

# advancedata

FROM VITAL &amp; HEALTH STATISTICS OF THE NATIONAL CENTER FOR HEALTH STATISTICS

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## 1976 Summary: National Ambulatory Medical Care Survey<sup>1</sup>

The estimates in this report highlight the findings of the 1976 National Ambulatory Medical Care Survey (NAMCS), 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 in the coterminous United States by the Division of Health Resources Utilization Statistics. The survey sample is selected from doctors of medicine and osteopathy who are principally engaged in office-based, patient-care practice. In its current scope, NAMCS excludes physicians practicing in Alaska and Hawaii; physicians whose specialty is anesthesiology, pathology, or radiology; physicians in Federal service.

Figure 1 is a facsimile of the Patient Record used by participating physicians to record information about their office visits in both the 1975 and 1976 survey years. The reader may find it useful to refer to figure 1 as selected aspects of the survey findings are presented.

Since the estimates presented in this report are based on a sample rather than the entire universe of office-based, patient-care physicians, they are subject to sampling variability. See "Technical Notes" at the end of this report for an explanation and for guidelines in judging the relative precision of the estimates presented.

<sup>1</sup>This report was prepared by Hugo Koch, Raymond O. Gagnon, and Trena Ezzati, Division of Health Resources Utilization Statistics.

### DATA HIGHLIGHTS

#### Physician Characteristics

Among the 12 most visited specialists, primary care providers led the other specialists in the provision of office-based, ambulatory care; two of these providers, general/family physicians and internists, accounted for one-half of all visits. In a ratio of about 3 to 2, visits to solo practitioners clearly outnumbered visits to physicians in multiple-member practice. (See table 1.)

#### Patient Characteristics

Number of office visits per person per year generally increased in a direct parallel to advancing age; the rate for persons aged 65 years and over was more than double the rate for persons under 15 years. Females reported more visits to the physician's office than males did; for every 2 visits made by males, there were about 3 visits by females. This 2-to-3 ratio also prevailed for annual visit rates between the sexes. The data in table 2 reveal that visits by females outnumbered visits by males in every age interval above 14 years of age.

#### Clinical Characteristics

*Reason for visit.*—The information in item 5 of the Patient Record represents the reasons for visiting the physician's office as expressed by

patients in their own words. The terms and codes applied to the patient's symptoms, complaints, or other problems come from a symptom classification developed for use in NAMCS.<sup>2</sup> Table 3 confines itself to "symptomatic" reasons for the visit, listing in rank order the 25 complaints or symptoms most frequently presented. "Nonsymptomatic" reasons such as physical examinations and visits for medication are excluded from the tabulation.

*Principal diagnosis.*—Table 4 lists the 25 most common principal diagnoses that were provisionally or finally assigned to office visits by the physician. Table 5 shows the classification of all principal diagnoses by the major diagnostic groups. The diagnostic terms and codes are those established in the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States, 1968* (ICDA). The considerable effort that office-based physicians devote to preventive and maintenance care—as opposed to care that is primarily morbidity related—is evident in the finding that 18 percent of visits center on examinations without illness and on such special conditions as immunizations, prenatal and postnatal care, and medical and surgical aftercare (table 5).

*Diagnostic and therapeutic services.*—The limited examination was the diagnostic tool most frequently used in office-based practice; drug therapy was the most frequent form of treatment. The finding that blood pressure was taken in about one-third of visits may cast some doubt on the general employment of this procedure as a routine detection mechanism. "Counseling" was checked by the physician only when it constituted a major part of the treatment provided during the visit. The overall use of such an intangible service is almost impossible to quantify. Certainly, the finding that counseling was prominent in only 14 percent of visits understates the actual extent of this important aspect of the physician's office practice.

## Other Visit Characteristics

Data about prior-visit status (table 7) reveal that the average office-based physician dealt chiefly with patients that he had seen before ("old" patients). New patients accounted for only 1 of every 7 visits. Furthermore, the physician dealt chiefly with problems for which he previously had treated the patient ("old" problems). Only about 1 of every 4 visits by an old patient concerned a new problem. *New problem encounters* (i.e., any problem presented by a new patient or a new problem presented by an old patient) accounted for about 37 percent of all visits. The remaining visits (i.e., old problems presented by old patients) offer a rough estimate of the average number of return visits made during the year for any given new problem. Thus, for a typical new problem presented in 1976, there was an average of 1.7 return visits in the course of that year.

Data on seriousness (table 7) express the physician's judgment as to the extent of impairment that might result if no care were available for the given problem. Office-based ambulatory care does not center on the treatment of problems that bear a "serious and very serious" prognosis. Only about 1 of every 5 visits belonged in this category. The largest proportion of visits (an estimated 48 percent) was given a "not serious" evaluation. This is due in large degree to the substantial amount of preventive care and routine maintenance care provided in the physician's office, and to the relatively high prevalence of acute, self-limiting conditions encountered there.

Some form of scheduled followup was the rule in office-based practice (see findings on disposition, table 7). In about 61 percent of visits the patient was directed to return at a specified time. Only 2 percent of visits resulted in hospital admission, a finding that reflects the nonserious character of most visits made to office-based physicians.

Duration of visits (table 7) is based on the estimated time spent in face-to-face encounter between patient and physician. The average encounter lasted about 15 minutes. Visits of 0-minute duration are those where there was no contact between physician and patient. These chiefly involved visits during which the patient was provided care by a member of the physician's staff.

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<sup>2</sup>National Center for Health Statistics: The National Ambulatory Medical Care Survey: Symptom Classification, United States. *Vital and Health Statistics*. Series 2-No. 63. DHEW Pub. No. (HRA) 74-1337. Health Resources Administration. Washington, U.S. Government Printing Office, May 1974.

### Figure 1. PATIENT RECORD

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.

C532201

**1. DATE OF VISIT**

Mo / Day / Yr

**PATIENT RECORD**  
NATIONAL AMBULATORY MEDICAL CARE SURVEY

**2. DATE OF BIRTH**

Mo / Day / Yr

**4. COLOR OR RACE**

- 1  WHITE
- 2  NEGRO/BLACK
- 3  OTHER
- 4  UNKNOWN

**5. PATIENT'S PRINCIPAL PROBLEM(S) COMPLAINT(S), OR SYMPTOM(S) THIS VISIT**  
*(In patient's own words)*

- 1 MOST IMPORTANT \_\_\_\_\_
- 2 OTHER \_\_\_\_\_

**6. SERIOUSNESS OF PROBLEM IN ITEM 5a**  
*(Check one)*

- 1  VERY SERIOUS
- 2  SERIOUS
- 3  SLIGHTLY SERIOUS
- 4  NOT SERIOUS

**7. HAVE YOU EVER SEEN THIS PATIENT BEFORE?**

- 1  YES      2  NO
- ↓
- If YES, for the problem indicated in ITEM 5a?*
- 1  YES      2  NO

**3. SEX**

- 1  FEMALE
- 2  MALE

**8. MAJOR REASON(S) FOR THIS VISIT** *(Check all major reasons)*

- 1  ACUTE PROBLEM
- 2  ACUTE PROBLEM, FOLLOW-UP
- 3  CHRONIC PROBLEM, ROUTINE
- 4  CHRONIC PROBLEM, FLARE-UP
- 5  PRENATAL CARE
- 6  POSTNATAL CARE
- 7  POSTOPERATIVE CARE
- 8  WELL ADULT/CHILD EXAM
- 9  FAMILY PLANNING
- 10  COUNSELING ADVICE
- 11  IMMUNIZATION
- 12  REFERRED BY OTHER PHYS/AGENCY
- 13  ADMINISTRATIVE PURPOSE
- 14  OTHER *(Specify)* \_\_\_\_\_

*(Operative procedure)*

**9. PHYSICIAN'S PRINCIPAL DIAGNOSIS THIS VISIT**

a. DIAGNOSIS ASSOCIATED WITH ITEM 5a ENTRY

\_\_\_\_\_

b. OTHER SIGNIFICANT CURRENT DIAGNOSES  
*(In order of importance)*

\_\_\_\_\_

**10. DIAGNOSTIC/THERAPEUTIC SERVICES ORDERED/PROVIDED THIS VISIT** *(Check all that apply)*

- 01  NONE
- 02  LIMITED HISTORY/EXAM
- 03  GENERAL HISTORY/EXAM
- 04  CLINICAL LAB. TEST
- 05  BLOOD PRESSURE CHECK
- 06  EKG
- 07  HEARING TEST
- 08  VISION TEST
- 09  ENDOSCOPY
- 10  OFFICE SURGERY
- 11  DRUG PRESCRIBED
- 12  X-RAY
- 13  INJECTION
- 14  IMMUNIZATION/DESENSITIZATION
- 15  PHYSIOTHERAPY
- 16  MEDICAL COUNSELING
- 17  PSYCHOTHERAPY/THERAPEUTIC LISTENING
- 18  OTHER *(Specify)* \_\_\_\_\_

**11. 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
- 5  REFERRED TO OTHER PHYSICIAN/AGENCY
- 6  RETURNED TO REFERRING PHYSICIAN
- 7  ADMIT TO HOSPITAL
- 8  OTHER *(Specify)* \_\_\_\_\_

**12. DURATION OF THIS VISIT** *(Time actually spent with physician)*

\_\_\_\_\_ MINUTES

Table 1. Number and percent distribution of office visits and mean number of office visits per week, by selected physician characteristics: United States, January-December 1976

Physician characteristic	Number of visits in thousands	Percent distribution	Mean number of office visits per week <sup>1</sup>
All visits .....	588,300	100.0	78
<u>Specialty</u>			
General and family practice.....	225,637	38.4	111
Internal medicine .....	68,249	11.6	62
Pediatrics.....	60,400	10.3	113
Obstetrics and gynecology.....	48,994	8.3	74
General surgery .....	35,967	6.1	46
Ophthalmology .....	29,302	5.0	86
Orthopedic surgery.....	27,837	4.7	64
Dermatology .....	21,627	3.7	140
Psychiatry .....	15,811	2.7	29
Otolaryngology .....	10,837	1.8	77
Urology .....	9,896	1.7	53
Cardiovascular disease .....	5,961	1.0	39
All other specialties.....	27,782	4.7	...
<u>Type of practice</u>			
Solo.....	353,854	60.2	78
Other <sup>2</sup> .....	234,446	39.8	77

<sup>1</sup>Applies only to sampled physicians who actively treated patients during the week of their participation.

<sup>2</sup>Includes partnership and group practice.

Table 2. Number and percent distribution of office visits and number of visits per person per year, by patient's age and sex: United States, January-December 1976

Age and sex of patient	Number of visits in thousands	Percent distribution	Number of visits per person per year
All visits .....	588,300	100.0	2.8
<u>Age</u>			
Under 15 years .....	109,995	18.7	2.1
15-24 years.....	88,403	15.0	2.3
25-44 years.....	151,107	25.7	2.8
45-64 years.....	144,708	24.6	3.4
65 years and over .....	94,087	16.0	4.3
<u>Sex and age</u>			
Female .....	354,831	60.3	3.3
Under 15 years .....	52,240	8.9	2.0
15-24 years.....	57,768	9.8	2.9
25-44 years.....	99,367	16.9	3.6
45-64 years.....	86,794	14.8	3.9
65 years and over .....	58,661	10.0	4.6
Male .....	233,470	39.7	2.3
Under 15 years .....	57,756	9.8	2.2
15-24 years.....	30,635	5.2	1.6
25-44 years.....	51,740	8.8	2.0
45-64 years.....	57,913	9.8	2.8
65 years and over .....	35,426	6.0	4.0

NOTE: Rates are based on the civilian noninstitutionalized population, excluding Alaska and Hawaii.

Table 3. Number and percent of office visits, by most common complaints or symptoms classified by NAMCS code in rank order: United States, January-December 1976

Rank	Most common symptom or complaint expressed by patient and NAMCS code	Number of visits in thousands	Percent of visits
1	Pain, swelling, injury—lower extremity.....400	21,178	3.6
2	Pain, swelling, injury—back region.....415	16,932	2.9
3	Sore throat.....520	16,168	2.8
4	Pain, swelling, injury—upper extremity.....405	15,902	2.7
5	Abdominal pain.....540	14,590	2.5
6	Cough.....311	13,099	2.2
7	Cold.....312	10,844	1.8
8	Allergic skin reactions.....112	10,679	1.8
9	Headache.....056	9,908	1.7
10	Pain in chest.....322	9,564	1.6
11	Fatigue.....004	9,468	1.6
12	Pain, swelling, injury—face and neck.....410	9,122	1.6
13	Vision dysfunction, except blindness.....701	8,569	1.5
14	Fever.....002	8,535	1.5
15	Wounds of skin.....116	8,492	1.4
16	Abnormally high blood pressure.....205	7,518	1.3
17	Earache.....735	7,487	1.3
18	Weight gain.....010	6,956	1.2
19	Vertigo.....069	6,703	1.1
20	Nasal congestion.....301	6,488	1.1
21	Acne or pimples.....100	6,310	1.1
22	Swelling or mass of skin.....115	5,855	1.0
23	Shortness of breath.....306	5,843	1.0
24	Depression.....807	4,377	0.7
25	Vaginal discharge.....662	4,377	0.7

Table 4. Number and percent of office visits, by most common principal diagnoses classified by ICDA code in rank order: United States, January-December 1976

Rank	Most common principal diagnosis and ICDA code	Number of visits in thousands	Percent of visits
1	Medical or special examination..... Y00	44,736	7.6
2	Medical and surgical examination ..... Y10	29,598	5.0
3	Essential benign hypertension .....401	23,303	4.0
4	Prenatal care..... Y06	21,425	3.6
5	Acute upper respiratory infection .....465	18,641	3.2
6	Chronic ischemic heart disease .....412	13,507	2.3
7	Neuroses.....300	12,058	2.1
8	Otitis media.....381	10,715	1.8
9	Other eczema and dermatitis .....692	9,744	1.7
10	Diabetes mellitus .....250	9,605	1.6
11	Hay fever.....507	9,337	1.6
12	Refractive errors.....370	9,052	1.5
13	Acute pharyngitis .....462	8,883	1.5
14	Diseases of sebaceous gland .....706	8,719	1.5
15	Obesity .....277	8,288	1.4
16	Bronchitis, unqualified.....490	7,248	1.2
17	Osteoarthritis and allied conditions .....713	7,012	1.2
18	Sprains and strains of other and unspecified parts of back.....847	6,520	1.1
19	Asthma.....493	6,319	1.1
20	Acute tonsillitis .....463	6,168	1.1
21	Synovitis, bursitis, tenosynovitis .....731	5,661	1.0
22	Other viral diseases .....079	5,659	1.0
23	Diarrheal diseases .....009	5,448	0.9
24	Arthritis, unqualified.....715	4,781	0.8
25	Observation, without need for further medical care .....793	4,353	0.7

Table 5. Number and percent distribution of office visits, by principal diagnosis classified by major ICDA group: United States, January-December 1976

Principal diagnosis classified by major diagnostic group and ICDA code	Number of visits in thousands	Percent distribution
All principal diagnoses.....	588,300	100.0
Infective and parasitic diseases .....000-136	25,327	4.3
Neoplasms .....140-239	12,346	2.1
Endocrine, nutritional, and metabolic diseases .....240-279	24,724	4.2
Mental disorders .....290-315	23,446	4.0
Diseases of the nervous system and sense organs .....320-389	49,220	8.4
Diseases of the circulatory system .....390-458	54,259	9.2
Diseases of the respiratory system .....460-519	83,276	14.2
Diseases of the digestive system .....520-577	18,235	3.1
Diseases of the genitourinary system .....580-629	34,143	5.8
Diseases of the skin and subcutaneous tissue .....680-709	33,088	5.6
Diseases of the musculoskeletal system .....710-738	33,151	5.6
Symptoms and ill-defined conditions .....780-796	27,549	4.7
Accidents, poisonings, and violence .....800-999	43,985	7.5
Special conditions and examinations without sickness ..... Y00-Y13	108,578	18.5
Residual .....	16,973	2.9



Table 6. Number and percent of office visits, by diagnostic and therapeutic services provided: United States, January-December 1976

Diagnostic and therapeutic services provided (selected procedures)	Number of visits in thousands	Percent of visits
<u>Diagnostic services</u>		
Limited history or examination .....	305,231	51.9
General history or examination.....	99,309	16.9
Clinical lab test .....	133,598	22.7
X-ray.....	45,527	7.7
Blood pressure check .....	195,179	33.2
EKG.....	19,370	3.3
Hearing test.....	7,873	1.3
Vision test.....	30,684	5.2
Endoscopy .....	6,809	1.2
<u>Therapeutic services</u>		
Drug prescribed.....	251,970	42.8
Injection .....	73,309	12.5
Immunization or desensitization .....	31,287	5.3
Office surgery .....	41,497	7.1
Physiotherapy .....	17,590	3.0
Medical counseling .....	79,920	13.6
Psychotherapy and therapeutic listening .....	24,249	4.1

Table 7. Number and percent distribution of office visits, by selected visit characteristics: United States, January-December 1976

Selected visit characteristic	Number of visits in thousands	Percent distribution
All visits .....	588,300	100.0
<u>Prior-visit status</u>		
New patient .....	83,606	14.2
Old patient, new problem .....	135,107	23.0
Old patient, old problem.....	369,587	62.8
<u>Seriousness of problem</u>		
Serious and very serious.....	114,909	19.5
Slightly serious.....	189,886	32.3
Not serious.....	283,506	48.2
<u>Disposition<sup>1</sup></u>		
No followup.....	67,599	11.5
Return at specified time.....	361,149	61.4
Return if needed .....	126,283	21.5
Telephone followup .....	19,142	3.3
Referred to other physician or agency .....	16,281	2.8
Returned to referring physician .....	4,800	0.8
Admit to hospital.....	12,222	2.1
<u>Duration of visit</u>		
0 minute (no face-to-face encounter with physician).....	13,560	2.3
1-5 minutes .....	83,106	14.1
6-10 minutes .....	186,802	31.8
11-15 minutes .....	154,994	26.4
16-30 minutes .....	117,894	20.0
31 minutes or more.....	31,943	5.4

<sup>1</sup>Will not add to totals since more than one disposition was possible.

## TECHNICAL NOTES

**SOURCE OF DATA:** Data presented in this report were obtained during 1976 through the National Ambulatory Medical Care Survey (NAMCS). The target population of NAMCS encompasses office visits within the coterminous United States made to physicians who are principally engaged in office practice.

**SAMPLE DESIGN:** The 1976 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 3,000 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 (figure 1) for a systematic random sample of office visits taking place within their practice during the assigned reporting period. 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 published in Series 2, No. 61, of *Vital and Health Statistics*, DHEW Pub. No. (HRA) 76-1335, Health Resources Administration, Washington, U.S. Government Printing Office, Apr. 1974.

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

**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,

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

Estimate in thousands	Relative standard error in percentages 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 percents for estimated numbers of office visits

Base of percent (number of 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					
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).

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

**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 practicing in Alaska and Hawaii; physicians who specialize in anesthesiology, pathology, or 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-----	*

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