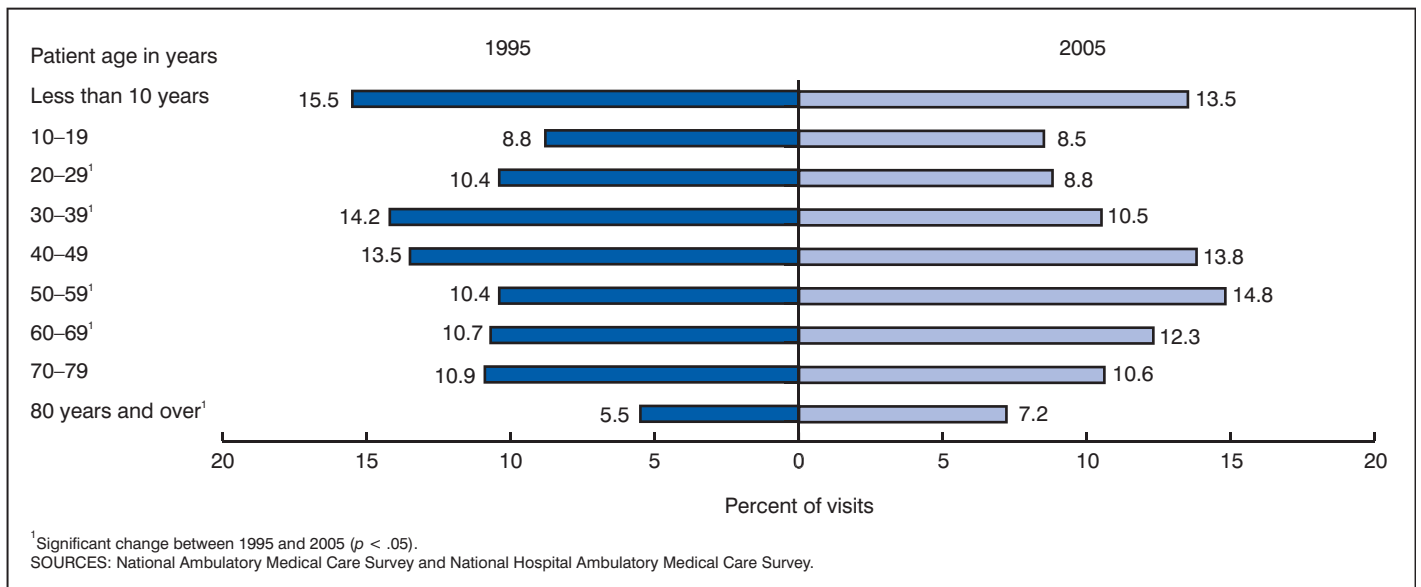


Figure 3. Percent distribution of ambulatory care visits by patient age, according to year: United States 1995 and 2005

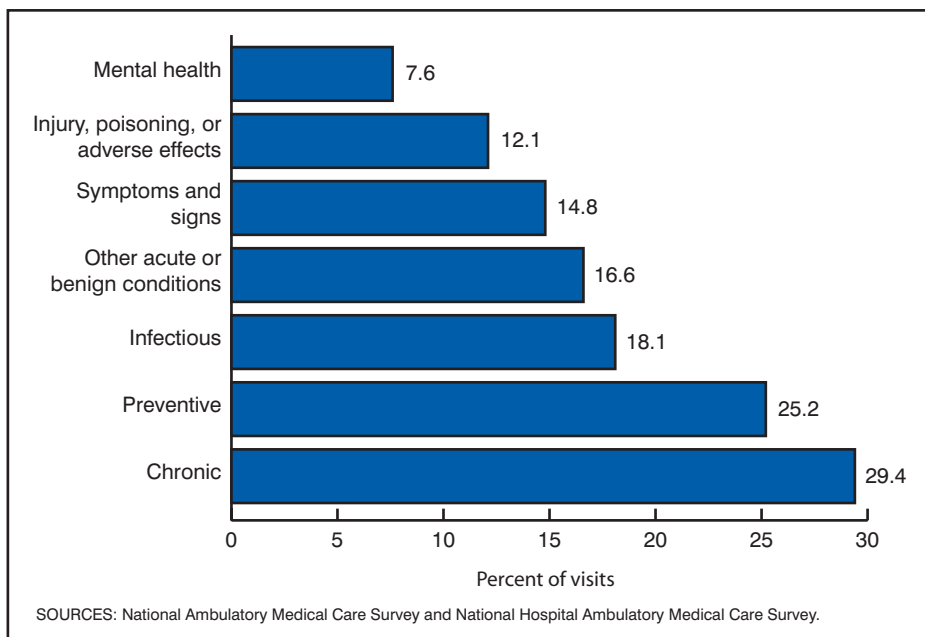


Figure 4. Percentage of ambulatory care visits by type of diseases or conditions seen: United States, 2005

checkups, prenatal care, and postsurgical care. About 18.1 percent of visits were for infectious diseases and 12.1 percent were for injuries, poisonings, or adverse effects of medical treatment (Figure 4). The types of patients' conditions varied by setting type (Table 3). EDs were relatively more likely to see injuries and infectious diseases as well as symptoms with no specific diagnosis compared with other conditions. Essential hypertension was the primary diagnosis recorded most frequently (49.2 million) at ambulatory care visits (Table 4), with over three-quarters of these occurring in primary care offices.

The leading treatment provided at ambulatory care visits was medicinal with 71.3 percent of all visits having one or more medications prescribed, up by 10% since 1995 when encounters with drug therapy represented 64.9 percent of all visits. There were 2.4 billion medications prescribed or administered at these visits, including over-the-counter medications, immunizations, allergy shots, anesthetics, and dietary supplements that were newly prescribed or continued (Table 5). Antidepressants, antihypertensives, nonsteroidal anti-inflammatory drugs, hyperlipidemia drugs, and nonnarcotic analgesics were the leading drug classes prescribed, accounting for nearly one quarter

no charge, or charity) were lower for all office-based settings than visit rates for persons with various kinds of insurance. In contrast, the visit rate to EDs for the uninsured (45.9 visits per 100 persons) was about twice the rate of persons with private insurance (23.8 visits per 100 persons) (Table 2). The total visit rate for Hispanics (308.4 visits per 100 persons) was lower than that for non-Hispanics (417.4 visits per 100

persons) driven largely by difference in use of office-based physicians as opposed to hospital settings (Table 2). Similarly, black persons had higher visit rates than white persons to hospital OPDs and EDs, but lower visit rates to office-based primary care and surgical and medical specialists.

About 29.4 percent of all visits were for chronic diseases and 25.2 percent were for preventive care, including

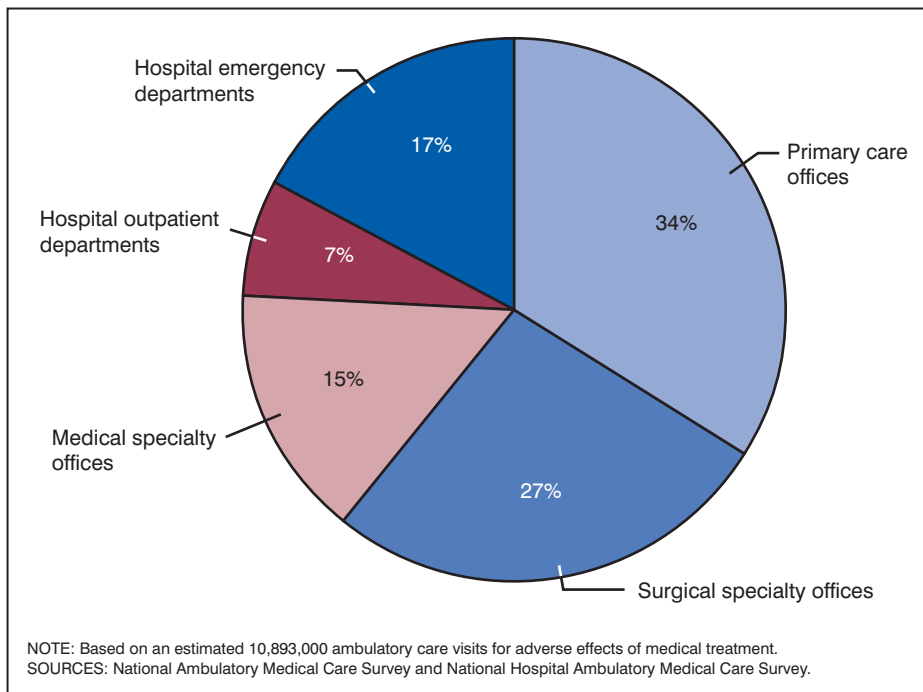


Figure 5. Percent distribution of visits for adverse effects of medical treatment by setting type: United States, 2005

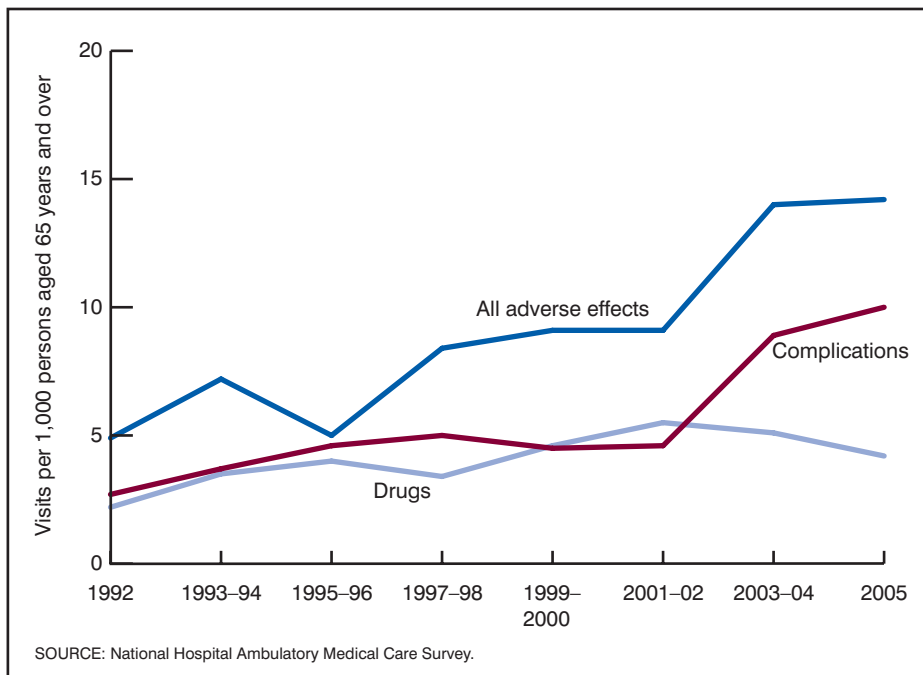


Figure 6. Trends in the rate of visits to emergency departments for adverse effects of medical treatment for persons aged 65 years and over: United States, 1992–2005

(22.9 percent) of all prescriptions (Table 6). Approximately 27.3 percent of medications prescribed or administered at ambulatory care visits in nonemergency settings were for new prescriptions, whereas 72.7 percent were

for continued prescriptions (data not shown).

A small proportion of visits were due to adverse effects of medical treatment (about 1 percent of all visits), which accounted for 10.8 million

medical encounters. These included complications from medical and surgical procedures as well as adverse drug reactions. About 17 percent of visits for adverse effects (Figure 5) were to the ED (1.8 million visits), of which 59.9 percent were for medical and surgical complications and 41.1 percent for adverse drug reactions (data not shown). Among patients aged 65 years and over, adverse effects of medical treatment represented 3.0 percent of ED visits. The rate of ED visits for adverse effects of medical treatment among seniors increased from 4.9 per 1,000 persons in 1992 to 14.2 per 1,000 persons in 2005. The rate has been increasing more for complications of procedures (e.g., surgical-site infection, postoperative bleeding), which had a fourfold increase during this time, compared with the increases in adverse drug reactions that peaked in 2001–2002 (Figure 6). Although the rate of hospital discharges with any procedures has remained fairly constant for seniors during this time frame, their average length of stay has declined by about 40 percent (4). Additionally, the rate of outpatient surgeries for seniors may have increased during this period contributing to more opportunities for complications.

Facility characteristics for physician offices and hospital EDs have been recently published. Public-use micro-data visit files for 2005 are available for download from <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

References

- Cherry DK, Woodwell DA, Rechtsteiner EA. National Ambulatory Medical Care Survey: 2005 Summary. Advance data from vital and health statistics; no 387. Hyattsville, MD. National Center for Health Statistics. 2007. Available from: <http://www.cdc.gov/nchs/data/ad/ad387.pdf>.
- Middleton KR, Hing E, Xu J. National Hospital Ambulatory Medical Care Survey: 2005 Outpatient Department Summary. Advance data from vital and health statistics; no 389. Hyattsville, MD. National Center for Health Statistics. 2007. Available from: <http://www/cdc.gov/nchs/data/ad/ad389.pdf>.

3. Nawar E, Niska R. National Hospital Ambulatory Medical Care Survey: 2005 Emergency Department Summary. Advance data from vital and health statistics; **no 386**. Hyattsville, MD. National Center for Health Statistics. 2007. Available from: <http://www/cdc.gov/nchs/data/ad/ad386.pdf>.
4. National Center for Health Statistics. Health, United States, 2006 with chartbook on trends in the health of Americans. Hyattsville, MD. 2006.

Table 1. Number and percent distribution of ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 2005

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
	Number of visits in thousands					
All visits	1,169,333	573,169	200,217	190,232	90,393	115,323
Patient age						
Under 15 years	206,158	139,048	10,444	11,059	21,109	24,497
Under 1 year	39,717	30,995	*	*	3,902	3,745
1–4 years	66,181	46,027	2,662	*1,710	6,529	9,253
5–14 years	100,260	62,026	7,233	8,823	10,678	11,500
15–24 years	99,683	48,362	10,696	11,525	10,418	18,682
25–44 years	256,656	129,253	37,017	35,349	21,805	33,232
45–64 years	328,564	148,117	66,919	68,144	23,202	22,182
65 years and over	278,272	108,389	75,140	64,154	13,859	16,730
65–74 years	133,334	52,738	35,448	30,875	7,517	6,756
75 years and over	144,938	55,651	39,692	33,280	6,341	9,974
Patient sex						
Female	677,744	336,880	109,485	113,990	55,280	62,109
Male	491,589	236,288	90,732	76,242	35,113	53,213
Patient race ¹						
White	984,419	488,868	176,100	167,070	66,232	86,149
Black or African American	134,917	54,487	19,217	15,226	20,764	25,223
Asian	37,618	23,131	3,310	*6,817	2,187	2,173
Native Hawaiian or Other Pacific Islander	*4,477	*2,740	*533	*	*347	*609
American Indian or Alaska Native	4,318	*1,917	*	*	485	786
Two or more races reported	3,584	2,026	*	*	378	*382
Patient ethnicity						
Hispanic or Latino	130,064	63,387	18,415	17,102	14,289	16,872
Not Hispanic or Latino	1,039,269	509,782	181,801	173,131	76,104	98,451
Primary expected source of payment						
Private insurance	692,542	369,701	119,360	119,158	38,324	45,999
Medicare	266,062	104,118	64,797	62,741	15,223	19,184
Medicare and Medicaid	24,674	10,715	3,988	4,298	2,532	3,140
Medicaid/SCHIP ²	167,413	80,071	13,539	14,990	30,151	28,661
No insurance ³	69,288	23,255	10,691	9,489	6,586	19,267
Self-pay	62,875	21,044	9,225	8,902	5,277	18,426
No charge/charity	7,153	*2,465	*1,466	*	*1,408	*1,227
Worker's compensation	12,861	1,968	5,967	*2,078	870	1,977
Other	29,411	14,000	6,726	3,396	2,557	2,732
Unknown or blank	58,462	27,329	10,746	8,363	4,562	7,462
Geographic region of provider						
Northeast	235,121	107,106	39,558	40,541	25,670	22,245
Midwest	287,177	144,430	46,334	38,536	29,105	28,771
South	424,365	199,627	78,479	78,578	23,809	43,871
West	222,670	122,005	35,845	32,577	11,808	20,436
MSA ⁴ status of provider						
MSA	1,013,103	493,910	166,551	178,723	75,297	98,622
Not MSA	156,230	79,259	33,666	*11,509	*15,096	16,700

See footnotes at end of table.

Table 1. Number and percent distribution of ambulatory care visits by setting type, according to selected patient and provider characteristics: United States, 2005—Con.

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
	Percent distribution					
All visits	100.0	49.0	17.1	16.3	7.7	9.9
Patient age						
Under 15 years	100.0	67.4	5.1	5.4	10.2	11.9
Under 1 year	100.0	78.0	*1.4	*1.3	9.8	9.4
1–4 years	100.0	69.5	4.0	*2.6	9.9	14.0
5–14 years	100.0	61.9	7.2	8.8	10.7	11.5
15–24 years	100.0	48.5	10.7	11.6	10.5	18.7
25–44 years	100.0	50.4	14.4	13.8	8.5	12.9
45–64 years	100.0	45.1	20.4	20.7	7.1	6.8
65 years and over	100.0	39.0	27.0	23.1	5.0	6.0
65–74 years	100.0	39.6	26.6	23.2	5.6	5.1
75 years and over	100.0	38.4	27.4	23.0	4.4	6.9
Patient sex						
Female	100.0	49.7	16.2	16.8	8.2	9.2
Male	100.0	48.1	18.5	15.5	7.1	10.8
Patient race ¹						
White	100.0	49.7	17.9	17.0	6.7	8.8
Black or African American	100.0	40.4	14.2	11.3	15.4	18.7
Asian	100.0	61.5	8.8	*18.1	5.8	5.8
Native Hawaiian or Other Pacific Islander	100.0	61.2	*11.9	*5.5	*7.8	*13.6
American Indian or Alaska Native	100.0	44.4	*14.6	*11.5	11.2	18.2
Two or more races reported	100.0	56.5	*11.8	10.4	10.5	*10.7
Patient ethnicity						
Hispanic or Latino	100.0	48.7	14.2	13.1	11.0	13.0
Not Hispanic or Latino	100.0	49.1	17.5	16.7	7.3	9.5
Primary expected source of payment						
Private insurance	100.0	53.4	17.2	17.2	5.5	6.6
Medicare	100.0	39.1	24.4	23.6	5.7	7.2
Medicare and Medicaid	100.0	43.4	16.2	17.4	10.3	12.7
Medicaid/SCHIP ²	100.0	47.8	8.1	9.0	18.0	17.1
No insurance ³	100.0	33.6	15.4	13.7	9.5	27.8
Self-pay	100.0	33.5	14.7	14.2	8.4	29.3
No charge/charity	100.0	*34.5	*20.5	*8.2	*19.7	*17.2
Worker's compensation	100.0	15.3	46.4	*16.2	6.8	15.4
Other	100.0	47.6	22.9	11.5	8.7	9.3
Unknown or blank	100.0	46.7	18.4	14.3	7.8	12.8
Geographic region of provider						
Northeast	100.0	45.6	16.8	17.2	10.9	9.5
Midwest	100.0	50.3	16.1	13.4	10.1	10.0
South	100.0	47.0	18.5	18.5	5.6	10.3
West	100.0	54.8	16.1	14.6	5.3	9.2
MSA ⁴ status of provider						
MSA	100.0	48.8	16.4	17.6	7.4	9.7
Not MSA	100.0	50.7	21.5	*7.4	*9.7	10.7

* Figure does not meet standards of reliability or precision.

¹The race groups, White, Black or African American, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and multiple races, include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to 1997 Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and lower than is typically found for self-reported race in household surveys.²SCHIP is State Children's Health Insurance Program.³No insurance is defined as having only self-pay, no charge, or charity as payment sources.⁴MSA is metropolitan statistical area.

Table 2. Rate of ambulatory care visits with corresponding standard errors, by setting type, and selected patient and provider characteristics: United States, 2005

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
	Number of visits per 100 persons ^{1,2,3}					
All visits	401.6	196.9	68.8	65.3	31.0	39.6
Patient age						
Under 15 years	339.9	229.3	17.2	18.2	34.8	40.4
Under 1 year	968.0	755.4	*13.4	*12.8	95.1	91.3
1–4 years	408.7	284.2	16.4	*10.6	40.3	57.1
5–14 years	248.5	153.7	17.9	21.9	26.5	28.5
15–24 years	243.0	117.9	26.1	28.1	25.4	45.5
25–44 years	313.0	157.6	45.1	43.1	26.6	40.5
45–64 years	454.2	204.7	92.5	94.2	32.1	30.7
65 years and over	791.7	308.4	213.8	182.5	39.4	47.6
65–74 years	724.8	286.7	192.7	167.8	40.9	36.7
75 years and over	865.1	332.2	236.9	198.6	37.9	59.5
Patient sex						
Female	455.7	226.5	73.6	76.7	37.2	41.8
Male	345.1	165.9	63.7	53.5	24.7	37.4
Patient race ⁴						
White	420.4	208.8	75.2	71.4	28.3	36.8
Black or African American	369.2	149.1	52.6	41.7	56.8	69.0
Asian	298.2	183.3	26.2	*54.0	17.3	17.2
Native Hawaiian or Other Pacific Islander	*881.9	*539.7	*105.0	*48.7	*68.4	*120.1
American Indian or Alaska Native	153.7	*68.2	*22.5	*17.7	17.3	28.0
Two or more races reported	79.2	44.8	*9.4	8.3	8.3	*8.4
Patient ethnicity						
Hispanic or Latino	308.4	150.3	43.7	40.6	33.9	40.0
Not Hispanic or Latino	417.4	204.7	73.0	69.5	30.6	39.5
Primary expected source of payment						
Private insurance	357.8	191.0	61.7	61.6	19.8	23.8
Medicare	706.8	276.6	172.1	166.7	40.4	51.0
Medicaid/SCHIP ⁵	522.4	249.8	42.2	46.8	94.1	89.4
No insurance ⁶	165.2	55.5	25.5	22.6	15.7	45.9
Geographic region of provider						
Northeast	436.9	199.0	73.5	75.3	47.7	41.3
Midwest	442.1	222.3	71.3	59.3	44.8	44.3
South	403.3	189.7	74.6	74.7	22.6	41.7
West	331.5	181.6	53.4	48.5	17.6	30.4
MSA ⁷ status of provider						
MSA	412.8	201.2	67.9	72.8	30.7	40.2
Not MSA	341.8	173.4	73.6	*25.2	*33.0	36.5

See footnotes at end of table.

Table 2. Rate of ambulatory care visits with corresponding standard errors, by setting type, and selected patient and provider characteristics: United States, 2005—Con.

Characteristic	Combined settings	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
	Standard error of rate					
All visits	15.1	10.7	4.9	5.0	3.0	1.9
Patient age						
Under 15 years	20.5	19.2	2.2	4.4	5.0	3.2
Under 1 year	88.3	83.7	4.7	6.0	15.9	7.3
1–4 years	29.6	28.5	2.9	4.5	6.1	5.1
5–14 years	13.2	11.7	2.3	4.7	3.7	2.2
15–24 years	11.0	8.6	2.9	3.2	2.6	2.3
25–44 years	13.6	10.6	3.7	4.0	2.7	1.9
45–64 years	20.2	15.3	7.1	7.5	3.2	1.4
65 years and over	45.0	27.3	19.0	19.7	4.7	2.2
65–74 years	41.4	25.1	17.4	19.6	4.9	1.9
75 years and over	54.1	33.8	22.5	22.4	4.7	3.0
Patient sex						
Female	17.5	12.3	5.3	6.3	3.6	2.0
Male	13.8	10.5	5.0	4.1	2.4	1.8
Patient race ⁴						
White	16.6	11.9	5.5	5.4	3.0	1.9
Black or African American	24.1	17.5	7.1	6.5	8.0	4.9
Asian	43.0	37.9	3.7	18.8	2.5	3.1
Native Hawaiian or Other Pacific Islander	295.0	259.2	46.5	30.1	25.1	53.1
American Indian or Alaska Native	30.1	22.6	7.3	6.1	4.7	8.1
Two or more races reported	10.2	8.0	3.1	2.0	2.5	3.2
Patient ethnicity						
Hispanic or Latino	26.4	16.5	5.9	7.4	4.8	4.8
Not Hispanic or Latino	16.1	11.9	5.3	5.3	3.1	1.9
Primary expected source of payment						
Private insurance	15.1	11.8	5.0	4.9	2.4	1.2
Medicare	42.0	25.4	15.7	19.7	4.7	2.7
Medicaid/SCHIP ⁵	30.0	24.0	5.5	6.2	11.9	6.0
No insurance ⁶	10.7	7.3	6.2	3.3	2.0	3.4
Geographic region of provider						
Northeast	27.1	21.5	10.9	10.9	9.3	3.9
Midwest	36.5	26.9	8.3	11.8	7.6	4.6
South	30.1	19.9	10.5	9.9	3.7	3.7
West	28.1	19.8	5.4	5.3	4.7	2.2
MSA ⁷ status of provider						
MSA	18.0	12.2	5.2	5.7	3.1	2.2
Not MSA	46.1	30.2	14.3	9.7	10.7	4.7

* Figure does not meet standards of reliability or precision.

¹Visit rates for age, sex, race, and region are based on the July 1, 2005, set of estimates of the civilian noninstitutionalized population of the United States as developed by the Population Division, U.S. Census Bureau.²Population estimates of metropolitan statistical area status are based on data from the 2005 National Health Interview Survey, National Center for Health Statistics, adjusted to the U.S. Census Bureau definition of core-based statistical areas as of November 2004. See <http://www.census.gov/population/www/estimates/metrodef.html> for more about metropolitan statistical definitions.³Population estimates for expected source of payment are based on data from the 2005 National Health Interview Survey.⁴The race groups, White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and multiple races, include persons of Hispanic and not Hispanic origin. Persons of Hispanic origin may be of any race. Starting with data year 1999, race-specific estimates have been tabulated according to 1997 Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The percentage of visit records with multiple races indicated is small and lower than is typically found for self-reported race in household surveys.⁵SCHIP is State Children's Health Insurance Program.⁶No insurance is defined as having only self-pay, no charge, or charity as payment sources.⁷MSA is metropolitan statistical area.

Table 3. Number and percentage of visits for type of condition by type of ambulatory care setting: United States, 2005

Type of condition ¹	Number of visits in thousands ²	Percent of visits	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
All visits	1,169,333	...	100.0	49.0	17.1	16.3	7.7	9.9
Chronic	343,966	29.4	100.0	53.7	12.3	22.7	7.0	4.5
Preventive	294,868	25.2	100.0	58.2	20.6	9.6	8.8	2.8
Infectious	211,654	18.1	100.0	65.0	6.1	6.6	8.8	13.6
Other acute or benign conditions ³	194,505	16.6	100.0	33.2	32.6	20.7	6.2	7.3
Symptoms and signs	173,171	14.8	100.0	52.2	8.4	14.1	7.0	18.3
Injury, poisoning, or adverse effects	141,169	12.1	100.0	31.2	24.0	8.2	7.0	29.7
Mental health	88,344	7.6	100.0	44.8	1.4	36.1	10.7	7.0
				Standard error				
All conditions	43,828	...	...	1.6	1.1	1.1	0.7	0.5
Chronic	19,046	1.0	...	2.4	1.2	2.3	0.8	0.3
Preventive	16,536	0.9	...	2.0	1.7	1.0	1.1	0.2
Infectious	9,995	0.6	...	1.9	0.6	0.9	1.1	0.9
Other acute or benign conditions ³	8,789	0.5	...	2.0	1.9	1.6	0.6	0.5
Symptoms and signs	8,047	0.5	...	2.1	0.9	1.2	0.8	1.1
Injury, poisoning, or adverse effects	6,441	0.4	...	2.4	2.2	1.4	0.9	1.4
Mental health	5,576	0.4	...	3.2	0.3	3.1	1.6	0.6

... Category not applicable.

¹Based on any of 3 diagnoses recorded at the visit, coded to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM). For related ICD-9-CM codes see <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

²Sum will not add to total because more than one type of diagnosis may be reported per visit.

³Includes benign neoplasms; problems related to pregnancy, delivery, and reproductive health; and conditions that are not considered infectious or chronic, such as gastroenteritis, glaucoma, and cataracts.

Table 4. Number and percent distribution of ambulatory care visits with corresponding standard errors, by primary diagnosis group, with percent distribution by setting type: United States, 2005

Primary diagnosis group and <i>International Classification of Diseases, Ninth Revision, Clinical Modification</i> (ICD-9-CM) code(s) ¹	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
All visits	1,169,333	100.0	100.0	49.0	17.1	16.3	7.7	9.9
Essential hypertension 401	49,216	4.2	100.0	77.6	*0.5	12.7	7.9	1.3
Routine infant or child health check V20.2	45,487	3.9	100.0	91.8	*0.1	*0.1	7.9	0.1
Acute upper respiratory infections, excluding pharyngitis 460–461,463–466	44,207	3.8	100.0	74.7	2.0	*5.7	8.0	9.8
Arthropathies and related disorders 710–719	37,504	3.2	100.0	31.5	33.3	26.7	4.7	3.9
Malignant neoplasms 140–208,230–234	30,203	2.6	100.0	*9.2	20.0	65.8	*4.5	0.5
Diabetes mellitus 250	28,601	2.4	100.0	57.4	*16.0	*15.6	9.6	1.4
Spinal disorders 720–724	27,753	2.4	100.0	51.2	19.5	11.2	7.6	10.5
Rheumatism, excluding back 725–729	21,907	1.9	100.0	45.6	27.4	11.8	6.8	8.4
Specific procedures and aftercare V50–V59.9	18,702	1.6	100.0	46.4	26.4	10.9	10.5	5.8
Normal pregnancy V22	18,401	1.6	100.0	83.9	–	*0.3	14.6	1.1
Otitis media and eustachian tube disorders 381–382	18,285	1.6	100.0	65.8	12.3	*0.7	9.1	12.1
General medical examination V70	18,086	1.5	100.0	89.2	*2.4	*2.5	4.7	*1.2
Follow up examination V67	17,117	1.5	100.0	28.7	56.2	*10.0	4.6	*0.5
Gynecological examination V72.3	16,305	1.4	100.0	92.2	–	*0.2	7.6	*0.0
Asthma 493	15,897	1.4	100.0	56.5	*0.2	*23.9	8.2	11.1
Heart disease, excluding ischemic 391–392.0,393–398,402,404,415–416,420–429	14,490	1.2	100.0	31.9	*1.8	45.5	*10.0	10.8
Chronic sinusitis 473	14,419	1.2	100.0	74.9	8.3	*4.4	8.4	4.1
Acute pharyngitis 462	13,923	1.2	100.0	78.5	*0.4	*0.6	9.1	11.5
Disorders of lipid metabolism 272	13,485	1.2	100.0	83.5	*3.6	*6.7	6.1	*0.0
Allergic rhinitis 477	11,858	1.0	100.0	48.6	*19.3	*25.1	6.3	0.7
Psychoses, excluding major depressive disorder 290–295,296.0–296.1,296.4–299	11,671	1.0	100.0	*10.6	*0.2	66.8	14.3	8.1
Benign neoplasms 210–229,235–239	11,115	1.0	100.0	28.8	18.0	47.7	5.0	0.7
Abdominal pain 789	11,053	0.9	100.0	40.3	5.5	*5.2	7.1	41.9
Chronic and unspecified bronchitis 490–491	10,742	0.9	100.0	69.7	*1.7	*4.8	8.3	15.4
Ischemic heart disease 410–414.9	10,591	0.9	100.0	31.4	*7.9	51.0	*4.6	5.1
Potential health hazards related to personal and family history V10–V19	10,535	0.9	100.0	34.5	22.0	29.0	11.8	2.6
Artificial opening and other postsurgical status V44–V45	10,098	0.9	100.0	*9.2	74.7	*9.8	*5.9	*0.5
Chest pain 786.5	10,097	0.9	100.0	29.0	*0.4	22.8	3.9	44.0
Glaucoma 365	9,866	0.8	100.0	–	97.4	–	*2.6	–
Major depressive disorder 296.2–296.3	9,776	0.8	100.0	*5.7	–	80.1	*12.0	2.2
Sprains and strains, excluding ankle and back 840–844,845.1,848	9,716	0.8	100.0	36.9	26.8	*2.6	7.5	26.2
Contusion with intact skin surface 920–924	9,686	0.8	100.0	36.8	*4.8	*1.5	6.6	50.4
Contact dermatitis and other eczema 692	9,529	0.8	100.0	62.3	*3.2	22.0	6.4	6.0
Cataract 366	9,310	0.8	100.0	*3.2	94.6	–	*2.2	*0.0
Open wound, excluding head 874–897	8,356	0.7	100.0	27.6	13.3	*2.2	8.7	48.2
All other diagnoses	541,344	46.3	100.0	43.8	19.7	15.8	7.9	12.8

See footnotes at end of table.

Table 4. Number and percent distribution of ambulatory care visits with corresponding standard errors, by primary diagnosis group, with percent distribution by setting type: United States, 2005—Con.

Primary diagnosis group and <i>International Classification of Diseases, Ninth Revision, Clinical Modification</i> (ICD-9-CM) code(s) ¹	Number of visits in thousands	Percent distribution	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments	Standard error of percent	
									Standard error in thousands	
All visits	43,828	...	...	1.6	1.1	1.1	0.7	0.5		
Essential hypertension 401	4,447	0.3	...	2.7	0.3	2.4	1.2	0.2		
Routine infant or child health check V20.2	4,152	0.3	...	1.5	0.0	0.1	1.5	0.0		
Acute upper respiratory infections, excluding pharyngitis 460–461,463–466	2,987	0.2	...	2.4	0.5	1.7	1.3	0.9		
Arthropathies and related disorders 710–719	4,246	0.3	...	4.5	5.3	7.8	0.8	0.5		
Malignant neoplasms 140–208,230–234	5,642	0.5	...	2.9	4.9	7.7	1.4	0.1		
Diabetes mellitus 250	2,772	0.2	...	5.5	5.2	4.8	1.5	0.2		
Spinal disorders 720–724	2,538	0.2	...	4.1	3.7	2.0	1.2	1.1		
Rheumatism, excluding back 725–729	1,599	0.1	...	3.9	3.5	3.0	1.3	0.8		
Specific procedures and aftercare V50–V59.9	2,096	0.2	...	5.3	4.3	2.5	2.2	0.9		
Normal pregnancy V22	2,566	0.2	...	3.0	...	0.3	2.9	0.3		
Otitis media and eustachian tube disorders 381–382	1,497	0.1	...	3.8	2.1	0.7	1.7	1.6		
General medical examination V70	2,400	0.2	...	2.0	1.0	1.1	1.0	0.4		
Follow up examination V67	2,620	0.2	...	5.5	5.9	3.5	1.2	0.2		
Gynecological examination V72.3	2,397	0.2	...	1.6	...	0.2	1.5	0.0		
Asthma 493	2,127	0.2	...	7.9	0.2	9.9	1.5	1.7		
Heart disease, excluding ischemic 391–392.0,393–398,402,404,415–416,420–429	1,585	0.1	...	4.6	1.5	5.6	3.4	1.5		
Chronic sinusitis 473	1,319	0.1	...	3.0	1.6	1.7	1.8	0.5		
Acute pharyngitis 462	1,970	0.2	...	3.5	0.2	0.5	2.2	1.9		
Disorders of lipid metabolism 272	1,436	0.1	...	3.6	2.7	2.5	1.3	0.0		
Allergic rhinitis 477	2,080	0.2	...	8.6	8.6	10.1	1.7	0.2		
Psychoses, excluding major depressive disorder 290–295,296.0–296.1,296.4–299	1,465	0.1	...	3.3	0.2	4.6	3.2	1.3		
Benign neoplasms 210–229,235–239	1,649	0.1	...	3.9	3.7	5.1	1.2	0.2		
Abdominal pain 789	878	0.1	...	3.8	1.3	2.3	1.2	3.4		
Chronic and unspecified bronchitis 490–491	1,071	0.1	...	3.9	1.0	2.0	1.8	2.0		
Ischemic heart disease 410–414.9	1,225	0.1	...	5.3	4.1	6.3	1.5	0.8		
Potential health hazards related to personal and family history V10–V19	1,120	0.1	...	4.8	3.1	6.0	2.5	0.5		
Artificial opening and other postsurgical status V44–V45	1,989	0.2	...	2.8	5.7	3.5	2.0	0.2		
Chest pain 786.5	766	0.1	...	4.0	0.3	4.2	0.9	3.7		
Glaucoma 365	2,498	0.2	...	...	0.9	...	0.9	...		
Major depressive disorder 296.2–296.3	1,560	0.1	...	2.4	...	4.7	3.8	0.6		
Sprains and strains, excluding ankle and back 840–844,845.1,848	904	0.1	...	5.2	5.7	1.4	1.7	3.1		
Contusion with intact skin surface 920–924	718	0.1	...	4.4	1.8	1.1	1.3	3.9		
Contact dermatitis and other eczema 692	899	0.1	...	3.9	1.1	3.1	1.0	0.9		
Cataract 366	1,515	0.1	...	1.5	1.7	...	0.7	0.0		
Open wound, excluding head 874–897	641	0.1	...	3.5	3.3	1.1	1.6	3.3		
All other diagnoses	20,616	0.6	...	1.8	1.3	0.9	0.7	0.6		

* Figure does not meet standards of reliability or precision.

0.0 Quantity more than zero but less than 0.05.

– Quantity zero.

... Category not applicable.

¹Based on the *International Classification of Diseases, Ninth Revision, Clinical Modification*. However, certain codes have been combined in this table to form larger categories that better describe the utilization of ambulatory care services.

Table 5. Number and percent distribution of drug visits and drug mentions, and percentage of drug visits and drug mention rates per 100 visits with corresponding standard errors, in ambulatory care visits by setting type: United States, 2005

Ambulatory care setting	Drug visits ¹				Drug mentions ²				Percent drug visits ³		Drug mention rates ⁴	
	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	Standard error of percent	Number of drug mentions per 100 visits	Standard error of rate
All ambulatory care settings	833,332	33,022	100.0	...	2,430,234	132,154	100.0	...	71.3	1.0	207.8	6.8
Primary care offices	435,163	25,473	52.2	1.7	1,278,291	102,220	52.6	2.3	75.9	1.4	223.0	10.3
Medical specialty offices	153,402	12,465	18.4	1.3	532,091	55,554	21.9	1.9	80.6	1.6	279.7	15.9
Surgical specialty offices	90,684	8,076	10.9	0.9	220,422	25,029	9.1	1.0	45.3	2.1	110.1	8.1
Hospital outpatient departments	65,586	6,752	7.9	0.8	194,579	23,501	8.0	1.0	72.6	1.6	215.3	12.1
Hospital emergency departments	88,497	4,335	10.6	0.6	204,851	10,652	8.4	0.6	76.7	0.8	177.6	3.5

... Category not applicable.

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

²Number of drugs mentioned at visit (up to eight per visit).

³Percentage of visits that included one or more drug mentions (number of drug visits divided by number of visits multiplied by 100).

⁴Average number of drugs that were mentioned per 100 visits (number of drug mentions divided by total number of visits multiplied by 100).

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

Table 6. Number and rate of drug mentions for the 20 most frequently occurring therapeutic classes at ambulatory care visits and percent distribution by setting type, with corresponding standard errors: United States, 2005

Therapeutic class ¹	Number of occurrences in thousands ²	Number of occurrences per 100 drug mentions ³	Total	Percent distribution				
				Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
All occurrences	2,820,765	116.1	100.0	52.4	9.0	21.5	7.9	9.2
Antidepressants	117,813	4.8	100.0	48.6	4.4	37.9	8.4	0.7
Antihypertensive agents	113,078	4.7	100.0	62.5	8.5	22.1	6.1	0.8
NSAIDs ⁴	110,014	4.5	100.0	45.8	10.4	12.2	7.9	23.7
Hyperlipidemia	109,650	4.5	100.0	59.1	9.0	24.0	7.4	0.5
Nonnarcotic analgesics	107,589	4.4	100.0	52.4	6.7	18.5	8.4	13.9
Antiasthmatics or bronchodilators	100,273	4.1	100.0	58.9	4.6	20.1	8.7	7.8
Antipyretics	97,442	4.0	100.0	52.4	6.5	18.4	8.5	14.1
Antiarthritics	94,933	3.9	100.0	53.7	11.0	25.4	6.5	3.5
Narcotic analgesics	94,181	3.9	100.0	34.6	11.8	12.0	6.7	34.9
Acid or peptic disorders	88,764	3.7	100.0	52.5	8.0	24.3	8.2	6.9
Antihistamines	84,599	3.5	100.0	58.4	4.5	14.5	7.3	15.3
Blood glucose regulators	81,515	3.4	100.0	57.5	8.4	23.1	9.0	2.0
Vitamins or minerals	74,508	3.1	100.0	56.5	10.9	21.2	10.1	1.3
Vaccines or antisera	72,097	3.0	100.0	82.7	*0.3	*1.8	10.1	5.0
Beta blockers	69,821	2.9	100.0	53.3	8.0	28.5	8.4	1.8
Diuretics	66,595	2.7	100.0	54.7	8.6	24.8	9.1	2.8
ACE inhibitors ⁵	65,728	2.7	100.0	60.5	7.7	22.3	8.5	1.0
Calcium channel blockers	53,742	2.2	100.0	62.0	5.9	23.5	7.1	1.5
Adrenal corticosteroids	52,329	2.2	100.0	46.9	10.2	24.7	6.7	11.6
Thyroid or antithyroid	44,847	1.8	100.0	55.9	8.5	28.7	6.4	0.5

See footnotes at end of table.

Table 6. Number and rate of drug mentions for the 20 most frequently occurring therapeutic classes at ambulatory care visits and percent distribution by setting type, with corresponding standard errors: United States, 2005—Con.

Therapeutic class ¹	Number of occurrences in thousands ²	Number of occurrences per 100 drug mentions ³	Total	Primary care offices	Surgical specialty offices	Medical specialty offices	Hospital outpatient departments	Hospital emergency departments
	Standard error in thousands	Standard error of rate							Standard error of percent
All occurrences	154,987	0.4	...	2.3	1.0	1.9	1.0	0.6
Antidepressants	9,108	0.2	...	3.4	0.7	3.2	1.5	0.1
Antihypertensive agents	9,661	0.2	...	3.1	1.4	2.6	1.1	0.1
NSAIDs ⁴	6,680	0.2	...	3.0	1.6	2.5	1.0	1.6
Hyperlipidemia	8,770	0.2	...	3.0	1.7	2.8	1.3	0.1
Nonnarcotic analgesics	6,975	0.2	...	3.0	1.1	2.2	1.2	1.1
Antiasthmatics or bronchodilators	7,209	0.2	...	3.8	0.8	4.1	1.2	0.7
Antipyretics	6,734	0.2	...	3.1	1.1	2.2	1.3	1.1
Antiarthritics	7,874	0.2	...	3.6	1.7	3.5	1.2	0.4
Narcotic analgesics	6,437	0.2	...	3.5	1.7	1.7	0.9	2.4
Acid or peptic disorders	6,699	0.1	...	3.3	1.1	3.4	1.3	0.7
Antihistamines	4,719	0.1	...	3.0	0.7	2.1	1.0	1.1
Blood glucose regulators	6,657	0.2	...	3.7	2.1	3.6	1.3	0.3
Vitamins or minerals	5,161	0.2	...	3.6	2.0	2.7	1.8	0.2
Vaccines or antisera	7,854	0.3	...	2.5	0.1	0.8	2.1	0.6
Beta blockers	5,451	0.1	...	3.1	1.5	2.9	1.5	0.2
Diuretics	5,657	0.1	...	3.5	1.7	3.1	1.7	0.3
ACE inhibitors ⁵	5,223	0.1	...	3.1	1.5	2.6	1.4	0.2
Calcium channel blockers	4,383	0.1	...	3.2	1.0	2.9	1.3	0.2
Adrenal corticosteroids	3,732	0.1	...	3.3	2.3	3.8	1.0	1.1
Thyroid or antithyroid	4,303	0.1	...	4.0	2.2	4.2	1.2	0.1

* Figure does not meet standards of reliability or precision.

... Category not applicable.

¹Based on the standard four-digit drug classification used in the *National Drug Code Directory*, 1995 edition.

²Total of all therapeutic classes will exceed total number of drug mentions because up to three classes may be coded for each drug.

³Based on an estimated 2,430,234,000 drugs mentioned at ambulatory care visits (up to eight per visit) in 2005.

⁴NSAIDs are nonsteroidal anti-inflammatory drugs.

⁵ACE is angiotensin-converting enzyme.

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

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