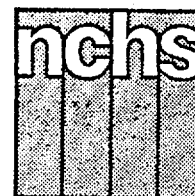


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From Vital and Health Statistics of the National Center for Health Statistics

Office Visits to Cardiovascular Disease Specialists, 1985

by Cheryl Nelson, M.S.P.H., Division of Health Care Statistics

In 1985 an estimated 10.6 million patient visits were made to the offices of physicians specializing in cardiovascular disease. This represented 1.7 percent of all ambulatory visits to all physician specialties. Patients seeking health care services from cardiovascular disease specialists were generally older than patients seeking care from physicians in other specialties. Patients 45 years of age and older represented 87 percent of the ambulatory visits. Patients 65 years of age and older accounted for an estimated 5 million visits and had a visit rate of 186 visits per 1,000 persons (table 1). The mean age of patients visiting cardiovascular disease specialists was 61.7 years (table 2). In other physician specialties, the next highest mean patient age was about 54 years for internal medicine, ophthalmology, and urological surgery.

Table 2. Mean age of visiting patients by physician specialty: United States, 1985

Physician specialty	Mean age of visiting patient
All specialties	39.6
Cardiovascular disease	61.7
Ophthalmology	54.4
Internal medicine	54.3
Urological surgery	54.1
General surgery	48.5
Neurology	45.3
Dermatology	41.0
General and family practice. ¹	40.2
Orthopedic surgery	40.0
Psychiatry	39.1
Otorhinolaryngology	36.5
Obstetrics and gynecology	32.5
Pediatrics	5.9
All other specialties	46.2

This report is based on data from the 1985 National Ambulatory Medical Care Survey (NAMCS). NAMCS, a year-long probability sample survey of the Nation's office-based physicians, was conducted annually from 1973

through 1981 and again in 1985 by the Division of Health Care Statistics of the National Center for Health Statistics. General findings from the 1985 NAMCS have been published (1).

In the office-based setting, visits by white patients outnumbered visits by black patients and by patients of other races in seeking health care services from cardiovascular disease specialists (table 3).

Established patient-physician relationships accounted for 88 percent of the visits, and the majority of those visits (78 percent) were from patients with old problems returning to the physician's office (table 4). In 1975-76, established patient-physician relationships accounted for 75 percent of the visits to cardiovascular disease specialists (2).

Table 1. Number, percent distribution, and rate of office visits to cardiovascular disease specialists, by age of patient: United States, 1985

Age of patient	Number of visits in thousands	Percent distribution	Visit rate per 1,000 persons
All ages	10,617	100.0	45
Under 25 years	*257	2.4	3
25-44 years	1,112	10.5	16
45-64 years	4,232	39.9	96
65 years and over	5,015	47.2	186

¹McLemore T, DeLozier J. 1985 summary: National Ambulatory Medical Care Survey. Advance data from vital and health statistics; no 128. Hyattsville, Maryland: National Center for Health Statistics. 1988.

²Koch H. Office visits to cardiovascular specialists, National Ambulatory Medical Care Survey, United States, 1975-76. Advance data from vital and health statistics; no 42. Hyattsville, Maryland: National Center for Health Statistics. 1988.

Table 3. Number and percent distribution of office visits to cardiovascular disease specialists, by sex and race of patient: United States, 1985

Sex and race of patient	Number of visits in thousands	Percent distribution
All visiting patients	10,617	100.0
Sex		
Female	4,842	45.6
Male	5,775	54.4
Race		
White	10,116	95.3
Black and other	500	4.7

Table 4. Number and percent distribution of office visits to cardiovascular disease specialists, by referral status and prior visit status: United States, 1985

Referral status and prior visit status	Number of visits in thousands	Percent distribution
All statuses	10,617	100.0
Referral status		
Referred by another physician	778	7.3
Not referred by another physician	9,838	92.7
Prior visit status		
New patient	1,239	11.7
Established patient	9,378	88.3
New problem		
Old problem	1,081	10.2
	8,297	78.1
New problem visit	2,320	21.9
Return visit	8,297	78.1

Table 5. Number and percent distribution of office visits to cardiovascular disease specialists, by patient's principal reason for visit module: United States, 1985

Principal reason for visit module and RVC code ¹	Number of visits in thousands	Percent distribution
All principal reasons for visit modules	10,617	100.0
Symptom module		
General symptomsS001-S099	4,430	41.7
General symptomsS001-S099	1,782	16.8
Symptoms referable to the respiratory systemS400-S499	627	5.9
Symptoms referable to the musculoskeletal systemS900-S999	666	6.3
Disease module		
Diseases of the circulatory systemD001-D999	1,904	17.9
Diseases of the circulatory systemD500-D599	1,562	14.7
Diagnostic, screening, and preventive moduleX100-X599	2,314	21.8
Treatment module		
All other modules ^{2,3}T100-T999	1,346	12.7
	623	5.9

¹RVC means "reason for visit classification." Codes are based on Schneider D, Appleton L, McLemore T. A reason for visit classification for ambulatory care. National Center for Health Statistics. Vital Health Stat 2(78). 1979.

²Includes injuries and adverse effects module, test result module, administrative module, and blank and uncodable entries.

³Each module represents fewer than 256,000 visits.

Table 6. Number and percent distribution of office visits to cardiovascular disease specialists, by the most common principal reason for visit: United States, 1985

Most common principal reason for visit and RVC code	Number of visits in thousands	Percent distribution
All principal reasons for visit modules	10,617	100.0
General medical examinationX100	1,501	14.1
Chest pain and related symptomsS050	1,214	11.4
Ischemic heart diseaseD515	707	6.7
HypertensionD510	418	3.9
Other heart diseaseD520	*351	3.3
Abnormal pulsations and palpitationsS260	*349	3.3
Shortness of breathS415	*262	*2.5
Blood pressure testX320	*254	*2.4
Vertigo—dizzinessS225	*229	*2.2
All other reasons	5,331	50.2

¹RVC means "reason for visit classification." Codes are based on Schneider D, Appleton L, McLemore, T. A reason for visit classification for ambulatory care. National Center for Health Statistics. Vital Health Stat 2(78). 1979.

Patient's reason for visiting the physician

A symptom was most often given by patients as the major reason for visiting cardiovascular disease specialists (table 5). The general symptom most often recorded as a reason for visit was chest pain (table 6). However, the most often recorded reason for visit was a general medical examination, accounting for about 14 percent of all reasons for visit. Diseases of the circulatory system, such as ischemic heart disease and hypertension, were also among the most common reasons for visiting the cardiovascular disease specialist.

Physician diagnoses

Cardiovascular disease physicians ordered or provided some type of diagnostic service for the majority of their patients' visits. No diagnostic services were utilized in almost 14 percent of the patient visits (table 7). Except for internal medicine and obstetrics and gynecology, cardiovascular disease specialists used the blood pressure check as a diagnostic tool more often than did physicians in other specialties. In 70 percent of the visits, cardiovascular physicians ordered or provided a blood pressure check. The EKG was another principal diagnostic tool used by cardiovascular disease physicians; in 30 percent of the patient visits, the physicians ordered or provided an EKG. Internists utilized the EKG in 11 percent of their patient visits; they ranked second to cardiovascular disease physicians in EKG utilization.

Sixty-three percent of all visits to cardiovascular disease physicians resulted in diagnoses of diseases of the circulatory system (table 8). Other forms of chronic ischemic heart disease, essential hypertension, cardiac dysrhythmias, angina pectoris, and heart failure represented 48 percent of the most common principal diagnoses made by cardiovascular disease specialists (table 9).

Table 7. Number and percent distribution of office visits to cardiovascular disease specialists, by number and type of diagnostic services ordered or provided: United States, 1985

<i>Number and type of specified diagnostic services ordered or provided</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All diagnostic services	10,617	100.0
Number of specified diagnostic services		
None	1,452	13.7
1	4,185	39.4
2	2,408	22.7
3	1,144	10.8
4	476	4.5
5 or more	951	8.9
Type of diagnostic services		
None	1,452	13.7
Blood pressure check	7,478	70.4
EKG	3,208	30.2
Blood chemistry	1,870	17.6
Hematology	1,412	13.3
Urinalysis	1,110	10.5
Chest x-ray	979	9.2
Other lab test	728	6.9
Breast exam	717	6.7
Other radiology	363	3.4
Other ¹	2,928	27.6

¹Includes pelvic exam, rectal exam, visual acuity, pap test, ultrasound, and other.

Table 8. Number and percent distribution of office visits to cardiovascular disease specialists, by principal diagnosis: United States, 1985

<i>Principal diagnosis and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All diagnoses	10,617	100.0
Endocrine, nutritional, and metabolic diseases and immunity disorders . . . . .	.240-279	*315
Diseases of the circulatory system . . . . .	.390-459	6,700
Diseases of the respiratory system . . . . .	.460-519	543
Diseases of the digestive system . . . . .	.520-579	*268
Diseases of the musculoskeletal system and connective tissue . . . . .	.710-739	547
Symptoms, signs, and ill-defined conditions . . . . .	.780-799	681
Injury and poisoning . . . . .	.800-999	*237
Supplementary classification . . . . .	.V01-V82	605
Other ²		721

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

²Includes infectious and parasitic diseases (001-139); neoplasms (140-239); mental disorders (290-319); diseases of the nervous system and sense organs (320-389); diseases of the genitourinary system (580-629); diseases of the skin and subcutaneous tissue (680-709); diseases of the blood and blood forming organs (280-289); complications of pregnancy, childbirth, and the puerperium (630-676); congenital anomalies (740-759); certain conditions originating in the perinatal period (760-779); and blank, noncodable, and illegible diagnoses.

Table 9. Number and percent distribution of office visits to cardiovascular disease specialists, by the most common principal diagnosis: United States, 1985

<i>Most common principal diagnosis and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent distribution</i>
All diagnoses	10,617	100.0
Other forms of chronic ischemic heart disease . . . . .	.414	2,232
Essential hypertension . . . . .	.401	1,289
Cardiac dysrhythmias . . . . .	.427	638
Angina pectoris . . . . .	.413	576
Heart failure . . . . .	.428	368
Symptoms involving respiratory system and other chest symptoms . . . . .	.786	*320
Other diseases of the endocardium . . . . .	.424	*316
Ill-defined descriptions and complications of heart disease . . . . .	.429	*214
Diabetes mellitus . . . . .	.250	*162
All other diagnoses		4,501

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

Table 10. Number and percent distribution of office visits to cardiovascular disease specialists, by type of visit and number of medications prescribed or ordered: United States, 1985

Type of visit and number of medications	Number of visits in thousands	Percent distribution
All visits	10,617	100.0
No drug visit (0 medications)	2,032	19.1
Drug visit	8,585	80.9
Number of medications		
1	1,543	14.5
2	1,704	16.0
3	1,641	15.5
4	1,543	14.5
5 or more	2,153	20.3

Table 11. Number and percent distribution of the most common drug mentions in the office-based practice of cardiovascular disease specialists, by therapeutic category: United States, 1985

Therapeutic category ¹	Number of drug mentions in thousands	Percent distribution
All drugs	26,812	100.0
Cardiovascular drugs	12,427	46.4
Cardiac drugs	6,196	23.1
Vasodilating drugs	3,699	13.8
Hypotensive drugs	2,466	9.2
Electrolytic, caloric, and water balance agents	4,860	18.1
Diuretics	3,448	12.9
Replacement solutions	1,162	4.3
Central nervous system drugs	3,116	11.6
Analgesics and antipyretics	1,789	6.7
Nonsteroidal anti-inflammatory agents	1,470	5.5
Anxiolytics, sedatives, and hypnotics	873	3.3
Benzodiazepines	*716	2.7
Hormones and synthetic substitutes	1,273	4.8
Antidiabetic agents	*648	2.4
Gastrointestinal drugs	997	3.7
Blood formation and coagulation agents	804	3.0
Anticoagulants	*697	2.6
Other ²	3,335	12.4

¹Based on the American Hospital Formulary Service Classification System Drug Product Information File, The American Druggist Blue Book Data Center, San Bruno, Calif., 1985.

²Includes antihistamine drugs; anti-infective agents; antineoplastic agents; autonomic drugs; antitussive, expectorants, and mucolytic agents; eye, ear, nose, and throat (EENT) preparations; local anesthetics; serums, toxoids, and vaccines; skin and mucous membrane agents; smooth muscle relaxants; vitamins; other and undetermined.

Table 12. Number, percent, and therapeutic use of the 10 drugs most frequently utilized in the office practice of cardiovascular disease specialists, by entry name: United States, 1985

Entry name of drug ¹	Number of mentions in thousands	Percent	Therapeutic use
All	26,812	100.0	
Lanoxin (digoxin)	1,442	5.4	Cardiotonic
Lasix (furosemide)	1,361	5.1	Diuretic
Inderal (propranolol)	1,174	4.4	Cardiotonic
Dyazide (triamterene, hydrochlorothiazide)	966	3.6	Diuretic
Persantine (dipyridamole)	*687	2.6	Vasodilator
Isordil (isosorbide)	*686	2.6	Vasodilator
Coumadin (warfarin)	*683	2.5	Anticoagulant
Digoxin	*674	2.5	Cardiotonic
Nitroglycerin	*643	2.4	Vasodilator
Procardia (nifedipine)	*630	2.4	Cardiotonic

¹The trade or generic name used by the physician on the prescription or other medical records. Trade name drug entries are accompanied by parenthesized generic ingredients.

Medication therapy

The 26 million drugs prescribed or provided by cardiovascular disease physicians account for almost 4 percent of all drugs reported by all specialties. Drugs mentioned in visits to general and family practitioners and internists account for the majority (54 percent) of all reported drugs (3). Medication was prescribed or provided by cardiovascular disease specialists in almost 81 percent of the visits (table 10); that was more often than in any other physician specialty. General and family practitioners and internists, respectively, prescribed or provided drugs in 72 and 77 percent of their visits. Cardiovascular disease physicians prescribed or provided two or more medications in 66 percent of their visits; general and family practitioners and internists prescribed or provided two or more medications in only 33 and 45 percent of their visits, respectively. The average number of drugs prescribed or provided by cardiovascular physicians was 2.5 drugs per visit. When drugs were prescribed or ordered by cardiovascular disease physicians, the average number of drugs per drug visit was 3.1.

Forty-six percent of the drugs reported by cardiovascular disease physicians were classified as cardiovascular drugs—specifically, cardiac drugs, vasodilating drugs, and hypotensive drugs (table 11). The cardiac drug Lanoxin accounted for 5 percent of the drugs reported. Digoxin, the principal generic ingredient of Lanoxin, was mentioned at least 2 percent of the time (table 12). Digoxin, as a generic ingredient, accounted for 7 percent of all drug ingredients (table 13).

Counseling was the principal non-medication therapy utilized by cardiovascular disease specialists (table 14).

³Koch H. Highlights of drug utilization in office practice, National Ambulatory Medical Care Survey, 1985. Advance data from vital and health statistics; no 134. Hyattsville, Maryland: National Center for Health Statistics. 1988.

Table 13. Number and percent of the 10 generic ingredients most frequently utilized in the office practice of cardiovascular disease specialists: United States, 1985

<i>Generic ingredients</i>	<i>Number of mentions in thousands</i>	<i>Percent</i>
All ¹	30,308	100.0
Digoxin	2,138	7.1
Nitroglycerin	1,829	6.0
Hydrochlorothiazide	1,748	5.8
Furosemide	1,361	4.5
Propranolol	1,224	4.0
Potassium replacement solutions	1,085	3.6
Triamterene	1,005	3.3
Aspirin	991	3.3
Isosorbide	971	3.2
Dipyridamole	855	2.8

¹ "There are more generic ingredients listed as used in office practice than entry names of drugs because a trade name drug can have multiple generic ingredients."

Table 14. Number and percent distribution of office visits to cardiovascular disease specialists, by the most common nonmedication therapy ordered or provided: United States, 1985

<i>Nonmedication therapy</i>	<i>Number of visits in thousands</i>	<i>Percent distribution¹</i>
All nonmedication therapies	10,617	100.0
None	8,597	81.0
Diet counseling	601	6.2
Other counseling	1,179	11.1
All other ^{2,3}	508	4.8

¹ May not add to 100.0 percent because more than one nonmedication therapy was possible.

² Includes physical therapy, ambulatory surgery, psychotherapy, family planning, and other.

³ Each element represents fewer than 260,000 visits.

Table 15. Number and percent distribution of office visits to cardiovascular disease specialists, by duration of visit: United States, 1985

<i>Duration</i>	<i>Number of visits in thousands¹</i>	<i>Percent distribution</i>
All durations	10,617	100.0
0 minutes ¹	390	3.7
1-5 minutes	*227	*2.1
6-10 minutes	1,023	9.6
11-15 minutes	3,390	31.9
16-30 minutes	4,431	41.7
31-60 minutes	968	9.1
61 minutes and over	*185	*1.8

¹ Represents office visits in which there was no face-to-face contact between the patient and the physician.

Table 16. Number and percent distribution of office visits to cardiovascular disease specialists, by disposition: United States, 1985

<i>Disposition</i>	<i>Number of visits in thousands</i>	<i>Percent distribution¹</i>
All dispositions	10,617	100.0
No followup planned	533	5.0
Return at specified time	8,501	80.1
Return if needed	729	6.9
Telephone followup planned	381	3.6
Referred to other physician	*328	3.1
Return to referring physician	575	5.4
Admit to hospital	*281	*2.6
Other	*52	*0.5

¹ May not add to 100.0 percent because more than one disposition was possible.

Duration and disposition of visit

The mean duration of all visits to cardiovascular disease specialists was 22 minutes. Seventy-three percent of those visits had a duration of between 11 and 30 minutes (table 15). However, when patient visits are stratified by the patient's prior visit status, the mean duration of visit was 38 minutes for new patients and 20 minutes for established patients.

Some type of "return" disposition was given in 92 percent of visits to cardiovascular disease specialists; eighty percent of visits were given the disposition of "return at a specified time" (table 16).

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 March 1985 through February 1986. The target universe of NAMCS includes office visits made within the coterminous 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. For 1985 a sample of 5,032 non-Federal, office-based physicians was selected from master files maintained by the American Medical Association and the American Osteopathic Association. The physician

response rate for the 1985 NAMCS was 70 percent; the response rate for cardiovascular disease specialists was 51 percent. Sample physicians were asked to complete patient records (see text figure) for a systematic random sample of office visits occurring during a randomly assigned 1-week reporting period. Responding physicians completed 71,594 patient records; 1,506 patient records were from cardiovascular disease specialists. Characteristics of the physician's practice, such as primary specialty and type of practice, were obtained during an

Assurance of Confidentiality—All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by persons engaged in and for the purposes of the survey and will not be disclosed or released to other persons or used for any other purpose.		Department of Health and Human Services Public Health Service National Center for Health Statistics				
1. DATE OF VISIT		PATIENT RECORD				OMB No. 0937-0141 Expires 9/30/88 (PHS) 6105-D 456-232
/ / Month Day Year		NATIONAL AMBULATORY MEDICAL CARE SURVEY				
2. DATE OF BIRTH	3. SEX	4. COLOR OR RACE	5. ETHNICITY	6. EXPECTED SOURCE(S) OF PAYMENT <i>[Check all that apply]</i>	7. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?	
/ / Month Day Year	1 <input type="checkbox"/> FEMALE 2 <input type="checkbox"/> MALE	1 <input type="checkbox"/> WHITE 2 <input type="checkbox"/> BLACK 3 <input type="checkbox"/> ASIAN/PACIFIC ISLANDER 4 <input type="checkbox"/> AMERICAN INDIAN/ALASKAN NATIVE	1 <input type="checkbox"/> HISPANIC ORIGIN 2 <input type="checkbox"/> NOT HISPANIC	1 <input type="checkbox"/> SELF-PAY 4 <input type="checkbox"/> BLUE CROSS/BLUE SHIELD 7 <input type="checkbox"/> NO CHARGE 2 <input type="checkbox"/> MEDICARE 5 <input type="checkbox"/> OTHER COMMERCIAL INSURANCE 8 <input type="checkbox"/> OTHER <i>[Specify]</i> 3 <input type="checkbox"/> MEDICAID 6 <input type="checkbox"/> HMO/PRE-PAID PLAN	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO	
8. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT <i>[In patient's own words]</i>		9. GLUCOSE TESTS THIS VISIT <i>[Check all ordered or provided]</i>		10. OTHER DIAGNOSTIC SERVICES THIS VISIT <i>[Check all ordered or provided]</i>		
a. MOST IMPORTANT _____ b. OTHER _____		1 <input type="checkbox"/> NONE 2 <input type="checkbox"/> BLOOD 3 <input type="checkbox"/> URINE 4 <input type="checkbox"/> ORAL		1 <input type="checkbox"/> NONE 6 <input type="checkbox"/> URINALYSIS 11 <input type="checkbox"/> BLOOD PRESSURE CHECK 2 <input type="checkbox"/> BREAST EXAM 7 <input type="checkbox"/> HEMATOLOGY 12 <input type="checkbox"/> EKG 3 <input type="checkbox"/> PELVIC EXAM 8 <input type="checkbox"/> BLOOD CHEMISTRY 13 <input type="checkbox"/> CHEST X-RAY 4 <input type="checkbox"/> RECTAL EXAM 9 <input type="checkbox"/> PAP TEST 14 <input type="checkbox"/> OTHER RADIOLOGY 5 <input type="checkbox"/> VISUAL ACUITY 10 <input type="checkbox"/> OTHER LAB TEST 15 <input type="checkbox"/> ULTRASOUND 16 <input type="checkbox"/> OTHER SERVICE <i>[Specify]</i> _____		
11. PHYSICIAN'S DIAGNOSES		12. HAVE YOU SEEN PATIENT BEFORE?		13. NON-MEDICATION THERAPY <i>[Check all services ordered or provided this visit]</i>		
a. PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 8a. _____ b. OTHER SIGNIFICANT CURRENT DIAGNOSES _____		1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO IF YES, FOR THE CONDITION IN ITEM 11a? 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO		1 <input type="checkbox"/> NONE 5 <input type="checkbox"/> PSYCHOTHERAPY 9 <input type="checkbox"/> CORRECTIVE LENSES 2 <input type="checkbox"/> PHYSIOTHERAPY 6 <input type="checkbox"/> FAMILY PLANNING 10 <input type="checkbox"/> OTHER <i>[Specify]</i> 3 <input type="checkbox"/> AMBULATORY SURGERY 7 <input type="checkbox"/> DIET COUNSELING 4 <input type="checkbox"/> RADIATION THERAPY 8 <input type="checkbox"/> OTHER COUNSELING		
14. MEDICATION THERAPY <i>[Record all new or continued medications ordered or provided at this visit. Use the same brand name or generic name entered on any Rx or office medical record.]</i> IF NONE, CHECK HERE <input type="checkbox"/>				15. DISPOSITION THIS VISIT <i>[Check all that apply]</i>		16. DURATION OF THIS VISIT <i>[Time actually spent with physician]</i> _____ Minutes
		a. NEW MEDICATION? YES NO		b. FOR DX IN ITEM 11a? YES NO		
1 _____		1 <input type="checkbox"/> 2 <input type="checkbox"/>		1 <input type="checkbox"/> 2 <input type="checkbox"/>		
2 _____		1 <input type="checkbox"/> 2 <input type="checkbox"/>		3 <input type="checkbox"/> RETURN IF NEEDED, PRN.		
3 _____		1 <input type="checkbox"/> 2 <input type="checkbox"/>		4 <input type="checkbox"/> TELEPHONE FOLLOW-UP PLANNED		
4 _____		1 <input type="checkbox"/> 2 <input type="checkbox"/>		5 <input type="checkbox"/> REFERRED TO OTHER PHYSICIAN		
5 _____		1 <input type="checkbox"/> 2 <input type="checkbox"/>		6 <input type="checkbox"/> RETURNED TO REFERRING PHYSICIAN		
				7 <input type="checkbox"/> ADMIT TO HOSPITAL		
				8 <input type="checkbox"/> OTHER <i>[Specify]</i> _____		

Figure. 1985 National Ambulatory Medical Care Survey patient record

induction interview. The National Opinion Research Center, under contract to NCHS, was responsible for the survey's data collection and processing operations.

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 the practice characteristics of similar responding physicians. For this purpose, physicians were judged similar if they had the same specialty designation and practiced in the same PSU.

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 relative standard error 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. These measurements are applied to office visits in tables I and II; in tables III and IV they are applied to drug mentions.

Rounding

In the tables, estimates of office visits have been rounded to the

Table I. Relative standard errors of estimated numbers of office visits to cardiovascular disease specialists: National Ambulatory Medical Care Survey, 1985.

Estimated number of office visits in thousands	Relative standard error in percent
100*	55.0
300*	32.4
353	30.0
500	25.5
1,000	18.8
3,000	12.5
5,000	10.8
10,000	9.4
30,000	8.3

Example of use of table: An aggregate estimate of 4,000,000 visits has a relative standard error of 11.5 percent, or a standard error of 460,000 visits (11.5 percent of 4,000,000).

Table II. Approximate standard errors of percent of estimated numbers of office visits to cardiovascular disease specialists: National Ambulatory Medical Care Survey, 1985

Estimated number of office visits in thousands	Estimated percent					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
	Standard error in percentage points					
200	3.8	8.4	11.6	15.4	17.6	19.3
300	3.1	6.8	9.4	12.6	14.4	15.7
500	2.4	5.3	7.3	9.7	11.2	12.2
1,000	1.7	3.7	5.2	6.9	7.9	8.6
2,000	1.2	2.6	3.6	4.9	5.6	6.1
3,000	1.0	2.2	3.0	4.0	4.6	5.0
5,000	0.8	1.7	2.3	3.1	3.5	3.8
10,000	0.5	1.2	1.6	2.2	2.5	2.7
20,000	0.4	0.8	1.2	1.5	1.8	1.9

Example of use of table: An estimate of 3 percent based on an aggregate estimate of 10,000,000 visits has a standard error of 0.85 percent, or a relative standard error of 28 percent (0.85 percent ÷ 3 percent).

Table III. Relative standard errors of estimated numbers of drug mentions in the office-based practice of cardiovascular disease specialists: National Ambulatory Medical Care Survey, 1985

Estimated number of drug mentions in thousands	Relative standard error in percent
300*	46.0
500*	36.3
768	30.0
800	29.5
1,000	26.8
3,000	17.8
5,000	15.4
8,000	13.9
10,000	13.3
30,000	11.7
50,000	11.2

Example of use of table: An aggregate estimate of 15,000,000 drug mentions has a relative standard error of 12.6 percent, or a standard error of 1,890,000 drug mentions (12.6 percent of 15,000,000).

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 IV. Approximate standard errors of percent of estimated numbers of drug mentions by cardiovascular disease specialists: National Ambulatory Medical Care Survey, 1985

Estimated number of office visits in thousands	Estimated percent					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
	Standard error in percentage points					
500	3.4	7.5	10.4	13.9	15.9	17.3
1,000	2.4	5.3	7.3	9.8	11.2	12.3
2,000	1.7	3.8	5.2	6.9	7.9	8.7
3,000	1.4	3.1	4.2	5.7	6.5	7.1
5,000	1.1	2.4	3.3	4.4	5.0	5.5
10,000	0.8	1.7	2.3	3.1	3.5	3.9
20,000	0.5	1.2	1.6	2.2	2.5	2.7
30,000	0.4	1.0	1.3	1.8	2.0	2.2
50,000	0.3	0.7	1.0	1.4	1.6	1.7

Example of use of table: An estimate of 2 percent based on an aggregate estimate of 30,000,000 drug mentions has a standard error of 0.55 percent, or a relative standard error of 27.5 percent (0.55 percent ÷ 2 percent).

Definition of terms

An ambulatory patient is an individual seeking personal health services and is not currently admitted to any health care institution.

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

An office is a place that physicians identify as a location for their ambulatory practice; these customarily include consultation, examination, or treatment spaces the patients associate with the particular physician. Respon-

sibility for patient care and professional services rendered in an office resides with the individual physician rather than with an institution.

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.

A drug mention is the physician's entry 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 as well as 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.

A drug visit is a visit in which medication was prescribed or provided by the physician.

Symbols

- - - Data not available
- . . . Category not applicable
- Quantity zero
- 0.0 Quantity more than zero but less than 0.05
- Z Quantity more than zero but less than 500 where numbers are rounded to thousands
- * Figure does not meet standards of reliability or precision
- # Figure suppressed to comply with confidentiality requirements

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Public Health Service
Centers for Disease Control
National Center for Health Statistics
3700 East-West Highway
Hyattsville, Maryland 20782

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