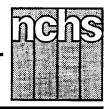
# Advance Data



From Vital and Health Statistics of the CENTERS FOR DISEASE CONTROLAND PREVENTION/National Center for Health Statistics

# **National Ambulatory Medical Care Survey: 1994 Summary**

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# Introduction

During the 12-month period from January 1994 through December 1994, an estimated 681.5 million visits were made to nonfederally employed, office-based physicians in the United States, a rate of 2.6 visits per person. This rate is not significantly different from the 1993 visit rate of 2.8 visits per person. Annual visit rates have ranged between 2.6 and 3.0 visits per person between 1975 and 1994 (1–6).

This report presents data highlights from the 1994 National Ambulatory Medical Care Survey (NAMCS), a national probability sample survey conducted by the Division of Health Care Statistics of the National Center for Health Statistics, Centers for Disease Control and Prevention. Statistics are presented on physician, patient, and visit characteristics.

Only visits to the offices of nonfederally employed physicians (excluding those in the specialties of anesthesiology, radiology, and pathology) who were classified by the American Medical Association and the American Osteopathic Association as "office-based, patient care" were included in the NAMCS. Visits to private, nonhospital-based clinics and health maintenance organizations were within the scope of the survey, but those that took place in government-operated

facilities and hospital-based outpatient departments were not. Telephone contacts and visits made outside the physician's office were also excluded.

Because the estimates presented in this report are based on a sample rather than on the entire universe of office visits, they are subject to sampling variability. The Technical notes at the end of this report include an overview of the sample design used in the 1994 NAMCS, an explanation of sampling errors, and guidelines for judging the precision of the estimates.

The Patient Record form is used by physicians participating in the NAMCS to record information about their patients' office visits. This form is reproduced in figure 1 and is intended to serve as a reference for readers as they review the survey findings presented in this document.

The physician sample for the NAMCS was selected with the cooperation of the American Medical Association and the American Osteopathic Association. Their contribution to this effort is gratefully acknowledged.

# Physician characteristics

The distribution of office visits according to physician specialty for the 13 most visited specialties is presented in table 1. The largest share of visits

was made to physicians in general and family practice (22.6 percent). Visit rates to each of the 13 physician specialty groups did not differ significantly from 1993 visit rates, with the exception of general and family practice, which showed a significant decrease.

Doctors of osteopathy received 34.4 million visits during 1994, or 5.1 percent of all office visits. Visits to this specialty occurred at a rate of 13.3 per 100 persons, which was not significantly different from the 1993 visit rate of 17.7 visits per 100 persons.

Visits according to geographic characteristics of the physician's practice are also displayed in table 1. Visit rates by region—Northeast, Midwest, South, and West—did not differ from each other in 1994, except that the Northeast rate was higher than the South and Midwest, and the West was higher than the South. Regional rates were not significantly different than the corresponding 1993 rates.

#### Patient characteristics

Office visits by patient's age, sex, and race are shown in table 2. Females made 59.9 percent of all office visits during 1994 and accounted for a higher percent of visits than males in all age categories except the youngest (under 15 years). Females also had significantly higher visit rates than males in the age





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Assurance of Confidentiality-All information which would permit identification a practice, or an establishment will be held confidential, will be used only by in and for the purposes of the survey and will not be disclosed or released or used for any other purpose.	persons engaged	Department of Health and Human Services Public Health Service Certiers for Disease Control National Center for Health Statistics	В	
1. DATE OF VISIT  Month Day Year  NATIONA		ATORY MEDICAL CARE 34 PATIENT RECORD	ESURVEY	OMB NO. 0920-0234 Expires 4-30-95 CDC 64.21B
2. DATE OF BIRTH    Month Day Year   1 White   2 Black   3 Asian / Pacific   Islander   4 American Indian / Eskimo / Aleut   4 American Indian / Eskimo / Aleut	5. ETHNICITY  1 Hispanic origin  2 Not Hispanic	6. EXPECTED SOURCE(S) OF PAYMENT (Check all that apply)  1	REFERRED FOR THIS VISIT BY ANOTHER BUYER CLANS	IS THIS VISIT INJURY RELATED?  1 Yes 2 No  DOES PATIENT SMOKE CIGARETTES?  1 Yes 2 No 3 Unknown
10. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT [In patient's own words]  a. Most important:	a. Precipal diagnosis problem associate with nem 10.a:	N'S DIAGNOSES [As specific as possible]	12. HAVE YOU OR ANYONE IN YOUR PRACTICE SEEN PATIENT BEFORE?	3. DOES PATIENT HAVE: [Check all that apply regardless of any entry in item 11]  1 Asihma 2 Diabetes 3 HiV
b. Other:	b. Other:		If yes, for the condition in item 11a?	Dobesity  Mone of the above
3 Spirometry	DES In line and check for each.J	HERAPIES None   clude: • Tests • Imagings • Surgerles and oth • Other therapies (such as contact lens Rx, individual psychotherapy, or physiotherapy  Performed	Counseling     Medications  Ordered	/ education
5			2	
[Check all ordered or provided]  1 None 6 Growth / evelopment example of the first of the first of the first ordered or provided]  2 Exercise 7 Injury prevention example of the first order of the first order orders or the first order order order or the first order	ATIONS / INJECT		17. DISPOSITION THIS VISIT   Check all that apply   1 No follow-up planned 2 Return at specified time 3 Return if needed, P.R.N. 4 Telephone follow-up planned 6 Referred to other physician 6 Returned to referring physici	OF THIS VISIT (Time actually spent with physician)
5 Stroking 10 Other	5		Other [Specify]	Minutes

Figure 1. Patient Record form.

categories 15–24 years, 25–44 years, and 45–64 years. However, visit rates by sex were not significantly different for the youngest age group (under 15 years) and the two oldest groups (65–74 years and 75 years and over). These patterns were also observed in the 1990–93 National Ambulatory Medical Care Surveys.

Visit rates were found to increase with age after the age of 24. Persons aged 75 years and over had the highest visit rate of the six age categories analyzed, at 5.9 visits per person. The pattern, however, was found to be slightly different for males and females.

The visit rate for males under 15 years was higher than for those 15–24 years (who had the lowest visit rate of the six age groups) and for those 25–44 years. The visit rate increased, relative to the preceding age group, for each group after the age of 24. Males 75 years and over had the highest rate, 6.0 visits per person per year (figure 2).

There was no significant difference in the visit rates for females under 15 years and those 15–24 years. However, the rate was higher for females 25–44 years than for those 15–24, and increased again for those 45–64 years and 65–74 years of age. There was no

significant difference in visit rates between females in the two oldest age groups, 65–74 years and 75 years and over.

The visit rate for the white population was significantly higher (2.8 visits per person) than the rate for the black population (1.7 visits per person) in 1994. Visit rates were higher for white persons in each age group compared with black persons, with the exception of those in the age groups 65–74 years and 75 years and over. White persons made 87.6 percent of all office visits, with black persons and Asians/Pacific Islanders accounting for

Table 1. Annual number, percent distribution, and rate of office visits by selected physician practice characteristics: United States, 1994

. Physician practice characteristic	Number of visits in thousands	Percent distribution	Number of visits per 100 persons per year
All visits	681,457	100.0	262.5
Physician specialty			
General and family practice	154,082	22.6	59.3
Internal medicine	99,731	14.6	38.4
Pediatrics	87,465	12.8	33.7
Obstetrics and gynecology	62,540	9.2	<sup>2</sup> 24.1
Orthopedic surgery	42,750	6.3	16.5
Ophthalmology	41,659	6.1	16.0
Dermatology	26,197	3.8	10.1
Psychlatry	24,973	3.7	9.6
General surgery	22,315	3.3	8.6
Otolaryngology	17,502	2.6	6.7
Cardiovascular diseases	14,981	2.2	5.8
Urology	13,122	1.9	5.1
Neurology	7,252	1.1	2.8
All other specialties	66,890	9.8	25.8
Professional identity			
Doctor of medicine	647,022	94.9	249.2
Doctor of osteopathy	34,436	5.1	13.3
Geographic region			
Northeast	162,051	23.8	320.2
Midwest	154,307	22.6	244.0
South	204,035	29.9	231.6
West	161,063	23.6	279.2
Metropolitan status			
MSA	568,809	83.5	280.1
Non-MSA	112,649	16.5	199.2

<sup>&</sup>lt;sup>1</sup>Based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1,

NOTES: Numbers may not add to totals because of rounding. MSA is metropolitan statistical area.

8.5 percent and 3.7 percent, respectively. The visit rate for the black population in 1994 was not significantly different from the 1993 rate (1.8 visits per person).

# Visit characteristics

# Referral status and prior-visit status

Table 3 shows data on office visits categorized by patient's referral status and prior-visit status. The distribution of visits by referral status and prior-visit status according to physician specialty is shown in table 4.

It is important to note that, in survey years prior to 1993, several data items were used to determine referral status. Beginning with the 1993 survey year, only data from the referral status item on the Patient Record form are used to determine referral status. The

definition of a referred visit consistent with past usage can be recreated using information available on the public use data file. A discussion of the changes that were adopted in the determination of referral status for NAMCS data has been published (6).

When referred visits are restricted to those made by new patients and those made by old patients for new problems, their share of total visits is 6.4 percent. This is not significantly different than the 1993 NAMCS figure of 6.6 percent. Using the number of referred visits reported by physicians (which includes visits made by old patients for old problems), the percent of referred visits is 14.1. This is not significantly different than the 1993 figure of 13.7 percent (table 3).

Also shown in table 3 are office visits by prior-visit status. Eight of ten office visits (83.5 percent) were made by

patients who had seen the physician on a previous occasion, and more than half of all visits (62.8 percent) were made by persons returning to the physician for care of a previously treated problem. Overall, 16.5 percent of visits were made by new patients.

As expected, the percent of referred visits reported by primary care specialties was relatively low, 8 percent or less of the visits to general and family practitioners, internists, and pediatricians. In contrast, about half the visits to neurologists (51.9 percent) were reported to be referrals (table 4).

## **Expected sources of payment**

Data on expected sources of payment are shown in table 5. Physicians were asked to check all the applicable payment categories for this survey item, with the result that multiple payment sources could be coded for each visit. The patient-paid category includes the patient's contribution towards "co-payments" and "deductibles."

Expected sources of payment were most often private/commercial insurance (39.0 percent of visits), Medicare (21.8 percent of visits), HMO/other prepaid (21.5 percent), and patient-paid (12.4 percent). Medicaid was listed as an expected source of payment at 9.8 percent of visits.

#### Injury-related visits

Injury-related office visits are presented in terms of patient's age, sex, and race in table 6. Based on data collected in item 8 of the Patient Record form, there were an estimated 84.6 million injury-related office visits in 1994, representing 12.4 percent of all office visits. Corresponding figures for 1993 were 84.0 million and 11.7 percent of visits, respectively. About half of all injury visits (51.2 percent) were made by males, and 36.4 percent were made by persons 25–44 years old.

The injury visit rate for males was not significantly higher than the rate for females in 1994 (34.3 visits per 100 males compared with 31.0 visits per 100 females), nor were there any differences noted between males and females by age with one exception—the rate for

<sup>&</sup>lt;sup>2</sup>The visit rate is 48.5 per 100 females.

Table 2. Annual number, percent distribution, and rate of office visits by patient's age, sex, and race: United States, 1994

Patient's age, sex, and race	Number of visits in thousands	Percent distribution	Number of visits per person per year
All visits	681,457	100.0	2.6
Age			
Under 15 years	124,421	18.3	2.1
15–24 years	60,722	8.9	1.7
25–44 years	184,143	27.0	2.2
45–64 years	149,038	21.9	3.0
65–74 years	87,461	12.8	4.8
75 years and over	75,674	11.1	5.9
Sex and age			
Female	408,049	59.9	3.1
Under 15 years	57,606	8.5	2.0
15–24 years	39,890	5.9	2.2
25-44 years	122,194	17.9	2.9
45–64 years	90,644	13.3	3.5
65–74 years	51,079	7.5	5.0
75 years and over	46,637	6.8	5.9
Maie	273,409	40.1	2.2
Under 15 years	66,815	9.8	2.2
15-24 years	20,832	3.1	1.1
25-44 years	61,948	9.1	1.5
45-64 years	58,394	8.6	2.4
65–74 years	36,382	5.3	4.5
75 years and over	29,038	4.3	6.0
Race and age			
White	597,091	87.6	2.8
Under 15 years	108,717	16.0	2.3
15-24 years	52,202	7.7	1.8
25–44 years	159,086	23.3	2.3
45–64 years	130,349	19.1	3.0
65–74 years	78,457	11.5	4.8
75 years and over	68,281	10.0	5.9
Black	57,723	8.5	1.7
Under 15 years	10,484	1.5	1.1
15–24 years	5,743	0.8	1.1
25-44 years	16,894	2.5	1.6
45–64 years	13,599	2.0	2.7
65–74 years	6,061	0.9	3.9
75 years and over	4,942	0.7	5.1
All other races			
Asian, Pacific Islander	24,965	3.7	
American Indian, Eskimo, Aleut	1,678	0.2	

<sup>- - -</sup> Data not available.

males 25–44 years was statistically higher than the rate for females in the same age group (42.1 and 32.3 visits per 100, respectively).

Among females, injury visit rates were not significantly different for women in the age groups 25–44, 45–64, 65–74, and 75 years and over. However, the rates for these groups were significantly higher than for females under 15 years. The rate for females 15–24 years was significantly lower than

for females 45–64, 65–74, and 75 years and over, but was not statistically different from the rate for females 25–44 years. Males in the age groups 25–44 years and 45–64 years had an injury visit rate significantly higher than the rate for those aged under 15 years. No other statistically significant differences were noted by age for males.

The injury visit rate for black persons was 20.3 visits per 100 persons in 1994, significantly lower than the rate

of 35.1 injury visits per 100 white persons. Rates were not significantly different between white males (36.9 per 100) and white females (33.4 per 100), or between black males (21.7 per 100) and black females (19.1 per 100) (data not shown).

## Patient's cigarette-smoking status

Results from the 1994 survey showed that 65.4 million office visits, or 9.6 percent of the total, were made by patients who smoke cigarettes. However, the patient's smoking status was not reported for 27.2 percent of office visits. Data on visits according to patient's cigarette-smoking status are presented in tables 7 and 8.

## Patient's principal reason for visit

Item 10 of the Patient Record form asks the physician to record the patient's (or patient surrogate's) "complaint(s), symptom(s), or other reason(s) for this visit in the patient's own words." Up to three reasons for visit are classified and coded from the survey according to A Reason for Visit Classification for Ambulatory Care (RVC) (7). The principal reason for visit is the problem, complaint, or reason listed in item 10a.

The RVC is divided into the eight modules or groups of reasons displayed in table 9. More than half of all visits were made for reasons classified as symptoms (56.2 percent). Respiratory symptoms accounted for 11.3 percent of all visits, and musculoskeletal symptoms accounted for 10.7 percent.

The 20 most frequently mentioned principal reasons for visit, representing 43.7 percent of all visits, are shown in table 10. General medical examination was the most frequently mentioned reason for visit (5.8 percent of the total), while cough was the most frequently mentioned reason having to do with illness or injury (3.5 percent). All of the top 20 reasons for office visits in 1994 were also listed among the 20 most frequently mentioned reasons in 1993, albeit in slightly different order. Depression, cited as the principal reason for 8.8 million office visits or 1.3 percent of the total in 1993, accounted for 13.2 million visits or 1.9 percent of the total in 1994, a

<sup>&</sup>lt;sup>1</sup>Based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1,

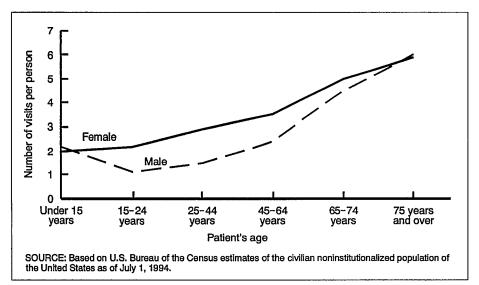


Figure 2. Annual rate of visits to office-based physicians by patient's age and sex: United States, 1994

Table 3. Number and percent distribution of office visits by referral status, according to prior-visit status: United States, 1994

	Prior-visit status					
Referral status	All visits	New patient	Old patient, new problem	Old patient, old problem		
	Number of visits in thousands					
All visits	681,457	112,158	141,655	427,644		
Referred for this visit	96,200	35,937	7,989	52,275		
Not referred for this visit	585,258	76,221	133,666	375,370		
		Perce	ent distribution			
All visits	100.0	100.0	100.0	100.0		
Referred for this visit	14.1	32.0	5.6	12.2		
Not referred for this visit	85.9	68.0	94.4	87.8		

Table 4. Number and percent distribution of office visits by referral status and prior-visit status, according to physician specialty: United States, 1994

		•	Refe	rred for th	is visit	Not re	ferred for	this visit
Physician specialty	Number of visits in thousands	Total	New patient	Old patient, new problem	Old patient, old problem	New patient	Old patient, new problem	Old patient, old problem
				Per	rcent distri	bution		
All visits	681,457	100.0	5.3	1.2	7.7	11.2	19.6	55.1
General and family practice	154,082	100.0	0.8	0.8	1.0	14.1	32.6	50.7
Internal medicine	99,731	100.0	1.8	1.2	4.6	8.8	24.5	59.1
Pediatrics	87,465	100.0	0.9	0.4	1.7	9.1	36.6	51.4
Obstetrics and gynecology	62,540	100.0	4.0	1.5	6.3	10.9	13.7	63.6
Orthopedic surgery	42,750	100.0	12.9	3.1	17.4	12.2	5.2	49.2
Ophthalmology	41,659	100.0	4.7	*0.5	8.1	10.2	7.1	69.3
Dermatology	26,197	100.0	10.6	1.7	10.3	18.8	10.6	48.0
Psychiatry	24,973	100.0	3.3	*0.2	14.0	10.0	1.1	71.5
General surgery	22,315	100.0	13.9	3.3	18.7	11.7	11.1	41.4
Otolaryngology	17,502	100.0	17.6	1.8	19.3	13.9	5.9	41.6
Cardiovascular diseases	14,981	100.0	7.6	*1.0	18.2	5.0	6.7	61.5
Urology	13,122	100.0	17.4	1.0	24.6	7.5	2.3	47.2
Neurology	7,252	100.0	27.7	1.5	22.7	7.9	2.0	38.2
All other specialties	66,890	100.0	10.3	1.2	12.8	10.1	7.9	57.7

<sup>\*</sup> Figure does not meet standard of reliability or precision. NOTE: Numbers may not add to totals because of rounding

significantly higher proportion. It should be noted that estimates that differ in ranked order may not be significantly different from each other.

# Tests, procedures, and therapies

Statistics on tests, procedures, and therapies scheduled or performed by the physician during the office visit are displayed in tables 11-13. The 1994 NAMCS Patient Record form (identical to the 1993 form) combined tests, surgical and nonsurgical procedures, and (nonmedication) therapies into a single item, with six checkboxes for selected services and space to record up to eight additional services. Results of the open-ended part of the item were coded according to the International Classification of Diseases, 9th Revision, Clinical Modification, Volume 3, Procedures Classification (ICD-9-CM) (8). It was hoped that allowing physicians to record services in this way would result in greater specificity of responses, thereby clarifying the large number of services generally recorded in the "other" checkbox category in previous versions of the survey. Data are shown separately for the checkbox items (part a of item 14) and the open-ended response categories (part b) in keeping with the format used on the Patient Record form.

Less than three-quarters (71.3 percent) of all office visits included one or more tests, procedures, or therapies (excluding counseling/education and medication therapy which are collected in separate data items) (table 11). Blood pressure check was the most frequently mentioned checkbox category, recorded at 47.7 percent of visits. Blood pressure checks were ordered or provided at a significantly higher proportion of visits by females (52.0 percent) than at visits by males (41.1 percent).

Other frequently mentioned services were "other" blood test (16.0 percent of visits) and urinalysis (13.1 percent). HIV serology was ordered or provided at 0.2 percent of office visits.

The top 25 diagnostic and therapeutic services (other than those reported in the checkbox categories on the Patient Record form) are shown in

Table 5. Number and percent of office visits by patient's expected source(s) of payment: United States, 1994

Expected source(s) of payment	Number of visits in thousands <sup>1</sup>	Percent of all visits
All visits	681,457	•••
Private/commercial insurance	265,972	39.0
Medicare	148,827	21.8
HMO/other prepaid <sup>2</sup>	146,243	21.5
Patient paid	84,162	12.4
Medicaid	66,686	9.8
Other government	14,267	2.1
No charge	8,048	1.2
Other	25,123	3.7
Unknown	12,197	1.8

<sup>...</sup> Category not applicable.

Table 6. Number, percent distribution, and annual rate of injury-related visits by patient's age, sex, and race: United States, 1994

Patient's age, sex, and race	Number of visits in thousands	Percent distribution	Number of visits per 100 persons per year
All injury-related visits	84,632	100.0	32.6
Age			
Jnder 15 years	12,126	14.3	20.5
15–24 years	9,996	11.8	27.6
5-44 years	30,773	36.4	37.1
5-64 years	18,970	22.4	37.6
5-74 years	6,756	8.0	37.0
5 years and over	6,010	7.1	47.1
Sex and age			
Female	41,261	48.8	31.0
Under 15 years	5,677	6.7	19.7
15-24 years	4,145	4.9	23.0
25-44 years	13,570	16.0	32.3
45-64 years	9,828	11.6	37.7
65-74 years	4,027	4.8	39.7
75 years and over	4,014	4.7	50.5
Male	43,371	51.2	34.3
Under 15 years	6,449	7.6	21.3
15-24 years	5,851	6.9	32.2
25-44 years	17,204	20.3	42.1
45-64 years	9,142	10.8	37.6
65-74 years	2,730	3.2	33.6
75 years and over	1,996	2.4	41.4
Race			
White	75,286	89.0	35.1
3lack	6,716	7.9	20.3
Asian, Pacific Islander	2,164	2.6	
American Indian, Eskimo, Aleut	*467	*0.6	* * *

<sup>---</sup> Data not available.

table 12. Eye exam, Pap smear, electrocardiogram, and routine chest x ray were among the most frequently mentioned procedures. Table 13 presents

data on additional procedures that, while not among the top 25, were also of interest.

# Physician's principal diagnosis

Item 11 of the Patient Record form asks the physician to record the principal diagnosis or problem associated with the patient's most important reason for the current visit as well as any other significant current diagnoses. Up to three diagnoses are coded and classified according to the ICD-9-CM (8). Displayed in table 14 are office visits by principal diagnosis using the major disease categories specified by the ICD-9-CM. The supplementary classification, used for diagnoses not classifiable to injury or illness (for example, general medical examination, routine prenatal examination, and health supervision of an infant or child), accounted for 16.5 percent of all office visits. Diseases of the respiratory system (13.7 percent) and diseases of the nervous system and sense organs (10.5 percent) were also prominent on the list.

The 20 most frequently reported principal diagnoses for 1994 are featured in table 15. These are categorized at the three-digit coding level of the ICD-9-CM, and accounted for 37.4 percent of all office visits made during the year. The most frequent diagnosis rendered by physicians at office visits in 1994 was essential hypertension, occurring at 3.7 percent of all visits. Essential hypertension has been the most frequently reported morbidity-related diagnosis in every survey year since the NAMCS began in 1973. (Morbidity-related diagnoses are those classifiable to illness or injury. Nonmorbidity-related diagnoses include routine prenatal examination, health supervision of an infant or child, and general medical examination, among others.) Of the 20 diagnoses shown in table 16, 19 also appeared on the list of the 20 most frequent diagnoses for 1993.

# Physician's checklist of medical conditions

In addition to the diagnostic data reported in item 11 of the Patient Record form, selected information on the patient's current health status was collected in item 13. Physicians were given a list of common conditions and

<sup>&</sup>lt;sup>1</sup>Numbers do not add to total because more than one expected source may be reported per visit.

<sup>&</sup>lt;sup>2</sup>HMO is health maintenance organization.

<sup>\*</sup> Figure does not meet standard of reliability or precision.

<sup>&</sup>lt;sup>1</sup>Based on U.S. Bureau of the Census estimates of the civilian noninstitutionalized population of the United States as of July 1, 1994.

Table 7. Number and percent distribution of office visits by patient's cigarette-smoking status, according to patient's age, sex, and race: United States, 1994

			Cigarette-smoking statuş				
Patient's age, sex, and race	Total	Smokers	Nonsmokers	Unknown <sup>1</sup>	Unspecified		
			Number of visits in thous	ands			
All visits	681,457	65,406	430,269	161,093	24,688		
Age							
Under 15 years	124,421	*268	119,034	4,574	*545		
15–24 years	60,722	6,458	36,441	15,669	2,154		
25–44 years	184,143	27,377	96,398	52,557	7,810		
15–64 years	149,038	20,983	79,402	41,686	6,967		
55-74 years	87,461	7,024	51,083	25,777	3,577		
75 years and over	75,674	3,296	47,912	20,830	3,636		
Sex							
Female	408,049	37,465	260,167	94,416	16,001		
Male	273,409	27,942	170,103	66,677	8,687		
Race							
White	597,091	57,993	376,151	142,382	20,565		
Black	57,723	5,675	34,905	14,047	3,097		
Asian, Pacific Islander	24,965	1,471	18,306	4,297	891		
American Indian, Eskimo, Aleut	1,678	*267	908	*367	*135		
			Percent distribution				
All visits	100.0	9.6	63.1	23.6	3.6		
Age							
Jnder 15 years	100.0	*0.2	95.7	3.7	*0.4		
15–24 years	100.0	10.6	60.0	25.8	3.5		
25–44 years	100.0	14.9	52.3	28.5	4.2		
45–64 years	100.0	14.1	53.3	28.0	4.7		
55–74 years	100.0	8.0	58.4	29.5	4.1		
75 years and over	100.0	4.4	63.3	27.5	4.8		
Sex							
Female	100.0	9.2	63.8	23.1	3.9		
Male	100.0	10.2	62.2	24.4	3.2		
Race							
White	100.0	9.7	63.0	23.8	3.4		
Black	100.0	9.8	60.5	24.3	5.4		
Asian, Pacific Islander	100.0	5.9	73.3	17.2	3.6		
American Indian, Eskimo, Aleut	100.0	*15.9	54.1	*21.9	*8.1		

<sup>\*</sup> Figure does not meet standard of reliability or precision.

asked to record whether the patient now has any of them, regardless of what was recorded as the current diagnosis in item 11. Results from item 13 are shown in table 16.

# Medication therapy

In item 16, physicians were instructed to record all new or continued medications ordered, supplied, or administered at the visit, including prescription and nonprescription preparations, immunization and desensitizing agents, and anesthetics. As used in the NAMCS, the term "drug" is

interchangeable with the term "medication," and the term "prescribing" is used broadly to mean ordering or providing any medication, whether prescription or over-the-counter. Visits with one or more drug mentions are termed "drug visits" in the NAMCS. Up to five medications, or drug mentions, were coded per drug visit.

The NAMCS drug data base permits classification by a wide range of variables. These include specific product name, generic class, entry form chosen by the physician (that is, brand name, generic name, or the desired therapeutic effect), prescription status (that is, whether the product is prescription or nonprescription), federally controlled substance status, composition status (that is, single or multiple ingredient product), and therapeutic category. A report describing the method and instruments used to collect and process drug information for the NAMCS is available (9).

Data on medication therapy are shown in tables 17–21. Medication therapy was the most commonly mentioned therapeutic service in 1994, reported at 444.0 million office visits or 65.2 percent of the total (table 17).

<sup>&</sup>lt;sup>1</sup>Indicates records where "unknown" was checked on the Patient Record form.

<sup>&</sup>lt;sup>2</sup>Indicates records where the response was missing or could not otherwise be determined.

Table 8. Number and percent distribution of office visits by patient's cigarette-smoking status, according to physician specialty: United States, 1994

	Number of		I	Does patient smo	ke cigarettes?	
Physician specialty	visits in thousands	Total	Yes	No	Unknown <sup>1</sup>	Unspecified <sup>2</sup>
		Percent distribution				
All visits	681,457	100.0	9.6	63.1	23.6	3.6
General and family practice	154,082	100.0	12.1	60.3	23.3	4.3
nternal medicine	99,731	100.0	12.5	64.3	18.6	4.6
Pediatrics	87,465	100.0	*0.3	94.8	4.5	*0.4
Obstetrics and gynecology	62,540	100.0	12.3	66.9	17.6	3.2
Orthopedic surgery	42,750	100.0	8.9	38.8	48.0	4.3
Ophthalmology	41,659	100.0	4.7	48.5	44.8	2.0
Dermatology	26,197	100.0	5.4	47.7	45.9	*1.0
Psychiatry	24,973	100.0	19.1	54.5	18.1	8.4
General surgery	22,315	100.0	11.7	47.1	36.7	4.5
Otolaryngology	17,502	100.0	8.7	71.2	17.5	*2.6
Cardiovascular diseases	14,981	100.0	10.3	63.7	22.1	*3.9
Jrology	13,122	100.0	8.8	51.6	34.3	5.3
leurology	7,252	100.0	11.6	62.2	19.1	*7.1
All other specialties	66,890	100.0	10.1	62.5	23.1	4.3

<sup>\*</sup> Figure does not meet standard of reliability or precision.

Table 9. Number and percent distribution of office visits by patient's principal reason for visit: United States, 1994

Principal reason for visit and RVC code <sup>1</sup>	Number of visits in thousands	Percent distribution
All visits	681,457	100.0
Symptom module	382,913	56.2
General symptoms	42,587	6.2
Symptoms referable to psychological/mental disorders	25,958	3.8
Symptoms referable to the nervous system (excluding sense organs) S200-S259	20,148	3.0
Symptoms referable to the cardiovascular/lymphatic system S260–S299	4,401	0.6
Symptoms referable to the eyes and ears	43,477	6.4
Symptoms referable to the respiratory system	77,105	11.3
Symptoms referable to the digestive system	30,206	4.4
Symptoms referable to the genitourinary system	26,867	3.9
Symptoms referable to the skin, hair, and nails	39,390	5.8
Symptoms referable to the musculoskeletal system	72,775	10.7
Disease module	67,773	9.9
Diagnostic/screening and preventive module	108,855	16.0
reatment module	75,821	11.1
njuries and adverse effects module	19,881	2.9
est results module	7,523	1.1
Administrative module	6,614	1.0
Other <sup>2</sup>	12,077	1.8

<sup>&</sup>lt;sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC) (7).

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

<sup>&</sup>lt;sup>1</sup>Indicates records where "unknown" was checked on the Patient Record form.

<sup>&</sup>lt;sup>2</sup>Indicates records where the response was missing or could not otherwise be determined.

<sup>&</sup>lt;sup>2</sup>Includes problems and complaints not elsewhere classified, entries of "none," blanks, and illegible entries.

Table 10. Number and percent distribution of office visits by the 20 principal reasons for visit most frequently mentioned by patients, according to patient's sex: United States, 1994

	Number of		Patient	's sex
Principal reason for visit and RVC code <sup>1</sup>	visits in thousands	Total	Female	Male
			Percent distribution	
ull visits	681,457	100.0	100.0	100.0
General medical examination	39,789	5.8	6.3	5.1
Progress visit, not otherwise specified	29,109	4.3	4.1	4.6
Cough	23,936	3.5	3.2	4.0
Routine prenatal examination	22,136	3.2	5.4	
Postoperative visit	19,136	2.8	2.8	2.8
Symptoms referable to throat	16,446	2.4	2.4	2.5
Vell-baby examination	13,204	1.9	1.5	2.6
Depression	13,180	1.9	2.2	1.6
arache or ear infection	12,204	1.8	1.6	2.1
tomach pain, cramps, and spasms	11,632	1.7	2.0	1.3
fision dysfunctions	11,575	1.7	1.7	1.7
Skin rash	11,504	1.7	1.6	1.8
Back symptoms	10,711	1.6	1.4	1.9
(nee symptoms	10,151	1.5	1.4	1.7
ever	9,518	1.4	1.2	1.7
lasal congestionS400	9,392	1.4	1.2	1.7
leadache, pain in head	9,235	1.4	1.6	1.0
lypertension	8,857	1.3	1.1	1.6
thest pain and related symptoms	8,112	1.2	1.0	1.5
lead cold, upper respiratory infection (coryza)S445	7,932	1.2	1.2	1.2
All other reasons	383,699	56.3	55.1	57.6

<sup>...</sup> Category not applicable.

Table 11. Number and percent distribution of office visits by number of tests, surgical and nonsurgical procedures, and therapies ordered or provided, according to patient's sex, and percent of visits by selected services ordered or provided and patient's sex: United States, 1994

	Number of		Patient's sex	
Visit characteristic	visits in thousands	Total	Female	Male
			Percent distribution	
All visits	681,457	100.0	100.0	100.0
Number of services ordered or provided <sup>1</sup>				
0	195,746	28.7	25.8	33.1
1	239,294	35.1	34.4	36.2
2	141,045	20.7	21.9	19.0
3	64,585	9.5	10.9	7.4
h	25,578	3.8	4.4	2.7
5	10,244	1.5	1.8	1.1
3 or more	4,966	0.7	0.9	0.4
Selected services <sup>2</sup>			Percent of visits	
Blood pressure	324,778	47.7	52.0	41.1
Jrinalysis	89,065	13.1	15.7	9.2
Spirometry	5,538	0.8	0.7	1.0
Allergy testing	2,150	0.3	0.3	0.3
HIV serology <sup>3</sup>	1,455	0.2	0.3	*0.1
Other blood test	108,890	16.0	16.2	15.7
None of the above	318,562	46.7	43.1	52.1

<sup>\*</sup> Figure does not meet standard of reliability or precision.

<sup>&</sup>lt;sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC) (7).

<sup>&</sup>lt;sup>1</sup>Includes the six checkbox categories for selected services and up to eight other services recorded by the physician in the spaces provided on the Patient Record form. These include tests, imagings, surgeries and other procedures, and therapies with the exception of education/counseling and medication. Numbers of services may not add to total because of rounding.

Numbers of selected services do not add to total because more than one service may be reported per visit.

<sup>&</sup>lt;sup>3</sup>HIV is human immunodeficiency virus.

Table 12. Number and percent of office visits by the 25 write-in diagnostic and therapeutic procedures most often ordered or performed: United States, 1994

Diagnostic and therapeutic procedures ordered or performed and ICD-9-CM code <sup>1</sup>	Number of visits in thousands	Percent of all visits
All visits	681,457	
Eye examination, not otherwise specified 95.09	22,494	3.3
Pap smear	22,199	3.3
Other nonoperative measurements and examinations 89.39	20,318	3.0
Electrocardiogram	16,682	2.4
Routine chest x ray	14,707	2.2
Other local excision or destruction of lesion or tissue of skin and		
subcutaneous tissue	14,130	2.1
Other mammography	10,369	1.5
Other individual psychotherapy	10,291	1.5
Microscopic examination of specimen from ear, nose, throat, and		
larynx—culture	10,158	1.5
Gynecological examination89.26	9,355	1.4
Tonometry	7,627	1.1
Other physicial therapy	6,896	1.0
Audiometry	4,486	0.7
Limited eye examination	4,034	0.6
Microscopic examination of specimen from unspecified site—		
other	3,779	0.6
Removal of other therapeutic device	3,674	0.5
X ray, other and unspecified	3,658	0.5
Fundus photography	3,554	0.5
Other diagnostic ultrasound	3,506	0.5
Skeletal x ray of thigh, knee, and lower leg 88.27	3,345	0.5
Manual examination of breast	3,317	0.5
Skeletal x ray of wrist and hand	3,314	0.5
Skeletal x ray of ankle and foot	3,218	0.5
Diagnostic ultrasound of gravid uterus	3,047	0.4
Microscopic examination of specimen from female genital tract—culture	2,829	0.4

<sup>..</sup> Category not applicable.

Table 13. Number and percent of office visits by selected diagnostic and therapeutic procedures: United States, 1994

Selected procedures and ICD-9-CM code <sup>1</sup>	Number of visits in thousands	Percen of all visits
All visits	681,457	
Ophthalmoscopy	2,291	0.3
Other endoscopy of small intestine	939	0.1
Colonoscopy	1,576	0.2
Flexible sigmoidoscopy	1,957	0.3
Other cystoscopy	1,492	0.2
Closed biopsy of uterus	*519	*0.1
Vaginoscopy	1,418	0.2
Injection of therapeutic substance into joint or ligament 81.92	2,329	0.3
Other incision with drainage of skin and subcutaneous tissue 86.04	1,209	0.2
Biopsy of skin and subcutaneous tissue	2,443	0.4
Application of other cast	1,816	0.3
Application of splint	2,281	0.3
Irrigation of ear	2,066	0.3

<sup>...</sup> Category not applicable

There were 857.0 million drug mentions at visits to office-based physicians during 1994. This yields an average of 1.3 drug mentions per office visit, or 1.9 drug mentions per drug visit.

Data on number of drug visits and drug mentions by physician specialty are shown in table 18. Three-quarters or more of the visits to general and family practitioners, internists, pediatricians, and cardiologists included at least one drug mention. In contrast, about one-third of the visits to orthopedic surgeons and general surgeons did so.

Drug mentions are displayed by therapeutic class in table 19. This classification is based on the therapeutic categories used in the *National Drug Code Directory*, 1985 edition (NDC) (10). It should be noted that some drugs have more than one therapeutic application. In these cases, the drug was listed under the NDC classification that occurred with the greatest frequency. Cardiovascular-renal drugs (14.9 percent), antimicrobial agents (13.2 percent), and drugs used for pain relief (10.5 percent) were listed most frequently.

The 20 most frequently used generic substances for 1994 are shown in table 20. Drug products containing more than one ingredient (combination products) are included in the data for each ingredient. For example, acetaminophen with codeine is included in both the count for acetaminophen and the count for codeine. Amoxicillin was the generic ingredient most frequently used in drugs ordered or provided by the physician at office visits in 1994 (as well as in 1990–93), occurring in 4.1 percent of drug mentions.

Table 21 presents the 20 medications most frequently mentioned by physicians in the NAMCS, according to the entry name of the drug. Entry name refers to the actual designation used by the physician on the Patient Record form and may be a trade name, generic name, or simply a desired therapeutic effect. Amoxicillin was the medication most frequently reported by physicians, with 18.2 million mentions (2.1 percent of the total). It was

<sup>&</sup>lt;sup>1</sup>Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (8).

<sup>\*</sup> Figure does not meet standard of reliability or precision.

<sup>&</sup>lt;sup>1</sup>Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (8).

Table 14. Number and percent distribution of office visits by physician's principal diagnosis: United States, 1994

Principal diagnosis and ICD-9-CM code <sup>1</sup>	Number of visits in thousands	Percent distribution
All visits	681,457	100.0
Infectious and parasitic diseases	20,135	3.0
Neoplasms	24,121	3.5
Endocrine, nutritional and metabolic diseases, and immunity disorders 240-279	23,719	3.5
Mental disorders	36,886	5.4
Diseases of the nervous system and sense organs	71,581	10.5
Diseases of the circulatory system	54,070	7.9
Diseases of the respiratory system	93,491	13.7
Diseases of the digestive system	26,745	3.9
Diseases of the genitourinary system	37,188	5.5
Diseases of the skin and subcutaneous tissue	37,979	5.6
Diseases of the musculoskeletal system and connective tissue 710-739	47,439	7.0
Symptoms, signs, and ill-defined conditions 780–799	29,653	4.4
Injury and poisoning	47,705	7.0
Supplementary classification	112,416	16.5
All other diagnoses <sup>2</sup>	7,625	1.1
Unknown <sup>3</sup>	10,706	1.6

<sup>&</sup>lt;sup>1</sup>Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (8).

Table 15. Number and percent distribution of office visits by the 20 principal diagnoses most frequently rendered by physicians, according to patient's sex: United States, 1994

	Number of	F	Patient's se	x
Principal diagnosis and ICD-9-CM code <sup>1</sup>	visits in thousands	Total	Female	Male
		Percent distrib  100.0 100.0  3.7 3.6  3.4 5.6  3.2 3.4  2.6 2.0  2.5 2.4  2.3 1.9  1.9 1.9  1.8 1.7  1.6 1.3  1.5 1.5  1.5 1.5	ttion	
All visits	681,457	100.0	100.0	100.0
Essential hypertension	25,521	3.7	3.6	4.0
Normal pregnancy	22,965	3.4	5.6	
General medical examination	21,719	3.2	3.4	2.8
Health supervision of infant or child	17,503	2.6	2.0	3.4
Acute upper respiratory infections of multiple or unspecified				
sites	17,100	2.5	2.4	2.7
Suppurative and unspecified otitis media	15,968	2.3	1.9	3.0
Chronic sinusitis	12,819	1.9	1.9	1.8
Diabetes mellitus	12,027	1.8	1.7	1.9
Asthma	10,757	1.6	1.3	2.0
Bronchitis, not specified as acute or chronic	10,417	1.5	1.5	1.6
Acute pharyngitis	10,016	1.5	1.5	1.5
Neurotic disorders	9,891	1.5	1.6	1.3
Affective psychoses	9,659	1.4	1.6	1.2
Other postsurgical states	9,300	1.4	1.3	1.4
Allergic rhinitis	9,289	1.4	1.3	1.5
Cataract	8,260	1.2	1.2	1.2
Special investigations and examinations	8,000	1.2	1.6	0.
Diseases of sebaceous glands	7,920	1.2	1.2	1.3
Glaucoma	7,657	1.1	1.1	1.2
Contact dermatitis and other eczema 692	6,573	1.0	0.9	1.
All other diagnoses	428,098	62.6	61.4	64.7

<sup>..</sup> Category not applicable.

followed by Amoxil, Lasix, allergy relief or shots, and Prednisone. All of these were among the top 10 drug entry names mentioned in 1993.

# Counseling and education

Data on counseling and education services ordered or provided at physicians' office visits were collected in item 15 of the Patient Record form. As shown in table 22, counseling and education services were recorded at half (50.2 percent) of all office visits during 1994. Exercise (9.0 percent), weight reduction (5.3 percent), and growth/development (4.8 percent) were mentioned most frequently. More than one-third of visits (35.2 percent) included "other" counseling not included in one of the eight checkbox categories.

The counseling and education categories of injury prevention, HIV transmission, and other STD transmission were first added to the 1993 Patient Record form. Such services were ordered or provided at 3.7 percent, 0.4 percent, and 0.8 percent of visits, respectively.

# Disposition of visit

Two-thirds of office visits (66.9 percent) included a scheduled followup visit or telephone call in 1994. More than one-fifth (22.7 percent) of office visits included instructions to return if needed. About 1 percent of visits resulted in a hospital admission. Table 23 displays data on disposition of office visits.

### **Duration of visit**

Data on the duration of office visits is presented in table 24. Duration of visit refers to the amount of time spent in face-to-face contact between the physician and the patient. This time is estimated and recorded by the physician and does not include time spent waiting to see the physician, time spent receiving care from someone other than the physician without the presence of the physician, or time spent by the physician in reviewing patient records and/or test results. In cases where the patient received care from a member of the physician's staff, but did not actually see the physician during the visit, duration was recorded as "0" minutes.

More than half (61.8 percent) of physicians' office visits had durations of 15 minutes or less in 1994, while more than one-third (38.3 percent) lasted over

<sup>&</sup>lt;sup>2</sup>Includes diseases of the blood and blood-forming organs (280–289); complications of pregnancy, childbirth, and the puerperium (630–676); congenital anomalies (740–759); and certain conditions originating in the perinatal period (760–779).

<sup>3</sup>Includes blank diagnoses, uncodable diagnoses, and Illegible diagnoses.

<sup>&</sup>lt;sup>1</sup>Based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (8). NOTE: Numbers may not add to totals because of rounding.

Table 16. Number and percent of office visits by selected medical conditions, and patient's age and sex: United States, 1994

				Patient	's age			Patier	t's sex
	All ages, both sexes	Under 15 years	15–24 years	25-44 years	45–64 years	65–74 years	75 years and over	Female	Male
				Number o	of visits in thous	sands <sup>1</sup>			
All visits	681,457	124,421	60,722	184,143	149,038	87,461	75,674	408,049	273,409
Obesity	51,938	1,455	3,254	14,659	18,464	8,671	5,435	37,418	14,520
Diabetes	39,118	*520	*607	4,654	14,065	11,129	8,141	21,940	17,178
Asthma	31,998	8,107	3,414	6,662	6,929	3,762	3,123	18,112	13,886
Osteoporosis	12,265	*241	*125	*302	2,206	3,816	5,575	10,942	1,323
HIV <sup>2</sup>	1,155	*56	_	685	*345	*16	*52	*364	791
None of the above	559,842	114,252	53,493	158,865	112,656	64,223	56,354	330,419	229,423
				P	ercent of visits				
All visits	• • •	•••							
Obesity	7.6	1.2	5.4	8.0	12.4	9.9	7.2	9.2	5.3
Diabetes	5.7	*0.4	*1.0	2.5	9.4	12.7	10.8	5.4	6.3
Asthma	4.7	6.5	5.6	3.6	4.6	4.3	4.1	4.4	5.1
Osteoporosis	1.8	*0.2	*0.2	*0.2	1.5	4.4	7.4	2.7	0.5
HIV <sup>2</sup>	0.2	*0.0	_	0.4	*0.2	*0.0	*0.1	*0.1	0.3
None of the above	82.2	91.8	88.1	86.3	75.6	73.4	74.5	81.0	83.9

<sup>\*</sup> Figure does not meet standard of reliability or precision.

Table 17. Number and percent distribution of office visits by medication therapy and number of medications provided or prescribed, according to patient's sex: United States, 1994

	Number of	Patient's sex		
Visit characteristic	visits in thousands	Total	Female	Male
Medication therapy <sup>1</sup>		Per	Percent distribution	
All visits	681,457	100.0	100.0	100.0
Drug visits <sup>2</sup>	444,002	65.2	65.4	64.8
Visits without mention of medication	237,456	34.8	34.6	35.2
Number of medications provided or prescribed				
All visits	681,457	100.0	100.0	100.0
0	237,456	34.8	34.6	35.2
1	220,202	32.3	32.1	32.7
2	115,498	16.9	17.1	16.7
3	54,720	8.0	8.2	7.7
4	26,261	3.9	4.0	3.7
5 or more	27,321	4.0	4.0	4.0

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

15 minutes. The mean duration time for all visits was 18.6 minutes.

Corresponding numbers for 1993 were 63.5 percent, 36.5 percent, and 18.4 minutes, respectively.

Additional reports utilizing 1994
NAMCS data are forthcoming in the
Advance Data from Vital and Health
Statistics series. Data from the 1994
NAMCS will be available on computer
tape and CD-ROM from the National

Technical Information Service in late 1996. Questions regarding this report, future reports, or the NAMCS may be directed to the Ambulatory Care Statistics Branch by calling (301) 436–7132.

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<sup>-</sup> Quantity zero

<sup>. .</sup> Category not applicable.

<sup>&</sup>lt;sup>1</sup>Numbers may not add to totals because more than one condition may be reported per visit.

<sup>&</sup>lt;sup>2</sup>HIV is human immunodeficiency virus.

<sup>&</sup>lt;sup>2</sup>Visits at which one or more drugs were provided or prescribed by the physician.

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

Table 18. Number and percent distribution of drug visits and drug mentions by physician specialty: United States, 1994

	Drug		Drug n	nentions	
Physician specialty	Number in thousands	Percent distribution	Number in thousands	Percent distribution	Percent of drug visits <sup>2</sup>
All specialties	444,002	100.0	857,007	100.0	65.2
General and family practice	118,392	26.7	223,693	26.1	76.8
Internal medicine	79,424	17.9	187,468	21.9	79.6
Pediatrics	66,215	14.9	107,321	12.5	75.7
Obstetrics and gynecology	29,204	6.6	40,134	4.7	46.7
Ophthalmology	19,147	4.3	35,266	4.1	46.0
Dermatology	18,350	4.1	32,532	3.8	70.0
Psychiatry	18,184	4.1	32,074	3.7	72.8
Orthopedic surgery	13,557	3.1	19,039	2.2	31.7
Cardiovascular diseases	11,687	2.6	37,349	4.4	78.0
Otolaryngology	8,689	2.0	14,349	1.7	49.6
General surgery	6,938	1.6	12,886	1.5	31.1
Urology	6,194	1.4	8,554	1.0	. 47.2
Neurology	4,746	1.1	10,023	1.2	65.4
All other specialties	43,275	9.7	96,319	11.2	64.7

<sup>&</sup>lt;sup>1</sup>Visits at which one or more drugs were provided or prescribed by the physician.

Table 19. Number and percent distribution of drug mentions by therapeutic classification: United States, 1994

Therapeutic classification <sup>1</sup>	Number of drug mentions in thousands	Percent distribution
All drug mentions	857,007	100.0
Cardiovascular-renal drugs	127,741	14.9
Antimicrobial agents	113,040	13.2
Drugs used for relief of pain	90,305	10.5
Respiratory tract drugs	80,925	9.4
Hormones and agents affecting hormonal mechanisms	79,936	9.3
Psychopharmacologic drugs	60,420	7.1
Skin/mucous membrane	49,881	5.8
Immunologic agents	40,385	4.7
Metabolic and nutrient agents	40,241	4.7
Ophthalmic drugs	31,800	3.7
Gastrointestinal agents	30,068	3.5
Neurologic drugs	15,886	1.9
Radiopharmaceutical/contrast media	14,317	1.7
Hematologic agents	13,404	1.6
Other and unclassified <sup>2</sup>	68,659	8.0

<sup>&</sup>lt;sup>1</sup>Based on the standard drug classification used in the *National Drug Code Directory*, 1985 edition (NDC) (10).
<sup>2</sup>Includes anesthetics, antidotes, oncolytics, otologics, antiparasitics, and unclassified/miscellaneous drugs.

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

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<sup>&</sup>lt;sup>2</sup>Number of drug visits divided by number of office visits multiplied by 100.

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

Table 20. The 20 most frequently occurring generic substances in drug mentions at office visits by number of occurrences and percent of all drug mentions: United States, 1994

•	•	•
Generic substance	Number of occurrences in thousands <sup>1</sup>	Percent of all drug mentions <sup>2</sup>
All generic substances	1,001,421	•••
Amoxicillin	34,952	4.1
Acetaminophen	27,877	3.3
Albuterol	14,660	1.7
Aspirin	13,786	1.6
Ibuprofen	13,260	1.5
Hydrochlorothiazide	12,676	1.5
Multivitamins general	11,823	1.4
Furosemide	11,766	1.4
Erythromycin	11,347	1.3
Guaifenesin	11,275	1.3
Estrogens	10,642	1.2
Digoxin	10,033	1.2
Prednisone	9,794	1.1
Beclomethasone	9,536	1.1
Diltiazem	9,466	1.1
Phenylephrine	9,362	1.1
Phenylpropanolamine	9,205	1.1
Triamcinolone	8,764	1.0
Codeine	8,465	1.0
Levothyroxine	8,317	1.0

Category not applicable.

Table 21. Number, percent distribution, and therapeutic classification of the 20 drugs most frequently prescribed at office visits by entry name of drug: United States, 1994

Entry name of drug <sup>1</sup>	Number of drug mentions in thousands	Percent distribution	Therapeutic classification <sup>2</sup>
All drug mentions	857,007	100.0	
Amoxicillin	18,161	2.1	Penicillins
Amoxil	11,435	1.3	Penicillins
.asix	10,538	1.2	Diuretics
Allergy relief or shots	9,982	1.2	Diagnostics, nonradioactive and radiopaque
Prednisone	9,397	1.1	Adrenal corticosteroids
Premarin	9,047	1.1	Estrogens and progestins
「ylenol	8,617	1.0	General analgesics
Zantac	8,107	0.9	Agents used in disorders of upper GI tract
Dardizem	7,947	0.9	Antianginal agents
Synthroid	7,394	0.9	Agents used to treat thyroid disease
Poliomyelitis vaccine	7,179	0.8	Vaccines and antiserums
nfluenza virus vaccine	6,957	0.8	Vaccines and antiserums
/entolin	6,817	0.8	Bronchodilators, antiasthmatics
/asotec	6,528	0.8	Antihypertensive agents
Prenatal formula (vitamins)	6,484	0.8	Vitamins, minerals
.anoxin	6,480	8.0	Cardiac glycosides
Diptheria/Tetanus Toxoids/Pertussis	6,042	0.7	Vaccines and antiserums
Prozac	5,989	0.7	Antidepressants
All other	703,908	82.1	•••

<sup>1</sup> Frequency of mention combines single-ingredient agents with mentions of the agent as an ingredient in a combination drug.

<sup>&</sup>lt;sup>2</sup>Based on an estimated 857,007,000 drug mentions in 1994.

The entry made by the physician on the prescription or other medical records. This may be a trade name, generic name, or desired therapeutic effect.

2 Based on the National Drug Code Directory, 1985 Edition (NDC) (10). In cases where a drug had more than one therapeutic use, it was listed under the NDC category that occurred with the greatest frequency.

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

Table 22. Number and percent of office visits by counseling/education ordered or provided and patient's sex: United States, 1994

	Number of	Patient's sex			
Counseling/education ordered or provided	visits in thousands <sup>1</sup>	Total	Female	Male	
		Percent of visits			
All visits	681,457				
None	339,546	49.8	49.1	50.9	
Exercise	61,004	9.0	8.8	9.2	
Weight reduction	36,291	5.3	5.7	4.8	
Growth/development	32,486	4.8	4.4	5.4	
Injury prevention	25,335	3.7	3.3	4.4	
Cholesterol reduction	21,403	3.1	3.1	3.2	
Smoking cessation	18,811	2.8	2.6	3.0	
STD transmission (except HIV) <sup>2,3</sup>	5,275	0.8	1.0	0.4	
HIV transmission <sup>3</sup>	2,737	0.4	0.5	*0.2	
Other	240,142	35.2	36.4	33.5	

<sup>...</sup> Category not applicable.

Table 23. Number and percent of office visits by disposition of visit: United States, 1994

Disposition	Number of visits in thousands <sup>1</sup>	Percent of all visits
All visits	681,457	
Return at specified time	433,430	63.6
Return if needed	154,609	22.7
No followup planned	56,636	8.3
Telephone followup planned	22,809	3.3
Referred to other physician	29,741	4.4
Admit to hospital	5,123	0.8
Return to referring physician	9,159	1.3
Other	12,409	1.8

<sup>...</sup> Category not applicable.

Table 24. Number and percent distribution of office visits by duration of visit: United States, 1994

Duration	Number of visits in thousands	Percent distribution
All visits	681,457	100.0
O minutes <sup>1</sup>	10,579	1.6
1–5 minutes	36,563	5.4
6-10 minutes	167,260	24.5
11–15 minutes	206,177	30.3
16-30 minutes	202,434	29.7
31 minutes and over	58,446	8.6

<sup>&</sup>lt;sup>1</sup>Visits in which there was no face-to-face contact between patient and physician.

<sup>\*</sup> Figure does not meet standard of reliability or precision.

Numbers do not add to total because more than one type of counseling/education may be reported per visit.

<sup>&</sup>lt;sup>2</sup>STD is sexually transmitted disease.

<sup>&</sup>lt;sup>3</sup>HIV is human immunodeficiency virus.

Numbers do not add to total because more than one disposition may be reported per visit.

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

# **Technical notes**

# Source of data and sample design

The information presented in this report is based on data collected by means of the National Ambulatory Medical Care Survey (NAMCS) from January 3, 1994 through January 1, 1995. The target universe of NAMCS includes office visits made in the United States by ambulatory patients to nonfederally employed physicians who are principally engaged in office practice, but not in the specialties of anesthesiology, pathology, or radiology. Telephone contacts and nonoffice visits are excluded.

A multistage probability sample design is used in NAMCS, involving samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within physician practices. The PSU's are counties, groups of counties, county equivalents (such as parishes or independent cities), or towns and townships (for some PSU's in New England). For 1994, a sample of 3,499 nonfederal, office-based physicians was selected from master files maintained by the American Medical Association and American Osteopathic Association. Physicians were screened at the time of the survey to ensure that they were eligible for survey participation. Of those screened, 1,073 physicians were ruled ineligible (out-of-scope) because they were retired; employed primarily in teaching, research, or administration; or other reasons. The remaining 2,426 physicians were in-scope, or eligible to participate in the survey. The physician response rate for the 1994 NAMCS was 70.2 percent.

Sample physicians were asked to complete Patient Record forms (figure 1) for a systematic random sample of office visits occurring during a randomly assigned 1-week reporting period.

Responding physicians completed 33,598 Patient Record forms.

Characteristics of the physician's practice, such as primary specialty and type of practice, were obtained from the physicians during an induction interview. The U.S. Bureau of the

Census, Housing Surveys Branch, was responsible for the survey's data collection. Processing operations and medical coding were performed by the National Center for Health Statistics, Health Care Survey Section, Research Triangle Park, North Carolina.

# Sampling errors

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

The standard errors used in tests of significance for this report were calculated using generalized linear models for predicting the relative standard error for estimates based on the linear relationship between the actual standard error, as approximated using SUDAAN software, and the size of the estimate. SUDAAN computes standard errors by using a first-order Taylor approximation of the deviation of estimates from their expected values. A description of the software and the approach it uses has been published (11). The relative standard error (RSE) of an estimate is obtained by dividing the standard error by the estimate itself. The result is then expressed as a percent of the estimate.

Relative standard errors for estimated numbers of office visits in 1994 are shown in table I; relative standard errors for estimated numbers of drug mentions are presented in table II. Standard errors for estimated percents of visits and drug mentions are displayed in tables III and IV. Multiplying the estimate by the RSE will provide an estimate of the standard error for the estimate.

Alternatively, relative standard errors for aggregate estimates may be calculated using the following general formula, where x is the aggregate of

Table I. Approximate relative standard errors for estimated numbers of office visits: National Ambulatory Medical Care Survey, 1994

Estimated number of office visits in thousands	Relative standard error in percent
100	74.8
200	53.0
500	33.6
629	30.0
1,000	23.9
2,000	17.0
5,000	11.0
10,000	8.1
20,000	6.2
50,000	4.6
100,000	3.9
200,000	3.6
500,000	3.3
1,000,000	3.2

NOTE: The smallest reliable estimate of visits to aggregated specialties is 629,000 visits. Estimates below this figure have a relative standard error greater than 30 percent and are deemed unreliable by NCHS standards.

Example of use of table: An aggregate estimate of 10 million visits has a relative standard error of 8.1 percent or a standard error of 810,000 visits (8.1 percent of 10 million).

Table II. Approximate relative standard errors for estimated numbers of drug mentions: National Ambulatory Medical Care Survey, 1994

Estimated number of drug mentions in thousands	Relative standard error in percent
100	104.5
200	73.9
500	46.9
1,000	33.3
1,231	30.0
2,000	23.7
5,000	15.4
10,000	11.3
20,000	8.5
50,000	6.3
100,000	5.4
200,000	4.8
500,000	4.5
1,000,000	4.4

NOTE: The smallest reliable estimate of drug mentions for aggregated specialties is 1,231,000 mentions. Estimates below this figure have a relative standard error greater than 30 percent and are deemed unreliable by NCHS standards.

Example of use of table: An aggregate estimate of 200 million drug mentions has a relative standard error of 4.8 percent or a standard error of 9,600,000 mentions (4.8 percent of 200 million).

interest in thousands, and A and B are the appropriate coefficients from table V.

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

Similarly, relative standard errors for percents may be calculated using the following general formula, where p is

Table III. Approximate standard errors of percents of estimated numbers of office visits: National Ambulatory Medical Care Survey, 1994

Base of percent (visits in thousands)	Estimated percent						
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
	Standard error in percentage points					•	
100	7.4	16.3	22.4	29.9	34.3	36.6	37.4
200	5.3	11.5	15.9	21.2	24.2	25.9	26.4
500	3.3	7.3	10.0	13.4	15.3	16.4	16.7
1,000	2.4	5.2	7.1	9.5	10.8	11.6	11.8
2,000	1.7	3.6	5.0	6.7	7.7	8.2	8.4
5,000	1.1	2.3	3.2	4.2	4.9	5.2	5.3
10,000	0.7	1.6	2.2	3.0	3.4	3.7	3.7
20,000	0.5	1.2	1.6	2.1	2.4	2.6	2.7
50,000	0.3	0.7	1.0	1.3	1.5	1.6	1.7
100,000	0.2	0.5	0.7	1.0	1.1	1.2	1.2
200,000	0.2	0.4	0.5	0.7	0.8	8.0	0.8
500,000	0.1	0.2	0.3	0.4	0.5	0.5	0.5
1,000,000	0.1	0.2	0.2	0.3	0.3	0.4	0.4

NOTE: Example of use of table: An estimate of 30 percent based on an aggregate estimate of 10 million visits has a standard error of 3.4 percent or a relative standard error of 11.3 percent (3.4 percent divided by 30 percent).

Table IV. Approximate standard errors of percents of estimated numbers of drug mentions: National Ambulatory Medical Care Survey, 1994

Base of percent (visits in thousands)	Estimated percent						
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	40 or 60	50
	Standard error in percentage points						
100	10.4	22.8	31.3	41.8	47.8	51.1	52.2
200	7.3	16.1	<b>`</b> 22.1	29.5	33.8	36.2	36.9
500	4.6	10.2	14.0	18.7	21.4	22.9	23.3
1,000	3.3	7.2	9.9	13.2	15.1	16.2	16.5
2,000	2.3	5.1	7.0	9.3	10.7	11.4	11.7
5,000	1.5	3.2	4.4	5.9	6.8	7.2	7.4
10,000	1.0	2.3	3.1	4.2	4.8	5.1	5.2
20,000	0.7	1.6	2.2	3.0	3.4	3.6	3.7
50,000	0.5	1.0	1.4	1.9	2.1	2.3	2.3
100,000	0.3	0.7	1.0	1.3	1.5	1.6	1.7
200,000	0.2	0.5	0.7	0.9	1.1	1.1	1.2
500,000	0.2	0.3	.0.4	0.6	0.7	0.7	0.7
1,000,000	0.1	0.2	0.3	0.4	0.5	0.5	0.5

NOTE: Example of use of table: An estimate of 30 percent based on an aggregate estimate of 100 million drug mentions has a standard error of 1.5 percent or a relative standard error of 5.0 percent (1.5 percent divided by 30 percent).

the percent of interest expressed as a proportion, and x is the denominator of the percent in thousands, using the appropriate coefficient from table V.

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

# Adjustments for nonresponse

Estimates from NAMCS data were adjusted to account for sample physicians who were in-scope but did not participate in the study. This adjustment was calculated to minimize the impact of response on final estimates by imputing to nonresponding

physicians, data from visits to similar physicians. For this purpose, physicians were judged similar if they had the same specialty designation and practiced in the same PSU.

# Test of significance and rounding

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. Terms relating to differences such as "greater than" or "less than" indicate that the difference is statistically significant. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant.

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

Table V. Coefficients appropriate for determining approximate relative standard errors by type of estimate and physician specialty: National Ambulatory Medical Care Survey, 1994

	Coefficient for use with estimates in thousands		
Type of estimate and physician specialty	Α	В	
Visits			
Overall totals	0.000990250	55.902031080	
General and family practice	0.006033301	47.379616940	
nternal medicine	0.008029351	43.123258450	
Pediatrics	0.014239630	17.023529120	
General surgery	0.010766200	11.190268690	
Obstetrics and gynecology	0.005010846	23.455725360	
Orthopedic surgery	0.013106420	20.154622700	
Cardiovascular diseases	0.018604320	13.504372690	
Dermatology	0.016549130	10.883340300	
Jrology	0.012278940	7.492645610	
Psychiatry	0.020567170	16.899966430	
leurology	0.025540660	5.467677160	
Ophthalomology	0.010926520	18.161257030	
Otolaryngology	0.017154700	12.009741520	
All other specialties	0.006869801	25.117799020	
Drug mentions			
Overall totals	0.001785164	108.942160000	
General and family practice	0.007814948	62.372749890	
nternal medicine	0.013908530	54.937609560	
Pediatrics	0.017272440	38.426101300	
General surgery	0.040363830	12.827741120	
Obstetrics and gynecology	0.011327130	25.714137950	
Orthopedic surgery	0.030957720	23.291758810	
Cardiovascular diseases	0.028950140	23.572458990	
Dermatology	0.020923260	14.993592000	
Jrology	0.020047040	8.755697670	
Psychiatry	0.038835070	19.399450470	
Neurology	0.043260250	14.859476610	
Ophthalomology	0.036805880	24.405510040	
Otolaryngology	0.024432540	13.823831220	
All other specialties	0.014539390	43.231194640	

NOTE: These coefficients apply to NAMCS data where doctors of osteopathy (D.O.'s) have been aggregated with medical doctors according to their self-designated practice specialty, as is the case in all tables of this report with the exception of the section on professional identity in table 1. For those who wish to conduct a separate analysis on visits to doctors of osteopathy, the A and B coefficients for use with estimates of osteopathy visits in thousands are 0.01151468 and 14.38171026, respectively. To perform analyses of NAMCS data where doctors of osteopathy are not included with medical doctors according to their self-designated practice specialty, please contact the Ambulatory Care Statistics Branch for additions? coefficients.

# **Definition of terms**

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

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

medication. Physicians may report up to five medications per visit.

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

Office—An office is the space identified by a physician as a location for his or her ambulatory practice.
Offices customarily include consultation, examination, or treatment spaces that patients associate with the particular physician.

Physician—A physician is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) who is currently in office-based practice and who spends some time caring for ambulatory patients. Excluded from the NAMCS are physicians who are hospital

based; who specialize in anesthesiology, pathology, or radiology; who are federally employed; who treat only institutionalized patients; or who are employed full time by an institution and spend no time seeing ambulatory patients.

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

#### Trade name disclaimer

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### Suggested citation

Schappert SM. National Ambulatory Medical Care Survey: 1994 summary. Advance data from vital and health statistics; no. 273. Hyattsville, Maryland: National Center for Health Statistics. 1996.

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DHHS Publication No. (PHS) 96-1250 6-0245 (4/96)

POSTAGE & FEES PAID PHS/NCHS PERMIT NO. G-281

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