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Ambulatory Medical Care Rendered in Pediatricians' Offices During 1975^a

This report presents statistics concerning an estimated 46.7 million visits to the offices of pediatricians practicing in the coterminous United States. The data were collected during calendar year 1975 in the National Ambulatory Medical Care Survey (NAMCS), a continuous survey conducted yearly by the National Center for Health Statistics.

The estimates presented are based on information obtained from the "Patient Record," a facsimile of which can be found in Advance Data No. 12. This form is used by sample physicians to record selected information about their office encounters. The sampling errors associated with these estimates and information concerning the sample design used by the 1975 NAMCS are presented in the section, "Technical Notes," that follows.

HIGHLIGHTS

During 1975 there were an estimated 567.6 million visits to "office-based, patient-care" physicians practicing in the coterminous United States. The estimated total yearly volume of office-based ambulatory medical care by specialty is shown in table A. In terms of total office visits, the 46,684,000 visits to pediatricians ranked fourth among all physician specialties.

Forty-two percent of these visits were to pediatricians in practice by themselves while the remaining 58 percent were to pediatricians practicing in a group or partnership arrangement.

Table A. Number and percent distribution of office visits, by selected physician specialties: United States, 1975

Physician specialty	Number of visits in thousands ¹	Percent distribution
All specialties	567,600	100.0
General family practice	234,660	41.3
Internal medicine	62,117	10.9
Obstetrics/gynecology	48,076	8.5
PEDIATRICS	46,684	8.2
General surgery	41,292	7.3
All other specialties	134,771	23.8

¹Due to a refinement of the NAMCS estimating procedure used to project national estimates from sample data, caution should be used when comparing these estimated numbers of office visits with previously published estimates for 1973 and 1974.

Visits to pediatricians by males (52.3 percent) outnumbered those by females (47.7 percent), whereas the proportion of visits to all physicians by females exceeded that by males (figure 1).

Information regarding the age distribution of visits to pediatricians is presented in figure 2. A negative correlation exists between age and the number of visits to pediatricians, i.e., as the age of patients increases, the number of visits decreases. Less than 2 percent of the visits to pediatricians were by patients over 19 years of age and only 5 percent were by patients 15-18 years of age. Thus, the major portion of visits to pediatricians was by patients under 15 years of age.

Visit rates further show that there were more visits made by children under 2 years of age than by children in any other age group (table B), thus reflecting the most frequent rea-

^aThis report was prepared by Trena Ezzati, Division of Health Resources Utilization Statistics.

Figure 1. PERCENT OF OFFICE VISITS, BY SEX: UNITED STATES, 1975

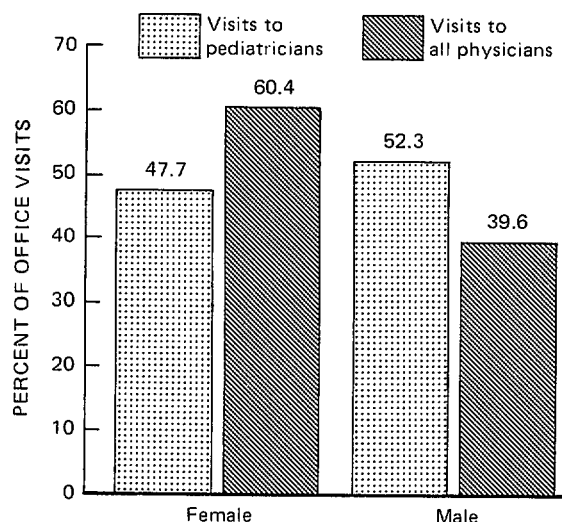


Figure 2. PERCENT OF OFFICE VISITS TO PEDIATRICIANS, BY AGE OF PATIENT: UNITED STATES, 1975

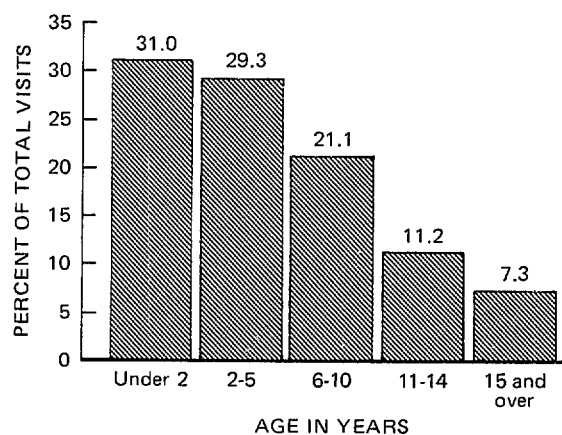


Table B. Rate of office visits per 100 persons by age: United States, 1975

Age	Rate
Total	58
Under 2 years.....	244
2-5 years	106
6-10 years	57
11-14 years	33
15-18 years	16

son for visiting a pediatrician—the well-baby examination.

In addition to the well-baby examination, other common reasons for visits to pediatricians as presented in the patient's own words (or when necessary, the words of the parent or accompanying adult) are shown in table 1. These 14 problems, complaints, or symptoms accounted for about 67 percent of all visits. This reveals a relatively narrow clinical range for pediatricians as compared with the more varied range for general and family practitioners where it requires nearly two and one-half times as many problems to account for a comparable 67 percent of their visits. For about one of every three visits to pediatricians, a "nonsymptomatic" problem (generally an examination) was the reason for a visit. Among "symptomatic" problems presented to pediatricians, cough, fever, sore throat, and earache were the most common.

Data on the physician's judgment of the seriousness of the patient's problem, complaint, or symptom (in terms of the extent of impairment that might result if no care were obtained) revealed that only 10 percent of the visits to pediatricians were "serious or very serious" (table C). The proportion of conditions categorized as "not serious" (60 percent) is in part a reflection of the relatively large number of visits involving examinations and acute, self-limiting problems common to children.

Table C. Percent distribution of visits to pediatricians by degree of seriousness of patient's problem: United States, 1975

Degree of seriousness	Percent distribution
Total	100.0
Serious or very serious	10.1
Slightly serious.....	29.5
Not serious.....	60.4

Data presented in table 2 provide statistics on the most frequent physician diagnoses associated with the reasons for office visits to pediatricians. The physician's principal diagnosis refers to the diagnosis listed first in item

9 of the Patient Record. The diagnostic data are grouped by the classes used in the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States* (ICDA). As might be predicted from the previous statistics presented on problems, the ICDA category "special conditions and examinations without illness" was the largest. This also reflects that about one-third of all visits made to pediatricians were for well-child care. In comparison with all other physicians, only obstetricians/gynecologists exceeded pediatricians in the proportion of visits for special conditions and examinations (57 percent). The second most frequent category of illness or injury diagnosed by pediatricians were diseases of the respiratory system (28 percent). Acute pharyngitis, acute tonsillitis, acute upper respiratory infection, and bronchitis, unqualified, comprised over one-half (60 percent) of the diagnoses associated with diseases of the respiratory system.

Further information abstracted from the Patient Record shows that the majority of visits (91 percent) to pediatricians were made by patients who had seen the physician before (table D).

Table D. Percent distribution of patient visits to pediatricians by patient's prior visit status: United States, 1975

Patient's prior-visit status	Percent distribution
Total	100.0
New patient	9.2
Old patient, new problem	41.5
Old patient, old problem.....	49.3

However, the percentage of *new* problems presented to pediatricians (51 percent) proportionately exceeded that for all physicians (38 percent).

Further reflecting the large number of visits to pediatricians for routine examinations, history or examinations (either limited or general) were the most common diagnostic services provided (table 3). The proportion of visits at which history or examinations were performed was generally higher for pediatricians than for all physicians. Likewise the percentage of visits where medical counseling was a significant part of the office visit exceeded the percentage for all physicians. On the other hand, the pediatrician fell below the overall average in the proportion of visits involving blood pressure checks, office surgery, x-rays, and the prescription of drugs. The relatively large proportion of visits to pediatricians at which immunizations or desensitizations were provided (23 percent) reflects the age composition of patients.

The duration of the visit represents the amount of time spent by the patient in face-to-face contact with the physician. The average encounter time between pediatricians and their patients was approximately 12 minutes, as compared to an average time duration of 15 minutes per visit for all physicians.

Finally, data on disposition (table 3) reveal that pediatricians, when compared to all physicians, were more likely to have a telephone followup and less likely to schedule a return visit, thus indicating acute, self limiting problems characteristic of children. No followup was planned after 24 percent of the visits, thus reflecting the large amount of well-child care occurring at ambulatory pediatric office visits.

Table 1. Number, percent, and cumulative percent of office visits to pediatricians, by the most common patient problems, complaints, or symptoms: United States, 1975

Most common patient problems, complaints or symptoms (NAMCS code)	Number of visits in thousands	Percent of visits ¹	Cumulative percent
Well-baby examination906	6,233	13.4	13.4
General medical examination900	4,687	10.0	23.4
Cough.....311	3,425	7.3	30.7
Fever.....002	3,170	6.8	37.5
Visit for medication910	2,859	6.1	43.6
Throat soreness520	2,439	5.2	48.8
Earache735	2,001	4.3	53.1
Allergic skin reactions112	1,662	3.6	56.7
Cold312	1,464	3.1	59.8
Required physical examination901	974	2.1	61.9
Abdominal pain.....540	764	1.6	63.5
Wounds of skin.....116	745	1.6	65.1
Nausea and vomiting572	571	1.2	66.3
Problems of lower extremity400	531	1.1	67.4

¹ Based on a total of 46,684,000 office visits.

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-----	*

Table 2. Number and percent of office visits to pediatricians, by principal diagnoses most frequently rendered by the physician: United States, 1975

Principal diagnoses most frequently rendered by the physician (ICDA code)	Number of visits in thousands	Percent of visits ¹
Infective and parasitic diseases 001-136	3,286	7.0
Streptococcal sore throat and scarlet fever 034	771	1.7
Other viral diseases 079	754	1.6
Diseases of nervous system and sense organs 320-389	4,625	9.9
Otitis media 381	3,795	8.1
Diseases of respiratory system 460-519	13,220	28.3
Acute pharyngitis 462	1,839	3.9
Acute tonsillitis 463	1,477	3.2
Acute laryngitis and tracheitis 464	530	1.1
Acute upper respiratory infection 465	2,944	6.3
Bronchitis, unqualified 490	1,731	3.7
Asthma 493	729	1.6
Hay fever 507	981	2.1
Diseases of skin and subcutaneous tissue 680-709	2,847	6.1
Other eczema and dermatitis 692	1,577	3.4
Symptoms and ill-defined conditions 780-796	1,967	4.2
Observation, without need for further medical care 793	726	1.6
Accidents, poisoning, and violence 800-999	2,174	4.7
Special conditions and examinations without sickness Y00-Y13	15,137	32.4
Medical or special examination Y00	12,462	26.7
Prophylactic inoculation and vaccination Y02	1,667	3.6
Medical and surgical aftercare Y10	841	1.8

¹Based on a total of 46,684,000 office visits.

Table 3. Number and percent distributions of office visits to pediatricians by selected diagnostic or therapeutic services ordered or provided and disposition of patient: United States, 1975

Selected diagnostic or therapeutic services ordered or provided and disposition of patient	Number of visits in thousands	Percent distributions ¹
<u>Diagnostic services</u>		
Limited history/exam.....	19,136	41.0
General history/exam.....	15,612	33.4
Clinical lab test.....	10,442	22.4
Blood pressure check.....	3,612	7.7
Vision test.....	1,955	4.2
X-ray.....	1,933	4.1
Hearing test.....	1,277	2.7
<u>Therapeutic services</u>		
Drug prescribed.....	19,235	41.2
Immunization/desensitization.....	10,693	22.9
Medical counseling.....	7,322	15.7
Injection.....	4,340	9.3
Office surgery.....	1,482	3.2
None.....	1,339	2.9
<u>Disposition of patient</u>		
No followup planned.....	11,005	23.6
Return at specified time.....	20,795	44.5
Return if needed.....	11,015	23.6
Telephone followup planned.....	4,597	9.9
Referred to other physician or agency.....	1,365	2.9

¹ Percents may total more than 100.0 since more than one treatment or more than one disposition could be given at a single visit.

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 error of estimated number of office visits

Estimated office visits 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).

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,

Table II. Approximate standard errors of percentages for estimated number 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
	Standard error expressed 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).

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.

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