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Office Visits to General Surgeons: National Ambulatory Medical Care Survey, United States, 1975¹

In 1975 there were an estimated 41.3 million visits made to office-based physicians specializing in general surgery, resulting in an average of 20 visits per 100 persons per year.

These and other preliminary data about visits to general surgeons are presented in this brief report from the 1975 National Ambulatory Medical Care Survey (NAMCS). NAMCS is conducted by the Division of Health Resources Utilization Statistics of the National Center for Health Statistics. The sampling frame for the survey is a list of licensed physicians in "office-based, patient care" practice compiled from files that are classified and maintained by the American Medical Association (AMA) and the American Osteopathic Association (AOA). NAMCS currently excludes physicians practicing in Alaska and Hawaii as well as physicians specializing in anesthesiology, pathology, or radiology and all physicians who are Federally employed.

A complete description of the background and survey methodology is available in an earlier report entitled "National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72."²

¹This report prepared by Raymond O. Gagnon, Division of Health Resources Utilization Statistics.

²National Center for Health Statistics: National Ambulatory Medical Care Survey: Background and Methodology, United States, 1967-72, by J. B. Tenney and others. *Vital and Health Statistics*. Series 2-No. 61. DHEW Pub. No. (HRA) 76-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974.

DATA HIGHLIGHTS

The 41.3 million patient visits to general surgeons in 1975 represent about 7 percent of the total 567.6 million visits made by Americans to all physicians engaged in office-based patient care. From table 1 the reader can compare visits to general surgeons with those made to physicians in the other largest specialties.

Table 1. Number and rate of visits per 100 persons per year, by selected specialties: United States, 1975

Physician specialty	Number of visits in thousands	Number of visits per 100 persons per year ¹
All specialties--	567,600	273
General and family practice-----	234,660	113
Internal medicine--	62,117	30
Obstetrics and gynecology-----	48,076	23
Pediatrics-----	46,684	22
GENERAL SURGERY----	41,292	20
Psychiatry-----	14,806	7

¹The base populations used in computing the rates are national estimates published by the U.S. Bureau of the Census for the civilian noninstitutionalized population as of July 1, 1975, in Series P-25 and P-26 of Current Population Reports.

Of the 41.3 million patient visits to general surgeons, 64 percent were made to solo practitioners and 36 percent were made to surgeons in other types of practice (table 2). The data in table 2 also show that 6 of every 10 visits to general surgeons were made by females. The largest proportion of visits (about one-third) was made by persons in the 45-64 year age group.

As shown in tables 2 and 3, patient visits to surgeons in standard metropolitan statistical areas outnumber those to surgeons in nonmetropolitan areas by almost 3 to 1 (72 to 28 percent, respectively). As with other specialties, the distribution of visits by location of practice parallels the distribution of physicians (table 3).

Table 4 lists—in order of frequency—the 15 most common patient problems, complaints, or symptoms encountered by the general surgeon in his office practice.³ This information represents the patient's reason for seeking care as expressed in the patient's own words. These 15 problems accounted for more than half of the visits to general surgeons. The primary need of patients visiting general surgeons in 1975 was "surgical aftercare," which accounted for 21 percent of the visits. Surgical aftercare includes cast and/or suture removal or inspection as well as other types of care which come under the general heading of postoperative care.

Table 5 distributes office visits to general surgeons by seriousness of the patient's problem, prior visit status, and duration of the visit. Seriousness refers to the physician's clinical judgment as to the extent of impairment that might result if care were not available to the patient. About half the problems presented to general surgeons were considered "not serious" by the surgeons, and 18 percent were "very serious" or "serious." Concerning prior visit status, about 84 percent of the visits were made by patients who had been seen before, and three-fourths of these had been seen for the same problem.

Data on duration of visit show that the typical encounter between patient and general surgeon lasted 13 minutes. In this survey duration means the amount of time the physician spent in face-to-face contact with the patient. The data

³ Excluded from the table are progress visits for followup care other than surgical aftercare.

Table 2. Number and percent distributions of office visits to general surgeons by selected variables: United States, 1975

Selected variable	Number of visits in thousands	Percent distribution
All visits---	41,292	100.0
<u>Type of practice</u>		
Solo-----	26,241	63.5
Other ¹ -----	15,051	36.5
<u>Location of practice</u>		
Metropolitan areas-----	29,803	72.2
Nonmetropolitan areas-----	11,489	27.8
<u>Sex of patient</u>		
Male-----	16,394	39.7
Female-----	24,898	60.3
<u>Age of patient</u>		
Under 25 years-----	8,039	19.5
25-44 years-----	11,863	28.7
45-64 years-----	14,055	34.0
65 years and over-----	7,335	17.8

¹Includes partnership and group practices.

also show that 56 percent of the visits lasted under 11 minutes.

In NAMCS diagnoses are coded according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*⁴ (ICDA). Table 6 presents data on the nine most common diagnoses rendered by general surgeons, which accounted for about one-third of their total visits. The most frequent diagnoses were "medical and surgical aftercare" and "essential benign hypertension." Together

⁴National 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 3. Number and percent distributions of visits to office-based physicians by location of practice, according to selected specialties: United States, 1975

Selected physician specialty	Number in thousands	Location of practice		
		Total	Metropolitan area	Non-metropolitan area
All physicians-----	567,600	100.0	73	27
General surgery-----	41,292	100.0	72	28
General and family practice-----	234,660	100.0	58	42
Internal medicine-----	62,117	100.0	85	15
Pediatrics-----	46,684	100.0	89	11
Obstetrics and gynecology-----	48,076	100.0	82	18

Table 4. Number, percent, and cumulative percent of office visits to general surgeons, by the 15 most frequent patient problems, complaints, or symptoms: United States, 1975

15 most frequent patient problems, complaints, or symptoms, and NAMCS codes ¹		Number of visits in thousands	Percent of visits	Cumulative percent	
1.	Surgical aftercare ² -----	986	8,486	20.6	20.6
2.	Problems of lower extremity-----	400	2,048	5.0	25.6
3.	Abdominal pain-----	540	1,895	4.6	30.2
4.	Swelling or mass of skin-----	115	1,651	4.0	34.2
5.	Problems of upper extremity-----	405	1,448	3.5	37.7
6.	Lump or mass of breast-----	680	1,094	2.7	40.4
7.	Wounds of skin-----	116	1,092	2.6	43.0
8.	Weight gain-----	010	929	2.3	45.3
9.	Problems of back-----	415	837	2.0	47.3
10.	Abdominal swelling-----	542	762	1.8	49.1
11.	Anus, rectal problems-----	560	751	1.8	50.9
12.	Throat soreness-----	520	660	1.6	52.5
13.	Fatigue-----	004	647	1.6	54.1
14.	Pain in chest-----	322	576	1.4	55.5
15.	High blood pressure-----	205	538	1.3	56.8

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

²Includes: cast-change or removal; suture removal or inspection.

Table 5. Number and percent distributions of office visits to general surgeons by seriousness of problem, prior visit status, and duration of visit: United States, 1975

Seriousness of problem, prior visit status, and duration of visit	Number of visits in thousands	Percent distribution
All visits-----	41,292	100.0
<u>Seriousness of problem</u>		
Serious and very serious-----	7,442	18.0
Slightly serious-----	11,883	28.8
Not serious-----	21,967	53.2
<u>Prior visit status</u>		
New patient-----	6,538	15.8
Return patient:		
New problem-----	7,881	19.1
Old problem-----	26,874	65.1
<u>Duration of visit</u>		
Less than 6 minutes-----	9,034	21.9
6-10 minutes-----	13,928	33.7
11-15 minutes-----	10,747	26.0
16 minutes or more-----	7,583	18.4

Table 6. Number, percent, and cumulative percent of office visits to general surgeons, by the 9 most frequent ICDA 3-digit categories containing the principal diagnosis: United States, 1975

9 most frequent diagnoses and ICDA codes ¹	Number of visits in thousands	Percent of visits	Cumulative percent of visits
1. Medical and surgical aftercare-----Y10	6,992	16.9	16.9
2. Essential benign hypertension-----401	1,242	3.0	19.9
3. Chronic cystic disease of breast-----610	957	2.3	22.2
4. Obesity-----277	926	2.2	24.4
5. Inguinal hernia without mention of obstruction-----550	874	2.1	26.5
6. Acute upper respiratory infection-----465	734	1.8	28.3
7. Diseases of sebaceous glands-----706	680	1.6	29.9
8. Varicose veins of lower extremities-----454	656	1.6	31.5
9. Synovitis, bursitis, and tenosynovitis-----731	621	1.5	33.0

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

these two diagnoses accounted for 8.2 million patient visits to general surgeons.

In table 7 the visits to all physicians and general surgeons are distributed according to the major diagnostic categories of the ICDA. For the categories shown, general surgeons' practices were quite similar to the practices of physicians in general; however, a few differences may be worthy of mention. The proportions of visits diagnosed as mental disorders, diseases of the nervous system, and diseases of the respiratory system were slightly lower for general surgeons than for all physicians. On the other hand, the proportions of visits for neoplasms, diseases of the digestive system, and accidents, poisonings, and violence were somewhat higher for general surgeons than for all physicians.

Table 8 distributes office visits to general surgeons by diagnostic and therapeutic services ordered or provided and disposition of the visit. The provision of a limited history and/or exam was the most frequently provided service being rendered at 47 percent of the patient visits. Data on disposition of visit show that the final advice or instruction given by the physician in the majority of patient visits (62 percent) was to "return at a specified time."

Table 9 compares general surgeons with all physicians in terms of three selected diagnostic and/or therapeutic services provided. It is evident that fewer drugs were prescribed or dispensed by general surgeons than by all physicians and that fewer laboratory tests were performed. Drugs were provided at 44 percent

Table 7. Number and percent distributions of office visits to all physicians and general surgeons by principal diagnosis: United States, 1975

Principal diagnosis classified by ICDA category and ICDA code ¹	All physicians	General surgeons
	Number in thousands	
All diagnoses-----	567,600	41,292
	Percent distribution	
All diagnoses-----	100.0	100.0
Infective and parasitic diseases-----000-136	4.0	2.6
Neoplasms-----140-239	2.4	7.6
Endocrine, nutritional, and metabolic diseases-----240-279	4.3	4.9
Mental disorders-----290-315	4.4	*1.0
Diseases of nervous system and sense organs-----320-389	7.9	1.8
Diseases of circulatory system-----390-458	9.9	8.8
Diseases of respiratory system-----460-519	14.1	6.1
Diseases of digestive system-----520-577	3.5	9.2
Diseases of genitourinary system-----580-629	6.6	7.8
Diseases of skin and subcutaneous tissue---680-709	5.0	6.0
Diseases of musculoskeletal system-----710-738	5.8	4.0
Symptoms and ill-defined conditions-----780-796	4.6	4.9
Accidents, poisonings, and violence-----800-999	7.2	9.7
Special conditions and examinations without illness-----Y00-Y13	17.8	23.4
All other diagnoses ² -----	2.5	2.4

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

²The category "all other diagnoses" includes 280-289, Diseases of the blood and blood-forming organs; 630-678, Complications of pregnancy, childbirth, and the puerperium; 740-759, Congenital anomalies; 760-779, Certain causes of perinatal morbidity and mortality; blank diagnosis, noncodable diagnosis, illegible diagnosis, and diagnosis given as "None."

Table 8. Number and percent distributions of office visits to general surgeons by diagnostic and/or therapeutic services ordered or provided, and disposition of visit: United States, 1975

Diagnostic and/or therapeutic services ordered or provided, and disposition of visit	Number of visits in thousands	Percent distribution
All visits-----	41,292	100.0
<u>Diagnostic and/or therapeutic services ordered or provided¹</u>		
None-----	3,120	7.6
Limited history and/or exam-----	19,235	46.6
General history and/or exam-----	4,532	11.0
Clinical lab test-----	4,853	11.8
Blood pressure check-----	9,531	23.1
EKG-----	862	2.1
Office surgery-----	6,844	16.6
Drug prescribed-----	11,272	27.3
X-ray-----	2,993	7.3
Injection-----	6,034	14.6
Medical counseling-----	4,839	11.7
Psychotherapy and/or therapeutic listening-----	775	1.9
Other-----	5,044	12.2
<u>Disposition of visit¹</u>		
No followup planned-----	4,320	10.5
Return at specified time-----	25,414	61.6
Return if needed-----	7,503	18.2
Telephone followup planned-----	689	1.7
Referred to other physician and/or agency-----	1,180	2.9
Returned to referring physician-----	*435	*1.1
Admitted to hospital-----	2,391	5.8
Other-----	899	2.2

¹Percents will add to more than 100 because many patients received more than one service and some patient visits had more than one disposition.

Table 9. Percent of office visits to all physicians and general surgeons, by selected diagnostic and/or therapeutic services: United States, 1975

All physicians and general surgeons	Drug pre-scribed or dis-pensed	Clin-ical lab test	Of-lice sur-gery
	Percent		
All physicians----	44.3	22.9	6.7
General surgeons--	27.3	11.8	16.6

of the visits to all physicians compared with 27 percent of the visits to general surgeons. Lab tests were ordered at 23 percent of the visits to all physicians and at 12 percent of the visits to surgeons. As expected, general surgeons provided office surgery considerably more often than did all physicians. Office surgery was provided at 17 percent of the visits to general surgeons as compared with 7 percent of the visits to all physicians. These latter differences are perhaps reflective of the large proportion of visits to general surgeons (21 percent), where the primary need of the patient was surgical aftercare (table 4).

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

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).

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.

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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