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National Ambulatory Medical Care Survey of Visits to General and Family Practitioners, January-December 1975¹

According to data collected in the National Ambulatory Medical Care Survey (NAMCS), an estimated 234,660,000 visits were made to the offices of general and family practitioners (GFP's) during calendar year 1975. These visits accounted for over 41 percent of the estimated 567.6 million visits made to all office-based physicians in 1975.

The NAMCS is a sample survey designed to explore the provision and utilization of ambulatory care in the physician's office—the setting where most Americans seek health care. The survey is conducted yearly over the coterminous United States by the Division of Health Resources Utilization Statistics of the National Center for Health Statistics. The survey sample is selected from doctors of medicine and osteopathy who are engaged in office-based, patient care practice. In its current scope, the NAMCS excludes physicians practicing in Alaska and Hawaii, physicians whose specialty is anesthesiology, pathology, or radiology, and physicians in Government service.

For a listing of publications describing the development of the survey and definitions of terms used in the survey see the Technical Notes. A detailed explanation of the sample design and the relative standard errors associated with selected aggregate statistics may be found in that section.

¹This report was prepared by Beulah K. Cypress, Ph.D., Division of Health Resources Utilization Statistics.

Provisional NAMCS data for calendar year 1974 regarding general and family practitioners have been published.² Caution should be exercised in making comparisons between 1975 estimates and the provisional 1974 estimates previously published. Since the 1974 provisional data were released, refinement of the procedures used to project the national estimates from the sample findings has resulted in a lowering of the final 1974 numerical estimates of office visits by 8 to 9 percent. In particular, the provisional estimate of 263.4 million office visits to general and family practitioners in 1974 was finalized to reflect the more accurate figure of 242.9 million office visits. Final distributions and percents, however, were virtually unchanged. The number of total office visits for all specialties for calendar year 1974, estimated at 634.1 million in the previous publication, has been adjusted to 577.8 million.³

²National Center for Health Statistics: National Ambulatory Medical Care Survey: National Ambulatory Medical Care Survey of Visits to General and Family Physicians, January 1974-December 1974. *Monthly Vital Statistics Report*. Vol. 25-No. 2, Supp. 2. DHEW Pub. No. (HRA) 76-1120. Health Resources Administration. Rockville, Md. May 19, 1976.

³National Center for Health Statistics: Ambulatory medical care rendered in physicians' offices, United States, 1975. *Advance Data From Vital and Health Statistics*, No. 12. DHEW Pub. No. (HRA) 77-1250. Health Resources Administration. Hyattsville, Md. October 12, 1977.

DATA HIGHLIGHTS

A comparison of visits made to office-based physicians in the most-visited specialties reveals that visits to GFP's during 1975—234.7 million—exceeded the total estimated visits to the next four leading specialties combined—198.2 million (table 1).

Table 1. Number and percent of visits to office-based physicians, by the most-visited specialties: United States, January-December 1975

Most-visited specialty	Number of visits in thousands	Percent of visits
GENERAL AND FAMILY PRACTICE-----	234,660	41.3
Internal medicine-----	62,117	10.9
Obstetrics and gynecology-----	48,076	8.5
Pediatrics-----	46,684	8.2
General surgery-----	41,292	7.3

Type and Location of Practice

More visits were made to general and family practitioners electing solo practice—73 percent—than to physicians having group or partnership arrangements—27 percent (table 2). This reflects the fact that about 74 percent of GFP's were engaged in solo practice in 1975.

While visits to the offices of GFP's located within standard metropolitan statistical areas (SMSA's)⁴ outnumbered visits to nonmetropoli-

⁴An SMSA is defined as a group of contiguous counties containing at least one city of 50,000 inhabitants or more, or two contiguous cities with a combined population of at least 50,000 inhabitants. The distinction "metropolitan/nonmetropolitan" should not be confused with "urban/suburban" or "urban/rural" since an SMSA may contain urban, suburban, and rural subsections.

tan-based offices (table 2), there was less disparity between location categories than appeared in other specialties. Table 3 illustrates this difference.

A greater number of visits to metropolitan-based GFP's is reasonable since about 70 percent of the population resides within SMSA's, and approximately 65 percent of physicians in general and family practice are located within SMSA's. However, the annual rate of visits to nonmetropolitan offices of GFP's (146 visits per 100 persons) was more than half again as much as the rate within SMSA's (94 visits per 100 persons)—an indication that the population outside of SMSA's tends to visit GFP's more often than those within SMSA's.

Patient's Age, Sex, and Color

The number of visits to office-based general and family practitioners increased with age, the greatest number occurring in the age interval from 45 to 64 years (table 2). For persons 65 years and over, the rate of annual visits was triple the rate for persons under 15 years of age.

Visits by females outnumbered visits by males by a ratio of about 3 to 2 (table 2). Further, the tendency of females to make more visits to the physician was clearly reflected in their higher rate of annual visits. For every 100 persons, there were 130 visits by females. For males, this rate was 95 visits for 100 persons.

Table 4 shows the influence of sex and age on percent and annual rate of visits. Female visits exceeded male visits in every age category except that under 15 years.

White persons (88.5 percent) outnumbered all other persons (11.5 percent) in office visits to GFP's (table 2). The annual rate of office visits was also higher for white persons than for the rest of the population. These data could indicate that members of other races availed themselves more often of other means of ambulatory medical care since the NAMCS includes only office-based care.

Visits described by the joint classification, white and female, were greater than by any other combination of sex and color as shown in table 5.

Table 2. Number, percent distributions, and number of visits per 100 persons per year to office-based general and family practitioners by type and location of the physician's practice and by age, sex, and color of the patient: United States, January-December 1975

Selected physician and patient characteristics	Number of visits in thousands	Percent distributions of visits	Number of visits per 100 persons per year ¹
All visits-----	234,660	100.0	113
<u>PHYSICIAN CHARACTERISTIC</u>			
<u>Type of practice</u>			
Solo-----	171,010	72.9	---
Other ² -----	63,650	27.1	---
<u>Location³</u>			
Metropolitan-----	136,533	58.2	94
Nonmetropolitan-----	98,127	41.8	146
<u>PATIENT CHARACTERISTIC</u>			
<u>Age</u>			
Under 15 years-----	33,772	14.4	65
15-24 years-----	37,568	16.0	96
25-44 years-----	56,476	24.1	108
45-64 years-----	64,502	27.5	152
65 years and over-----	42,343	18.0	194
<u>Sex</u>			
Female-----	138,904	59.2	130
Male-----	95,756	40.8	95
<u>Color</u>			
White-----	207,660	88.5	115
Other ⁴ -----	27,000	11.5	99

¹Based on population estimates for July 1, 1975, Bureau of the Census, Current Population Reports, Series P-25 and P-26.

²Includes partnership and group practices.

³Signifies location within or outside the standard metropolitan statistical areas (SMSA's).

⁴Of this category, about 81 percent are visits by blacks.

Major Reasons for Visit

The data concerning the most frequent complaints, symptoms, or other reasons for a patient's visit (table 6) were derived from an item on the survey form that elicited the reason

for visit recorded by the physician as nearly as possible in the patient's own words. The broad clinical range of the GFP's practice is demonstrated by the fact that it required 18 reasons to account for only half of all visits.

Table 3. Percent distribution of visits to office-based physicians by location, according to specialty: United States, January-December 1975

Location	General and family practice	Internal medicine	Obstetrics and gynecology	Pediatrics
Percent distribution of visits				
Total---	100.0	100.0	100.0	100.0
Metropolitan----	58.2	84.6	81.9	89.1
Nonmetropolitan--	41.8	15.4	18.1	10.9

Table 4. Percent and annual rate of visits to office-based general and family practitioners, by sex and age of the patient: United States, January-December 1975

Age of patient	Percent of all visits		Annual rate of visits per 100 persons	
	Female	Male	Female	Male
Under 15 years-----	6.5	7.8	60	69
15-24 years-----	9.7	6.3	118	75
25-44 years-----	15.0	9.1	133	85
45-64 years-----	16.8	10.7	178	123
Over 65 years---	11.1	7.0	202	183

In examining the major reasons for a visit shown in item 8 of the Patient Record form, it is estimated that over 2 million visits at least partly involved family planning, and over 6 million

Table 5. Percent of visits to office-based general and family practitioners, by sex and color: United States, January-December 1975

Color of patient	Percent of all visits	
	Female	Male
White-----	52.1	36.3
All other-----	7.1	4.4

visits involved prenatal and postnatal care. Only the obstetrician-gynecologist exceeded the GFP in the number of visits for these three reasons.

Principal Diagnosis

Table 7 lists the 25 most common principal diagnoses assigned by GFP's to office visits. These diagnoses constituted about one-half of all visits made to office-based GFP's in 1975.

Table 8 shows the number of principal diagnoses according to major ICDA⁵ groups. The following four diagnostic groups account for slightly more than 50 percent of all principal diagnoses rendered:

- Diseases of the respiratory system,
- Special conditions and examinations without sickness,
- Diseases of the circulatory system,
- Accidents, poisonings, and violence.

Diagnostic and Therapeutic Services

Limited or general histories and examinations were performed during about two-thirds of all general and family practitioner (GFP) office visits (table 9).

Blood pressure checks, performed during 40 percent of all GFP visits, were done frequently

⁵*Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA).*

Table 6. Number, percent, and cumulative percent of visits to office-based general and family practitioners, by the 25 most frequent patient problems, complaints, or symptoms classified by the National Ambulatory Medical Care Survey (NAMCS) symptom classification code: United States, January-December 1975

Rank	Most frequent patient problem, complaint, or symptom and NAMCS code ¹	Number of visits in thousands	Percent of visits	Cumulative percent
1	General and required physical examinations-----900,901	11,582	4.9	4.9
2	Problems of back-----415	9,535	4.1	9.0
3	Throat soreness-----520	9,005	3.8	12.8
4	Problems of lower extremity-----400	8,847	3.8	16.6
5	Abdominal pain-----540	7,279	3.1	19.7
6	Problems of upper extremity-----405	7,234	3.1	22.8
7	Cough-----311	7,046	3.0	25.8
8	Visit for medication-----910	6,436	2.7	28.5
9	Fatigue-----004	6,221	2.7	31.2
10	Cold-----312	6,077	2.6	33.8
11	Headache-----056	5,836	2.5	36.3
12	Pregnancy examination-----905	5,709	2.4	38.7
13	Pain in chest-----322	4,919	2.1	40.8
14	Allergic skin reaction-----112	4,711	2.0	42.8
15	Wounds of skin-----116	4,576	2.0	44.8
16	High blood pressure-----205	4,432	1.9	46.7
17	Surgical aftercare-----986	4,414	1.9	48.6
18	Weight gain-----010	3,643	1.6	50.2
19	Vertigo-dizziness-----069	3,554	1.5	51.7
20	Problems of face, neck-----410	3,161	1.4	53.1
21	Earache-----735	3,147	1.3	54.4
22	Fever-----002	3,087	1.3	55.7
23	Gynecologic examination-----904	2,749	1.2	56.9
24	Shortness of breath-----306	2,620	1.1	58.0
25	Flu-----313	2,560	1.1	59.1

¹Symptomatic groupings and code number inclusions are based on a symptom classification developed for use in the NAMCS.

for patients over 44 years of age and rarely for patients under 15 years. For persons over 44 years of age, 53 percent of visits included determination of arterial pressure and in only 10 percent of visits by patients under 15 years was arterial pressure measured. Drugs were the most common form of therapeutics. About 56 percent of visits resulted in administration or prescription of drugs.

Prior Visit Status

Patients tended to remain under the care of the same physician since 7 of 8 visits to GFP's were made by "old" (returning) patients (table

10). Of these, about two-thirds related to problems the physician had treated previously.

Seriousness of Problem

The data on seriousness of problem expressed the physician's judgment as to the extent of impairment that might result if no care were available for the given problem. They should be viewed in the context of the nature of the specialist's practice.

Problems presented by patients when visiting the office of the GFP tended toward the lower range of the "seriousness" scale (table 10). The largest proportion of visits (48 percent) were

Table 7. Number, percent and cumulative percent of visits to office-based general and family practitioners, by the 25 most common ICDA-coded principal diagnosis: United States, January-December 1975

Rank	Most common principal diagnosis and ICDA code ¹	Number of visits in thousands	Percent of visits	Cumulative percent
1	Medical or special examination-----Y00	14,690	6.3	6.3
2	Essential benign hypertension-----401	13,904	5.9	12.2
3	Acute upper respiratory infection, site unspecified-----465	8,505	3.6	15.8
4	Diabetes mellitus-----250	5,780	2.5	18.3
5	Medical and surgical aftercare-----Y10	5,602	2.4	20.7
6	Acute pharyngitis-----462	5,204	2.2	22.9
7	Chronic ischemic heart disease-----412	5,141	2.2	25.1
8	Other eczema and dermatitis-----692	5,075	2.2	27.3
9	Influenza, unqualified-----470	4,927	2.1	29.4
10	Obesity-----277	4,905	2.1	31.5
11	Neuroses-----300	4,126	1.8	33.3
12	Bronchitis, unqualified-----490	3,903	1.7	35.0
13	Acute tonsillitis-----463	3,884	1.7	36.7
14	Arthritis, unspecified-----715	3,457	1.5	38.2
15	Cystitis-----595	3,203	1.4	39.6
16	Otitis media-----381	3,087	1.3	40.9
17	Osteoarthritis-----713	2,895	1.2	42.1
18	Synovitis, bursitis-----731	2,868	1.2	43.3
19	Other nonarticular rheumatism-----717	2,818	1.2	44.5
20	Diarrheal disease-----009	2,709	1.2	45.7
21	Menopausal symptoms-----627	2,562	1.1	46.8
22	Chronic sinusitis-----503	2,546	1.1	47.9
23	Hay fever-----507	2,503	1.1	49.0
24	Sprains, strains of sacroiliac region-----846	2,437	1.0	50.0
25	Inoculations and vaccinations-----Y02	2,347	1.0	51.0

¹Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

rated "not serious" followed by about 35 percent rated "slightly serious." Only 17 percent of visits were judged "serious" or "very serious." Since much of office practice focuses on preventive and maintenance care, this result was predictable.

Disposition and Duration of Visit

More than half (51 percent) of the visits to the GFP resulted in the specific direction to return at a particular time (table 10). An additional one-third involved followup if needed or followup by telephone. A very small proportion

(slightly more than 1 percent) of the GFP's patients were admitted to a hospital. This also supports the findings that ambulatory office care focuses on preventive care and health maintenance with an accompanying small proportion of cases judged "serious."

The average time spent in face-to-face encounter between the GFP and the patient was about 13 minutes, slightly less than the average time for the 13 most-visited specialties. While the duration of most visits was 6-15 minutes (as evidenced by the average), the proportion of visits consuming 16-30 minutes tended to increase as the problems were judged more serious.

Table 8. Number and percent distribution of visits to office-based general and family practitioners, by principal diagnosis classified by ICDA group: United States, January-December 1975

Principal diagnosis and ICDA code ¹	Number of visits in thousands	Percent distribu- tion of visits
All principal diagnoses-----	234,660	100.0
Infective and parasitic diseases-----000-136	10,878	4.6
Neoplasms-----140-239	2,795	1.2
Endocrine, nutritional, and metabolic diseases-----240-279	13,568	5.8
Diseases of the blood and blood-forming organs-----280-289	3,043	1.3
Mental disorders-----290-315	7,064	3.0
Diseases of the nervous system and sense organs-----320-389	10,906	4.7
Diseases of the circulatory system-----390-458	29,005	12.4
Diseases of the respiratory system-----460-519	43,304	18.5
Diseases of the digestive system-----520-577	9,154	3.9
Diseases of the genitourinary system-----580-629	14,946	6.4
Diseases of the skin and subcutaneous tissue-----680-709	10,721	4.6
Diseases of the musculoskeletal system-----710-738	16,668	7.1
Symptoms and ill-defined conditions-----780-796	9,220	3.9
Accidents, poisonings, and violence-----800-999	20,168	8.6
Special conditions and examinations without sickness---Y00-Y13	30,188	12.9
Other diagnoses ² -----	544	0.2
Diagnosis "none" or unknown ³ -----	2,486	1.1

¹Diagnostic groupings and code number inclusions are based on the Eighth Revision International Classification of Diseases, Adapted for Use in the United States.

²Complications of pregnancy, childbirth and the puerperium (630-678), congenital anomalies (740-759), certain causes of perinatal morbidity and mortality (760-779).

³Includes blank, noncodeable, and illegible diagnoses.

Table 9. Number and percent distribution of visits to office-based general and family practitioners by diagnostic and therapeutic services ordered or provided: United States, January-December 1975

Diagnostic and therapeutic service ordered or provided	Number of visits in thousands	Percent of visits ¹
All visits-----	234,660	100.0
No services provided-----	4,082	1.7
Diagnostic services:		
Limited history/examination-----	130,516	55.6
General history/examination-----	29,570	12.6
Clinical lab test-----	50,618	21.6
X-ray-----	14,638	6.2
Blood pressure check-----	94,358	40.2
EKG-----	5,418	2.3
Hearing test-----	1,831	0.8
Vision test-----	3,307	1.4
Endoscopy-----	1,474	0.6
Therapeutic services:		
Drug administered or prescribed ² -----	130,479	55.6
Injection-----	50,476	21.5
Immunization/desensitization-----	8,659	3.7
Office surgery-----	12,113	5.2
Physiotherapy-----	7,834	3.3
Medical counseling-----	27,378	11.7
Psychotherapy/therapeutic listening-----	6,715	2.9
Other services provided-----	8,451	3.6

¹Percents will not add to 100 because most patient visits required the provision of more than one treatment or service.

²Includes prescription and nonprescription drugs.

Table 10. Number and percent distributions of visits to office-based general and family practitioners by prior-visit status, seriousness of problem, disposition and duration of visit: United States, January-December 1975

Selected visit characteristics	Number of visits in thousands	Percent distributions of visit
All visits-----	234,660	100.0
<u>Prior-visit status</u>		
Patient seen for the first time-----	29,847	12.7
Patient seen before—for another problem-----	71,446	30.5
Patient seen before—for current problem-----	133,367	56.8
<u>Seriousness of problem</u>		
Serious and very serious-----	39,941	17.0
Slightly serious-----	82,440	35.1
Not serious-----	112,279	47.9
<u>Disposition¹</u>		
No followup planned-----	36,326	15.5
Return at specified time-----	120,379	51.3
Return if needed-----	68,444	29.2
Telephone followup-----	8,658	3.7
Referred to other physician/agency-----	6,957	3.0
Admit to hospital-----	2,861	1.2
Other ² -----	2,276	1.0
<u>Duration of visit³</u>		
0 minutes-----	3,885	1.7
1-5 minutes-----	48,156	20.5
6-10 minutes-----	79,964	34.1
11-15 minutes-----	58,478	24.9
16-30 minutes-----	39,815	17.0
31 minutes or more-----	4,362	1.9

¹ Percents will not add to 100 because some patient visits had more than one disposition.

² Includes return to referring physician.

³ Signifies time spent in face-to-face encounter between physician and patient.

TECHNICAL NOTES

SOURCE OF DATA: Data presented in this report were obtained during 1975 through the National Ambulatory Medical Care Survey (NAMCS). The target population of NAMCS encompasses office visits within the conterminous United States made by ambulatory patients to physicians who are principally engaged in office practice.

SAMPLE DESIGN: The 1975 NAMCS utilized a multistage probability design that involved samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within practices. Within the 87 PSU's composing the first stage of selection, a sample of approximately 3,500 physicians was selected from master files maintained by the American Medical Association and the American Osteopathic Association. Sampled physicians, randomly assigned to 1 of the 52 weeks in the survey year, were requested to complete Patient Records (brief encounter forms) for a systematic random sample of office visits taking place within their practice during the assigned reporting period. (A facsimile of the Patient Record used is shown in a previous issue of *Advance Data From Vital and Health Statistics*, No. 12, October 12, 1977.) Additional data concerning physician practice characteristics such as primary specialty and type of practice were obtained during an induction interview.

A complete description of the survey's background and development has been presented in an earlier publication in Series 2 of *Vital and Health Statistics* (No. 61. DHEW Pub. No. (HRA) 76-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974). A detailed description of the 1975 NAMCS design and procedures will be presented in future publications.

SAMPLING ERRORS: Since the estimates for this report are based on a sample rather than the entire universe, they are subject to sampling variability. The standard error is primarily a measure of sampling variability. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percent of the esti-

mate. Relative standard errors of selected aggregate statistics are shown in table I. The standard errors appropriate for the estimated percentages of office visits are shown in table II.

Table I. Approximate relative standard errors of estimated numbers of office visits

Estimate in thousands	Relative standard error in percentage points
500	30.1
1,000	21.4
2,000	15.3
5,000	10.0
10,000	7.5
30,000	5.1
100,000	4.0
550,000	3.5

Example of use of table: An aggregate of 80,000,000 has a relative standard error of 4.3 percent or a standard error of 3,440,000 (4.3 percent of 80,000,000).

Table II. Approximate standard errors of percentages for estimated numbers of office visits

Base of percentage (number of visits in thousands)	Estimated percentage					
	1 or 99	5 or 95	10 or 90	20 or 80	30 or 70	50
1,000.....	2.1	4.6	6.3	8.5	9.7	10.6
3,000.....	1.2	2.7	3.7	4.9	5.6	6.1
5,000.....	0.9	2.1	2.8	3.8	4.3	4.7
10,000.....	0.7	1.5	2.0	2.7	3.1	3.3
50,000.....	0.3	0.7	0.9	1.2	1.4	1.5
100,000.....	0.2	0.5	0.6	0.8	1.0	1.1
500,000.....	0.1	0.2	0.3	0.4	0.4	0.5

Example of use of table: An estimate of 30 percent based on an aggregate of 75,000,000 has a standard error of 1.2 percent. The relative standard error of 30 percent is 4.0 percent (1.2 percent ÷ 30 percent).

ROUNDING: Aggregate estimates of office visits presented in the tables are rounded to the nearest thousand. The rates and percents, however, were calculated on the basis of original, un-

rounded figures. Due to rounding of percents, the sum of percentages may not equal 100.0 percent.

DEFINITIONS: An *ambulatory patient* is an individual presenting himself for personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

An *office* is a place that the physician identifies as a location for his ambulatory practice. Responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than 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 health services.

A *physician* is a duly licensed doctor of medicine (M.D.) or doctor of osteopathy (D.O.) currently in practice who spends time in caring for ambulatory patients at an office location. Excluded from NAMCS are physicians who specialize in anesthesiology, pathology, radiology; physicians who are federally employed; physicians who treat only institutionalized patients; physicians employed full time by an institution; and physicians who spend no time seeing ambulatory patients.

SYMBOLS	
Data not available-----	---
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05---	0.0
Figure does not meet standards of reliability or precision-----	*

Recent Issues of Advance Data From Vital and Health Statistics

- No. 14. Weight by Height and Age of Adults 18-74 Years in the United States in 1971-74 (Issued: November 30, 1977)
- No. 13. Ambulatory Medical Care Rendered in Pediatricians' Offices in the United States, 1975 (Issued: October 13, 1977)
- No. 12. Ambulatory Medical Care Rendered in Physicians' Offices in the United States, 1975 (Issued: October 12, 1977)

- No. 11. Pregnant Workers in the United States (Issued: September 15, 1977)
- No. 10. Expected Size of Complete Family Among Currently Married Women 15-44 Years of Age in the United States in 1973 (Issued: August 12, 1977)

A complete list of *Advance Data From the Vital and Health Statistics* is available from the Scientific and Technical Information Branch.