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# Office Visits to Doctors of Osteopathy: National Ambulatory Medical Care Survey, United States, 1975[1]

Using data from the National Ambulatory Medical Care Survey (NAMCS), this report describes an estimated 46.9 million visits made by ambulatory patients to the offices of osteopathic physicians in 1975.

The NAMCS is a sample survey designed to explore the provision and utilization of ambulatory medical care in the offices of physicians practicing within the conterminous United States. It is conducted yearly by the National Center for Health Statistics. The survey sample is selected from doctors of medicine and osteopathy (M.D.'s and D.O.'s) who are primarily engaged in office-based, patient-care practice. It excludes physicians whose specialties are anesthesiology, pathology, and radiology and all physicians in Federal service. The 1975 sample consisted of 3,507 physicians, of whom 141 were doctors of osteopathy. For the week of their participation in the NAMCS, physicians collected information on a sample of their office visits. Participants averaged about 30 visit reports per physician. Response rate was about 80 percent among eligible doctors of osteopathy.

## FINDINGS

When reference is made to an "overall" average or experience, it will refer to the characteristics of the 567.6 million visits made in 1975 to all physicians (M.D.'s and D.O.'s) within the NAMCS scope. Overall estimates for 1975 are available in an earlier report.[2]

Table 1 describes office visits to osteopathic physicians in terms of age, sex, and prior visit

[1]This report prepared by Hugo Koch, Division of Health Resources Utilization Statistics.

[2]National Center for Health Statistics: Ambulatory medical care rendered in physicians' offices, United States, 1975, by Hugo K. Koch and Norma Jean Dennison. *Advance Data From Vital and Health Statistics*, No. 12. DHEW Pub. No. (HRA) 77-1250. Health Resources Administration. Hyattsville, Md. Oct. 12, 1977.

Table 1. Number and percent distributions of office visits to osteopathic physicians by age, sex, and prior visit status of patient: United States, January-December 1975

| Age, sex, and prior visit status of patient | Number of visits in thousands | Percent distribution |
|---|---|---|
| All visits | 46,872 | 100.0 |
| **Age** | | |
| Under 15 years | 5,246 | 11.2 |
| 15-24 years | 6,621 | 14.1 |
| 25-44 years | 11,465 | 24.5 |
| 45-64 years | 14,795 | 31.6 |
| 65 years and over | 8,745 | 18.7 |
| **Sex** | | |
| Female | 27,551 | 58.8 |
| Male | 19,322 | 41.2 |
| **Prior visit status** | | |
| New patient | 5,535 | 11.8 |
| Old patient, new problem | 11,251 | 24.0 |
| Old patient, old problem | 30,087 | 64.2 |

status of patients. Total visits by females outnumbered visits by males in a ratio of 6 to 4, a finding that agrees closely with the overall ratio. Underscoring the generalist nature of their office practice, D.O.'s treated patients of all ages. An estimated 51 percent of visits, however, were made by patients over 44 years of age. In overall office-based practice, about 42 percent of visits fell in this age category. The data on prior visit status show that few patients were visiting the osteopathic physician for the first time; about 88 percent of visits were made by patients who had visited the office before. Not only did the D.O.'s office practice chiefly involve encounters with continuing patients, the largest proportion of visits (almost two-thirds) required the treatment of continuing problems as well. New problems were encountered in about 1 of every 3 visits. For the average new problem presented to the D.O., there were roughly 1.8 return visits in the course of the year.

Table 2 lists by rank the 15 most common patient problems, complaints, or symptoms that the osteopathic physician encountered in office practice. Symptoms and code numbers appear in a symptom classification developed for use in NAMCS.[3] This information represents the reason for seeking care expressed as nearly as possible in the patient's own words. The data offer distinct evidence of the functional specialization associated with osteopathic medicine. For example, in a substantial 17 percent of office visits, patients presented problems of the face or neck, the back, or the extremities. Back problems clearly exceeded all other patient complaints. The data also testify to the generalist nature of osteopathic office practice in that D.O.'s shared 11 of the 15 most common problems encountered in the overall 567.6 million visits. Further supportive of their generalist role is a marked diffuseness of clinical range, evident from the finding that, though a substantial 15 most common problems are listed, they still account for only about one-half of all the D.O.'s

[3]National Center for Health Statistics: The national ambulatory medical care survey: symptom classification, United States, by Sue Meads and Thomas McLemore. *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.

Table 2. Number, percent, and cumulative percent of office visits to osteopathic physicians, by the 15 most common patient problems, complaints, or symptoms: United States, January-December 1975

[Symptom titles and code numbers come from a symptom classification developed for use in the NAMCS]

| Rank | 15 most common patient problems, complaints, or symptoms | Number of visits in thousands | Percent of visits | Cumulative percent of visits |
|---|---|---|---|---|
| 1 | Pain, swelling, injury of back region ....415 | 3,919 | 8.4 | 8.4 |
| 2 | Physical examination ....900,901 | 2,080 | 4.4 | 12.8 |
| 3 | Fatigue ....004 | 1,775 | 3.8 | 16.6 |
| 4 | Flu ....313 | 1,680 | 3.6 | 20.2 |
| 5 | Pain, swelling, injury of lower extremity ....400 | 1,599 | 3.4 | 23.6 |
| 6 | Weight gain ....010 | 1,442 | 3.1 | 26.7 |
| 7 | Pain, swelling, injury of upper extremity ....405 | 1,422 | 3.0 | 29.7 |
| 8 | Sore throat ....520 | 1,383 | 3.0 | 32.7 |
| 9 | Headache ....056 | 1,221 | 2.6 | 35.3 |
| 10 | Pain, swelling, injury of face and neck region ....410 | 1,175 | 2.5 | 37.8 |
| 11 | Abdominal pain ....540 | 1,153 | 2.5 | 40.3 |
| 12 | Visit for medication ....910 | 1,170 | 2.5 | 42.8 |
| 13 | Cough ....311 | 1,140 | 2.4 | 45.2 |
| 14 | Allergic skin reaction ....112 | 1,044 | 2.2 | 47.4 |
| 15 | Wounds of skin ....116 | 911 | 1.9 | 49.3 |

Table 3. Number and percent distribution of office visits to osteopathic physicians by principal diagnosis classified by major ICDA groups: United States, January-December 1975

[Diagnostic groups and code number inclusions are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*]

| Principal diagnosis classified by major ICDA groups | Number of visits in thousands | Percent distribution |
|---|---|---|
| All principal diagnoses | 46,872 | 100.0 |
| Infective and parasitic diseases 000-136 | 1,404 | 3.0 |
| Endocrine, nutritional, and metabolic diseases 240-279 | 3,830 | 8.2 |
| Diseases of the blood and blood-forming organs 280-289 | 820 | 1.8 |
| Mental disorders 290-315 | 1,529 | 3.3 |
| Diseases of the nervous system and sense organs 320-389 | 2,057 | 4.4 |
| Diseases of the circulatory system 390-458 | 4,955 | 10.6 |
| Diseases of the respiratory system 460-519 | 8,238 | 17.6 |
| Diseases of the digestive system 520-577 | 1,418 | 3.0 |
| Diseases of the genitourinary system 580-629 | 3,122 | 6.7 |
| Diseases of the skin and subcutaneous tissue 680-709 | 1,861 | 4.0 |
| Diseases of the musculoskeletal system and connective tissue 710-738 | 5,432 | 11.6 |
| Symptoms and ill-defined conditions 780-796 | 1,147 | 2.5 |
| Accidents, poisonings, and violence 800-999 | 4,840 | 10.3 |
| Special conditions and examinations without sickness Y00-Y13 | 5,103 | 10.9 |
| Residual | 1,116 | 2.1 |

office visits. Problems presented to office-based D.O.'s were about equally divided between the acute and the chronic, i.e., persisting problems with an onset of 3 months or more before the current visit. Overall visit experience showed a dominance of acute problems (in 55 percent of visits) over chronic (in 45 percent).

Tables 3 and 4 present data on the diagnosis associated with each office visit to an osteopathic physician. Table 3 uses broad diagnostic classes to express the D.O.'s total diagnostic effort. Table 4 offers more specific diagnostic information by listing the 15 diagnoses most commonly rendered by the physician. Diagnos-

Table 4. Number, percent, and cumulative percent of office visits to osteopathic physicians, by the 15 most common principal diagnoses rendered: United States, January-December 1975

[Diagnoses and codes are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*]

| Rank | 15 most common principal diagnoses | Number of visits in thousands | Percent of visits | Cumulative percent of visits |
|---|---|---|---|---|
| 1 | Essential benign hypertension 401 | 2,642 | 5.6 | 5.6 |
| 2 | Influenza, unqualified 470 | 2,381 | 5.1 | 10.7 |
| 3 | Medical or special examination Y00 | 2,163 | 4.6 | 15.3 |
| 4 | Arthritis 713-715 | 1,993 | 4.3 | 19.6 |
| 5 | Obesity not specified as of endocrine origin 277 | 1,857 | 4.0 | 23.6 |
| 6 | Acute upper respiratory injection, multiple and unspecified sites 465 | 1,630 | 3.5 | 27.1 |
| 7 | Other nonarticular rheumatism 717 | 1,356 | 2.9 | 30.0 |
| 8 | Medical and surgical aftercare Y10 | 1,297 | 2.8 | 32.8 |
| 9 | Sprains and strains of sacroiliac region 846 | 1,162 | 2.5 | 35.3 |
| 10 | Diabetes mellitus 250 | 1,151 | 2.5 | 37.8 |
| 11 | Other eczema and dermatitis 692 | 1,048 | 2.2 | 40.0 |
| 12 | Neuroses 300 | 973 | 2.1 | 42.1 |
| 13 | Sprains and strains of other and unspecified parts of back 847 | 946 | 2.0 | 44.1 |
| 14 | Prophylactic inoculation and vaccination Y02 | 836 | 1.8 | 45.9 |
| 15 | Cystitis 595 | 749 | 1.6 | 47.5 |

tic groups and code number inclusions are based on the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.*

The data in the tables are in relatively close agreement with the most common reasons for visits expressed by patients (table 2). The generalist nature of osteopathic office practice is evident from the range and diversity of the diagnoses that the D.O. rendered. It requires 14 major diagnostic classes to express the breadth and variety of the D.O.'s clinical activity (table 3). On the other hand, the functional specialization expected of the D.O. is evident in the finding that the 15 specific conditions most frequently diagnosed prominently include arthritic conditions, rheumatism, and sprains or strains of the back region (table 4).

Table 5 shows that, as with all office-based physicians, the diagnostic procedures most favored in osteopathic office practice were the limited examination, blood pressure check, and laboratory test. The three therapeutic procedures that the D.O. most often ordered or provided were treatment by prescription drug, treatment by injection, and treatment by manipulative therapy. The D.O.'s reliance on drug therapy—in 54 percent of visits—exceeded the overall average by 10 percent. Perhaps more noteworthy was the 34 percent of visits in which the D.O. used injection therapy—a usage that exceeded the overall average by 20 percent.

Table 5 also presents data on the severity of patient problems. These data express the doctor's judgment of the extent of impairment that might result if no care were available. Clearly, most osteopathic practice centered on the treatment of problems which ranged in severity from slightly serious to not serious. The D.O. agreed with the average office-based physician in judging only about 1 in 5 problems as serious or very serious in prognosis.

Data on disposition (table 5) show that scheduled followup is the rule with office-based D.O.'s, as it is with all office-based practitioners. D.O.'s also shared the tendency of other generalist practitioners to provide most of the care that their patients required; less than 2 percent of visits to D.O.'s resulted in referral to another physician. Admission to the hospital was also a rare event in the D.O.'s office practice; it occurred in only 1 percent of visits.

The duration of visit (the portion of an office visit that involves face-to-face contact between patient and doctor) was under 16 minutes for 2 out of 3 office visits to D.O.'s. Agreeing closely with the average for all office-based practitioners, the average face-to-face encounter between D.O. and patient was estimated at about 15 minutes in duration.

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[4]National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States.* PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

Table 5. Number and percent of office visits to osteopathic physicians by services ordered or provided, seriousness of problem, disposition, and duration of visit: United States, January-December 1975

| Service ordered or provided, seriousness of problem, disposition, and duration of visit | Number of visits in thousands | Percent of visits |
|---|---|---|
| Service ordered or provided | | |
| No service | 810 | 1.7 |
| Diagnostic service:[1] | | |
| Limited history and/or examination | 21,603 | 46.1 |
| General history and/or examination | 4,673 | 10.0 |
| Clinical laboratory test | 6,358 | 13.6 |
| X-ray | 2,051 | 4.4 |
| Blood pressure check | 14,761 | 31.5 |
| EKG | 559 | 1.2 |
| Hearing and/or vision test | 952 | 2.1 |
| Endoscopy | 447 | 1.0 |
| Therapeutic service:[1] | | |
| Drug prescribed | 25,217 | 53.8 |
| Injection | 15,705 | 33.5 |
| Immunization and/or desensitization | 799 | 1.7 |
| Office surgery | 2,581 | 5.5 |
| Physiotherapy | 4,954 | 10.6 |
| Medical counseling | 4,944 | 10.6 |
| Psychotherapy and/or therapeutic listening | 3,580 | 7.6 |
| Other services | 4,689 | 10.0 |
| Seriousness of problem | | |
| Serious or very serious | 8,791 | 18.8 |
| Slightly serious | 18,692 | 39.9 |
| Not serious | 19,388 | 41.4 |
| Disposition (selected actions)[1] | | |
| No followup | 5,083 | 10.8 |
| Return at a specified time | 24,593 | 52.5 |
| Return if needed | 16,653 | 35.5 |
| Telephone followup | 1,326 | 2.8 |
| Referred to other physician or/agency | 831 | 1.8 |
| Admitted to hospital | 491 | 1.1 |
| Duration of visit | | |
| Less than 1 minute (no face-to-face contact with physician) | 383 | 0.8 |
| 1-5 minutes | 6,680 | 14.3 |
| 6-10 minutes | 12,909 | 27.5 |
| 11-15 minutes | 12,028 | 25.7 |
| 16-30 minutes | 13,677 | 29.2 |
| 31 minutes or more | 1,196 | 2.5 |

[1]Since more than one service and disposition were possible per visit, estimates will not add to total number of visits (46,872,000).

## 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 estimate. 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.

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

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).

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 | * |

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