

Patterns of Ambulatory Care in Pediatrics: The National Ambulatory Medical Care Survey United States, January 1980–December 1981

A profile of pediatric medical practice is developed using data on visits to office-based physicians collected during the National Ambulatory Medical Care Survey in 1980 and 1981. Descriptive statistics highlight physician and practice characteristics, patient characteristics, and aspects of patient condition and management. The first group includes analyses of visit data according to the type and location of the physician's practice, and sex and age of the physician. The demographic characteristics of patients visiting pediatricians are also explored. Under patient condition and management statistics are presented on patients' reasons for visit, principal diagnoses rendered by physicians, diagnostic services, medication and nonmedication therapy, and duration and disposition of the visit.

**Data From the National Health Survey
Series 13, No. 75**

DHHS Publication No. (PHS) 84-1736

U.S. Department of Health and Human
Services
Public Health Service
National Center for Health Statistics
Hyattsville, Md.
October 1983

Copyright Information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Suggested Citation

National Center for Health Statistics, B. K. Cypress: Patterns of ambulatory care in pediatrics, the National Ambulatory Medical Care Survey, United States, January 1980–December 1981. *Vital and Health Statistics. Series 13, no. 75.* DHHS Pub. no. (PHS) 84–1736. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1983

Library of Congress Cataloging in Publication Data

Cypress, Beulah K.

Patterns of ambulatory care in pediatrics.

(Data from the national health survey. Series 13 ; no. 75) (DHHS publication ; no. (PHS) 83–1736)

Includes bibliographical references.

1. Ambulatory medical care for children—United States—Utilization—Statistics. 2. Physician services utilization—United States—Statistics. 3. Children—Diseases—United States—Statistics. 4. Health surveys—United States. 5. United States—Statistics, Medical. I. National Center for Health Statistics (U.S.) II. The national ambulatory medical care survey, January 1980–December 1981. III. Title.

IV. Series: Vital and health statistics. Series 13, Data from the national health survey ; no. 75.

V. Series: DHHS publication ; no. (PHS) 83–1736.

RJ102.C95 1983 362.1'9892 83–17204

ISBN 0–8406–0285–0

National Center for Health Statistics

Manning Feinleib, M.D., Dr.P.H., *Director*

Robert A. Israel, *Deputy Director*

Jacob J. Feldman, Ph.D., *Associate Director for Analysis and Epidemiology*

Garrie J. Losee, *Associate Director for Data Processing and Services*

Alvan O. Zarate, Ph.D., *Assistant Director for International Statistics*

E. Earl Bryant, *Associate Director for Interview and Examination Statistics*

Robert L. Quave, *Associate Director for Management*

Gail F. Fisher, Ph.D., *Acting Associate Director for Program Planning, Evaluation, and Coordination*

Monroe G. Sirken, Ph.D., *Associate Director for Research and Methodology*

Peter L. Hurley, *Associate Director for Vital and Health Care Statistics*

Alice Haywood, *Information Officer*

Vital and Health Care Statistics Program

Peter L. Hurley, *Associate Director*

Gloria Kapantais, *Assistant to the Director for Data Policy, Planning and Analysis*

Division of Health Care Statistics

W. Edward Bacon, Ph.D., *Director*

Joan F. Van Nostrand, *Deputy Director*

James E. Delozier, *Chief, Ambulatory Care Statistics Branch*

Contents

Introduction	1
Purpose and background	1
Scope of the survey	1
Source and limitations of the data	1
Visits by specialty	1
Physician and practice characteristics	3
Type of practice	3
Location of practice	5
Physician age and sex	5
Patient characteristics	8
Sex, race, and ethnicity	8
Visit rates	8
Patient condition and management	11
Sex and age of the patient	11
Prior visit status	14
Reason for visit and diagnostic services	14
Principal diagnosis and therapy, duration, disposition	14
Conclusion	16
References	17
List of detailed tables	18
Appendixes	
I. Technical notes	40
II. Definitions of terms	47
III. Survey instruments	50
IV. American Hospital Formulary Service Classification System and therapeutic category codes	60
List of figures	
1. Percent distribution of office visits, by specialty: United States, January 1980–December 1981	2
2. Percent of office visits to pediatricians, by type of practice and age of physician: United States, January 1980–December 1981	7
3. Average annual rate of office visits to pediatricians, by age of patient: United States, January 1980–December 1981	9
4. Average annual rate of office visits to pediatricians, by race and age of patient: United States, January 1980–December 1981	10
5. Percent of office visits to pediatricians, by selected major reasons for visit and patient age: United States, January 1980–December 1981	12
List of text tables	
A. Percent distribution of office visits by physician specialty, according to selected age groups of patients: United States, 1975 and 1980–81	2

B. Annual rate of office visits for 1975 and average annual rate for 1980–81, by age of patient and physician specialty: United States, 1975 and 1980–81	2
C. Number of office visits to pediatricians by location of physician's practice and percent distribution by type of practice, according to location of physician's practice: United States, January 1980–December 1981.....	3
D. Number of office visits to pediatricians, number and percent of drug visits, number of drugs mentioned, drug mention rate per visit, and drug intensity rate per drug visit, by type and location of physician's practice: United States, January 1980–December 1981	4
E. Average number of office visits per week and mean duration of visits to pediatricians, by age and sex of physician: United States, January 1980–December 1981.....	5
F. Number of office visits to pediatricians, number and percent of drug visits, number of drugs mentioned, drug mention rate per visit, and drug intensity rate per drug visit, by age and sex of physician: United States, January 1980–December 1981	6
G. Annual visit rate by age of patient, and percent of office visits to pediatricians, by selected characteristics: United States, 1975 and 1980–81	13
H. Number of office visits to pediatricians, number and percent of drug visits, number of drugs mentioned, drug mention rate per visit, and drug intensity rate per drug visit, by selected characteristics: United States, January 1980–December 1981	14
J. Mean duration of office visits to pediatricians, by selected principal diagnosis categories and prior visit status: United States, January 1980–December 1981.....	15

Symbols

- Data not available
 - ... Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standards of reliability or precision
 - # Figure suppressed to comply with confidentiality requirements
-

Patterns of Ambulatory Care in Pediatrics

The National Ambulatory Medical Care Survey

by Beulah K. Cypress, Ph.D., Division of Health Care Statistics

Introduction

Purpose and background

This report is a presentation of national estimates of the use of ambulatory medical care services provided by nonfederally employed office-based pediatricians in the conterminous United States during the calendar years 1980–81. It is the second in a series of reports based on the visit characteristics of various medical and surgical specialties. The data were gathered by the National Center for Health Statistics by means of the National Ambulatory Medical Care Survey, a sample survey of physicians' office visits conducted annually through 1981 by the Division of Health Care Statistics. Data collection and processing for the 1980 and 1981 National Ambulatory Medical Care Surveys were the responsibility of the National Opinion Research Center at the University of Chicago. Sample selection was accomplished with the assistance of the American Medical Association and the American Osteopathic Association.

A brief report based on 1975 estimates of visits to pediatricians was published in *Advance Data from Vital and Health Statistics* No. 13.¹ However, because of the revision of the reason for visit coding system in use in 1977 and of the *International Classification of Diseases* in use in 1979, data from that report may not be strictly comparable to those in this report. Summary statistics for 1979, including selected characteristics of visits to pediatricians among other specialists, were presented in *Vital and Health Statistics*, Series 13, No. 66.²

Detailed information on the background and methodology of the survey was published in *Vital and Health Statistics*, Series 2, No. 61.³ A description of the 1980 and 1981 surveys, including statistical design, data collection and processing, and estimation procedures, may be found in appendix I of this report. Technical details regarding reliability of estimates are also given in appendix I. Definitions of terms used in the survey are provided in appendix II. Facsimiles of survey instruments appear in appendix III. Prior to data presentation, the scope of the survey and limitations of the data are described briefly to assist the reader in interpreting the estimates.

Scope of the survey

The basic sampling unit for the National Ambulatory Medical Care Survey (NAMCS) is the physician-patient encounter or visit. The current scope of NAMCS includes all office visits within the conterminous United States made by ambulatory patients to nonfederally employed, office-based physicians as

classified by the American Medical Association or the American Osteopathic Association. The NAMCS physician universe excludes anesthesiologists, pathologists, and radiologists, and physicians principally engaged in teaching, research, or administration. Telephone contacts and visits conducted outside the physician's office also are excluded.

Source and limitations of the data

The data in this report are based on information obtained from a patient encounter form, the Patient Record (see appendix III), for a sample of visits provided by a national probability sample of office-based physicians. The combined samples for the 1980 and 1981 NAMCS included 5,805 physicians, 1,124 of whom were ineligible because they were out of scope at the time of the survey. Of 4,681 eligible physicians, 3,676 (78.5 percent) participated (see appendix I). There were 414 pediatricians in the sample of whom 83 were out of scope. Of 331 eligible pediatricians, 289 participated (87.3 percent).

Sample physicians listed all office visits during a randomly assigned 7-day reporting period. During the 2-year period, information was recorded on Patient Records for a systematic random sample of 89,447 visits including 9,030 visits to pediatricians.

The 1980 and 1981 NAMCS were conducted in identical fashion using the same instruments, definitions, and procedures. The 2 years of data were combined to provide more reliable estimates. Therefore, the reader should note that estimates of number of visits and drug mentions contained in this report are for a 2-year period, but ratios and rates represent average annual estimates.

The information in this report is derived from a complex sample survey, and the appendixes should be reviewed to insure a proper understanding and interpretation of the statistical estimates presented. Since the statistics are based on a sample of office visits rather than on all visits, they are subject to sampling errors. Therefore, particular attention should be paid to the section "Reliability of estimates." Charts on relative standard errors and instructions for their use are also given.

Visits by specialty

The percent distribution of 1980–81 office visits, according to medical and surgical specialty, is illustrated in figure 1.

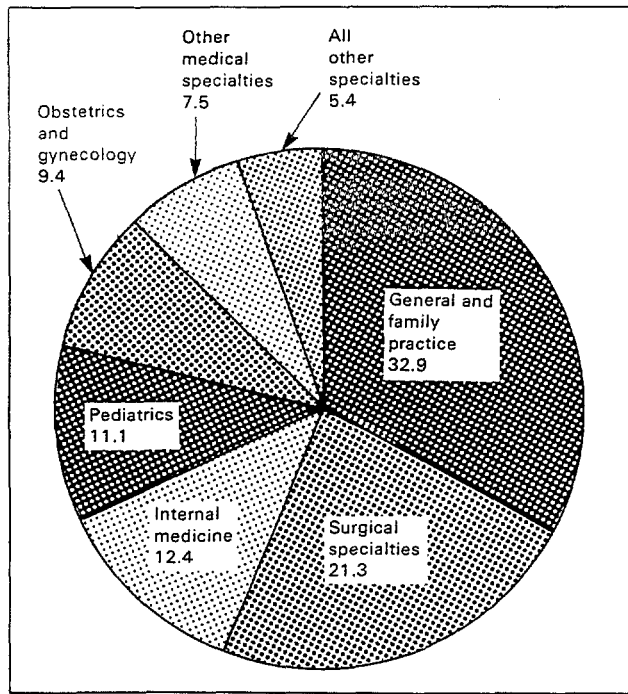


Figure 1. Percent distribution of office visits by specialty: United States, January 1980-December 1981

Pediatrics accounted for 11 percent of the visits, the third highest proportion among individual specialties. Visits to pediatricians increased from 8 percent of the visits to all physicians in 1975 to 11 percent in 1980-81.²

Changes in the utilization of pediatricians and other specialists by children under 15 years of age during these two time periods is evident in table A. Within each age group the proportion treated by pediatricians increased. Some of the decrease in visits to general and family practice physicians may be attributed to a corresponding decrease in the proportion of these doctors in office-based practice. They constituted 28 percent of the NAMCS universe in 1975, compared with 24 percent in 1980-81. However, the proportion of pediatricians in the NAMCS universe increased only from 6 percent to 7 percent. Thus, it is not

likely that the 38 percent visit increase, from 46,684,000 in 1975 to an average of 64,381,000 in 1980-81, was due solely to an increase in the number of physicians in pediatric practice. An examination of visit rates by children under 15 years of age reveals statistically significant differences between 1975 and 1980-81 (table B). The data suggest that a shift in visits from other specialties to pediatrics may have been partially responsible for the increased share of pediatricians' visits. This reasoning is based on the fact that visit rates for the three age groups were higher in 1980-81 than in 1975, and that pediatrics showed an increase while the rates of all other specialties decreased.

The following sections of this report describe ambulatory care provided by pediatricians in terms of physician and practice characteristics, patient characteristics, and patient condition and management. The profile is developed within the structure of the variables used in the NAMCS Patient Record form and data collected in the physician's induction interview (see appendix III). It should be kept in mind when reading this report that data are restricted to visits to pediatricians. Analysis of data on children's visits to other specialists may result in different statistics. The utilization of all physicians in 1975 by children and young adults is described in *Vital and Health Statistics*, Series 13, No. 39.⁴

Table B. Annual rate of office visits for 1975 and average annual rate for 1980-81 by age of patient and physician specialty: United States, 1980-81

Physician specialty	Age of patient		
	Under 2 years	2-5 years	6-14 years
All specialties			
Rate per 100 population			
1975.....	432	206	140
1980-81.....	510	220	144
Pediatrics			
1975.....	244	106	45
1980-81.....	351	133	57
All other specialties			
1975.....	188	101	95
1980-81.....	159	87	86

Table A. Percent distribution of office visits by physician specialty, according to selected age groups of patients: United States, 1975 and 1980-81

Physician specialty	Under 2 years		2-5 years		6-14 years	
	1975	1980-81	1975	1980-81	1975	1980-81
Percent distribution						
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
General and family practice.....	31.7	20.9	31.9	23.0	36.7	28.2
Pediatrics.....	56.5	68.9	51.1	60.5	32.4	40.0
Obstetrics and gynecology.....	*1.9	*0.5	*0.6	*0.2	*0.9	0.5
General surgery.....	*1.4	1.5	*1.7	1.8	3.8	2.7
Internal medicine.....	*0.8	0.7	*1.4	1.0	3.1	2.2
Orthopedic surgery.....	3.4	1.5	2.3	1.7	4.0	5.2
Ophthalmology.....	*1.0	0.8	1.9	2.0	5.6	5.0
Otolaryngology.....	*1.3	1.4	4.6	4.1	5.1	3.7
Dermatology.....	*0.5	*0.6	*0.5	1.5	2.2	4.6
Psychiatry.....	*0.0	*0.3	*0.3	*0.3	1.4	1.5
Other.....	*1.5	2.9	3.7	3.9	4.8	6.4

Physician and practice characteristics

Type of practice

The organization of medical practice has changed significantly in the United States. In 1975 the Center for Health Services Research of the American Medical Association reported an 8 percent average annual growth rate in group^a medical practice over a 40-year period.⁵ A decline in the proportion of visits to physicians in solo practice since 1975 reflects a continued trend toward multiple practice. In 1980–81 physicians in solo practice accounted for 38 percent of all visits to pediatricians (table C), a decrease from the 42 percent reported in NAMCS in 1975.¹ However, there were regional differences in the distribution of visits by type of practice. Visits to multiple-member practices were more likely in the South and West Regions where 71 percent and 69 percent of the visits, respectively, were made to such offices. But in the Northeast and North Central Regions less than average proportions of visits (62 percent for all pediatricians) were to group practices (52 percent and 57 percent, respectively). Some of the increase in nonsolo practice visits in the NAMCS data from 1975 to 1980–81 may be due to the higher proportion of all visits in the South Region (38 percent, compared with 28 percent in 1975) because this region was also higher than average in its proportion of multiple practice visits.

Visits to physicians in metropolitan and nonmetropolitan areas were similarly distributed by type of practice. However, there was a higher proportion of visits to pediatricians in nonmetropolitan areas (15 percent) in 1980–81 than in 1975 (11 percent).

Selected characteristics of all visits and of visits distributed by type of practice are shown in table 1. On the average 92 percent of the visits to pediatricians included patients under 15 years of age. New patients accounted for the smallest proportion of visits (9 percent). However, there were no statistically significant differences in the proportions by age or prior visit status, according to the type of practice. Acute problems were the major reasons in 54 percent of all visits. However, compared with patients visiting solo practitioners, patients seen by physicians having other practice arrangements were more likely to present acute problems. In addition, their reasons for visiting physicians were more likely to be expressed as symptoms. Visits to solo practitioners were more likely to be motivated by routine chronic problems than those to other pediatricians were.

^aThe American Medical Association defines group practice as the provision of medical services by three or more physicians. In this report the terms "group" and "multiple" practice are used to describe provision of medical services by more than one physician.

Table C. Number of office visits to pediatricians by location of physician's practice, and percent distribution by type of practice, according to location of physician's practice: United States, January 1980–December 1981

Location of practice	Number of visits in thousands	Type of practice		
		Total	Solo	Other ¹
Percent distribution				
All visits.....	128,762	100.0	37.6	62.4
Geographic region				
Northeast.....	35,724	100.0	48.3	51.7
North Central.....	26,897	100.0	42.8	57.2
South.....	48,844	100.0	29.1	70.9
West.....	17,297	100.0	31.2	68.8
Area				
Metropolitan.....	110,071	100.0	38.0	62.0
Nonmetropolitan.....	18,691	100.0	35.5	64.5

¹Includes partnership, group, and other types of practice.

In NAMCS patients' reasons for visit, expressed as closely as possible in the patients' own words, are recorded by the physician in item 6 of the Patient Record form. The reason given by the patient (or the accompanying adult in the case of a child), which in the physician's judgment is most responsible for the visit, is the first-listed or principal reason for the visit. Reasons for visit are coded and grouped in eight modules according to a classification system that is detailed in *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶ These modules are listed in table 1. (Specific reasons for visit are discussed in the section "Patient condition and management.") The symptom module and the diagnostic, screening, and preventive module accounted for 83 percent of all visits. Patients visiting multiple practices were more likely to present reasons in the symptom module than those visiting solo practices were, but other differences were not statistically significant. The higher proportion of symptomatic reasons may be a reflection of the higher proportion of acute problems associated with group practice visits.

The diagnostic services ordered or provided by pediatricians most often were the limited history and/or examination (58 percent), general history and/or examination (29 percent), and the clinical laboratory test (26 percent). Of these three types of services, physicians differed only in their use of the limited history and/or examination, which was more likely to be used by physicians in multiple practice than by those in solo practice. Compared with visits to other physicians, blood pressure checks were proportionately infrequent in pediatricians' offices. Only 9 per-

cent of the visits included this measurement. However, solo practitioners were more likely to use it for diagnosis than other pediatricians were (10 percent of the former's visits, compared with 8 percent of the latter's, a small but statistically significant difference). However, when all types of diagnostic services are considered, proportionately more visits to pediatricians in multiple practice than to those in solo practice included *some* type of diagnostic service because the proportion of their visits that had no services was smaller.

Nonmedication therapy was not provided in 60 percent of the pediatricians' visits. In contrast to diagnostic services, solo practitioners were more likely to offer *some* type of nonmedication therapy than their counterparts in group practice were. This was usually in the form of diet or medical counseling.

Medication was the most common form of therapy in pediatric practice. One or more drugs were prescribed in 72 percent of all visits (table D). Estimates of drug utilization in NAMCS are based on the physicians' entries on the Patient Record form. These entries may be brand^b or generic names of prescription or over-the-counter drugs, or a therapeutic effect. Drug mentions include all new or continued drugs listed in item 11. Physicians may make up to eight such entries. The methodology used to collect and process this drug information is described in *Vital and Health Statistics, Series 2, No. 90*.⁷

A single drug was more commonly mentioned during visits (41 percent) than multiple drugs were (table 1). This conservative use of medication is reflected in the rates of drug use shown in table D.

In addition to counting the number of drugs prescribed during a visit and the percent of visits in which one or more drugs were ordered (drug visits), drug utilization may be measured by

two utilization rates. The drug mention rate is the number of drug mentions divided by all visits; the drug intensity rate is the number of drug mentions divided by the number of *drug* visits. Differences in the proportions of drug visits or rates by type of practice were not statistically significant.

Drug mentions are listed by the therapeutic effects they are intended to produce in table 2. Therapeutic categories are based on the American Hospital Formulary Service classification system (AHFS) (see appendix IV).⁸ In the NAMCS drug file each drug entry was assigned to one AHFS category although for some drugs more than one therapeutic effect is possible. Only three categories accounted for about 63 percent of all drugs used by pediatricians. Anti-infectives was the largest group (30 percent) followed by serums, toxoids and vaccines (17 percent), and antihistamines (15 percent). Anti-infectives consisted chiefly of antibiotics and sulfonamides. Serums, toxoids and vaccines consisted chiefly of substances used for childhood immunizations. Central nervous system drugs were mentioned during 5 percent of the visits. These were usually analgesics and antipyretics. (Specific drugs are discussed in the section "Patient condition and management.") With regard to therapeutic categories, the physician's type of practice had no observable effect on the utilization of drugs. The drugs mentioned proportionately most often during visits were clearly related to the most frequent problems presented by pediatric patients. The principal (first-listed) diagnoses rendered by physicians during visits are listed by categories based on the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*⁹ in table 1. The leading category was the supplementary classification (31 percent) which includes a large number of routine infant or child health checks (also called well-baby examination) and general medical examinations. (These specific diagnoses as well as others are discussed in the section "Patient condition and management.") The next two major categories were diseases of the respiratory system (28 percent) and diseases of the nervous

^bThe use of brand or trade names is for identification purposes only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

Table D. Number of office visits to pediatricians, number and percent of drug visits, number of drug mentions, drug mention rate per visit, and drug intensity rate per drug visit, by type and location of physician's practice: United States, January 1980–December 1981

Type and location of practice	Number of visits in thousands	Drug visits in thousands ¹	Percent of drug visits	Number of drug mentions in thousands	Drug mention rate per visit ²	Drug intensity rate per drug visit ³
Type of practice						
All types of practice	128,762	92,500	71.8	146,515	1.14	1.58
Solo	48,408	35,541	73.4	55,276	1.14	1.56
Other ⁴	80,354	56,959	70.9	91,239	1.14	1.60
Geographic region						
Northeast	35,724	26,312	73.7	39,004	1.09	1.48
North Central	26,897	19,081	70.9	30,124	1.12	1.58
South	48,844	36,984	75.7	62,288	1.28	1.68
West	17,297	10,123	58.5	15,099	0.87	1.49
Area						
Metropolitan	110,071	79,527	72.3	125,733	1.14	1.58
Nonmetropolitan	18,691	12,973	69.4	20,782	1.11	1.60*

¹A visit in which one or more drugs were prescribed.
²Drug mentions divided by number of visits.
³Drug mentions divided by number of drug visits.
⁴Includes partnership, group, and other types of practice.

system and sense organs (15 percent, chiefly otitis media). There were no statistically significant differences in the proportions of diagnosis categories by type of practice.

The majority of visits in which pediatricians had a face-to-face encounter with the patient were relatively short (less than 11 minutes, table 1). Visits in which patients were seen only by a staff member accounted for only 4 percent of all visits regardless of the type of practice. The average duration of a visit was 12.8 minutes, which is less than the NAMCS average for all specialties.

In about half of all the visits, appointments were scheduled for return consultation. Instructions to return at a specified time were more likely to be given when patients visited solo physicians than when other types of practice were involved. In visits to physicians in multiple practice the instruction to return if needed was the more common culmination of the visit. This disposition is generally used in visits for acute, self-limited conditions that were shown previously to be associated with pediatricians in multiple practice.

Location of practice

Pediatricians in the South and West Regions saw proportionately more new patients and treated proportionately more patients with acute problems than physicians in the Northeast and North Central regions did (table 1). It was shown previously that care of acute problems is a major component of health care delivery in multiple pediatric practice. Also, as shown in table C, the South and West Regions had significantly higher proportions of visits to physicians in multiple practice than other regions did.

On the average, nonillness care was the major reason for visit in about 1 of 3 visits, but physicians in the Northeast and North Central Regions were more likely to encounter such reasons than those in the South and West Regions were. In the NAMCS data there is usually a positive correlation between the diagnostic general history and/or examination and nonillness care. This is apparent in the data for the Northeast Region, which had a relatively high proportion of visits for nonillness care and also the highest proportion of visits including a general history and/or examination (37 percent) among the four geographic regions. Similarly, blood pressure measurement, which is more likely to be included when an extensive workup is done than in other children's visits, was proportionately higher in the Northeast and North Central Regions than in the other two regions.

Pediatricians in the South exceeded those in all other regions in the proportion of visits with no nonmedication therapy, while those in the Northeast and West were predominant in their provision of family or social, and medical counseling. Physicians in the West Region had the highest proportion of visits with no medication therapy (42 percent) or, expressed in terms of drug visits, the lowest proportion of drug visits (59 percent, table D). A similar result was observed for general and family practice physicians in the West Region.¹⁰

The practice profiles of pediatricians in metropolitan and nonmetropolitan areas varied in only a few aspects. Physicians in metropolitan areas were more likely than those in nonmetropolitan areas were to perform general examinations and to meas-

ure blood pressure. They also treated a higher proportion of patients visiting for diseases of the respiratory system. There were proportionately more visits in nonmetropolitan areas in which there was no face-to-face encounter between patient and physician (9 percent, compared with 3 percent in metropolitan areas). Other differences were not statistically significant.

Physician age and sex

The relationship of the physician's age and sex to the content and organization of pediatric practice is explored in this section. Similar to the findings in general and family practice,¹⁰ pediatricians 45–54 years of age had the highest average number of weekly visits while physicians over 55 years of age had the lowest (table E). In both specialties male physicians exceeded female physicians in the average number of visits per week. But unlike general and family practitioners, weekly visits to pediatricians under 45 years of age and those older were not as disparate. The mean duration of visits did not vary significantly for different age groups, but female pediatricians (like female general and family practice physicians) spent more time, on the average, with patients than male physicians did.

Characteristics of visits to pediatricians are shown for physician age and sex groups in table 3, and drug mentions are listed by therapeutic categories in table 4. The reader will note that in previous tables the rounded total of visits was about 128.8 million and the number of drug mentions was 146.6 million. However, in tables 3 and 4 the comparable rounded totals are 126.7 million and 144.0 million, respectively. This is because tables relating to the age and sex of the physician do not include visits to doctors of osteopathy because data on the age of these physicians were unavailable. It is not likely that the distribution of visits, with the omission of the 2.1 million visits made in 1980–81 to doctors of osteopathy in pediatric practice would differ significantly from the distribution that includes them.

It was concluded in an earlier study¹⁰ that much of the variation in the practice patterns of different age groups of general

Table E. Average number of office visits per week and mean duration of visits to pediatricians, by age and sex of physician: United States, January 1980–December 1981

<i>Age and sex of physician¹</i>	<i>Average number of visits per physician per week</i>	<i>Mean duration of visit in minutes</i>
Age		
All ages	106.9	12.8
Under 35 years	111.2	12.9
35–44 years	105.2	13.0
45–54 years	119.4	12.3
55–64 years	97.1	13.2
65 years and over	78.7	13.3
Sex		
Female	95.8	14.6
Male	108.9	12.5

¹Does not include doctors of osteopathy.

and family physicians could be attributed to the age of the patients likely to visit them. Because the age range of pediatricians' patients is relatively narrow, compared with the ages of patients in other practices, less variation by physician age can be expected.

However, there were some differences among age groups of pediatricians in proportions of visits by patient age, visit status, and major reason for visit. As a result, patient condition and treatment varied in tandem. In about 50 percent of the visits to pediatricians under 35 years of age the patients were infants under 2 years of age, compared with 39 percent in the next older group of physicians. The proportion of new patients (12 percent) visiting the youngest group of physicians also exceeded those of the next two older groups (9 percent and 7 percent, respectively). The youngest and the newest patients tend to dominate the caseloads of young physicians in most specialties.

The relative distribution of visits by major reason for visit did not differ significantly among physician age groups, but the oldest group (65 years of age and over) had proportionately less than average visits due to acute problems and proportionately more for nonillness care.

The type of health care sought by the patients of older physicians is reflected by higher than average proportions of visits classified in the diagnostic, screening, and preventive module of the RVC (37 percent) and in the supplementary classification of the ICD-9-CM (42 percent). Older physicians also included blood pressure checks in their workups proportionately more often than their younger counterparts did. This may also be a reflection of the age of their patients because the number of infants seen by younger physicians may contraindicate their use of this diagnostic tool. One or more forms of counseling (diet, family or social, medical) was included in at least 46 percent of the visits to physicians 65 years and over, a significantly higher proportion than any other group. Lest it be argued that direct patient counseling is a more likely event when older children are patients (as is the case for older physicians), it should be noted that physicians 45-64 years of age had approximately the same proportions of patients from 6 to 14 years of age as physicians

65 years and over did, but proportionately less counseling was given.

A single medication was more likely to be prescribed by physicians over 54 years of age than by younger physicians. As a result the drug mention and drug intensity rates of the older groups were lower than others (table F). Only 3 classes of drugs (serums, toxoids and vaccines; anti-infective agents; and anti-histamine drugs) accounted for more than 60 percent of the drug mentions regardless of the physician's age group (table 4). This is consistent with the narrow range of diagnoses made during visits (table 3).

Physicians under 35 years of age were less likely than other physicians were to offer nonmedication therapy because in 72 percent of their visits no nonmedication service was indicated. They were also less likely to treat patients with diseases of the respiratory system (18 percent, compared with 27 percent for the next older group); but more likely to see patients with diseases of the nervous system and sense organs (28 percent, compared with 15 percent).

Physicians under 45 years of age tended to instruct patients to return at a specified time proportionately more often than other physicians did, but because their proportion of visits by returning patients with old problems was not correspondingly higher it is not possible to determine whether the physician's instruction was instrumental in return visits.

A significant difference by type of practice among physician age groups is illustrated in figure 2. Proportions of visits to pediatricians in solo practice increase with the increasing age group of the physician, but the opposite is true for other types of practice. The trend towards multiple practice by more recent graduates of medical school was also observed in data on general and family practice.¹⁰ It can also be seen in table 3 that 78 percent of the visits to physicians over 65 years of age were to physicians practicing alone, compared with only 33 percent to those under 35 years of age.

The female-to-male ratio was higher for pediatricians than for other physicians in the NAMCS universe. Women consti-

Table F. Number of office visits to pediatricians, number and percent of drug visits, number of drug mentions, drug mention rate per visit, and drug intensity rate per drug visit, by age and sex of physician: United States, January 1980-December 1981

<i>Age and sex of physician¹</i>	<i>Number of visits in thousands</i>	<i>Drug visits in thousands¹</i>	<i>Percent of drug visits</i>	<i>Number of drug mentions in thousands</i>	<i>Drug mention rate per visit³</i>	<i>Drug intensity rate per drug visit⁴</i>
Age						
All ages.....	126,663	90,729	71.6	144,011	1.14	1.59
Under 35 years.....	15,701	10,604	67.5	16,899	1.08	1.59
35-44 years.....	38,868	27,632	71.1	44,563	1.15	1.61
45-54 years.....	43,827	32,583	74.3	54,579	1.25	1.68
55-64 years.....	21,420	14,658	68.4	20,594	0.96	1.40
65 years and over.....	6,847	5,253	76.7	7,376	1.08	1.40
Sex						
Female.....	17,336	13,344	77.0	23,110	1.33	1.73
Male.....	109,328	77,386	70.8	120,901	1.11	1.56

¹Does not include doctors of osteopathy.

²Visits in which one or more drugs were prescribed.

³Drug mentions divided by number of visits.

⁴Drug mentions divided by number of drug visits.

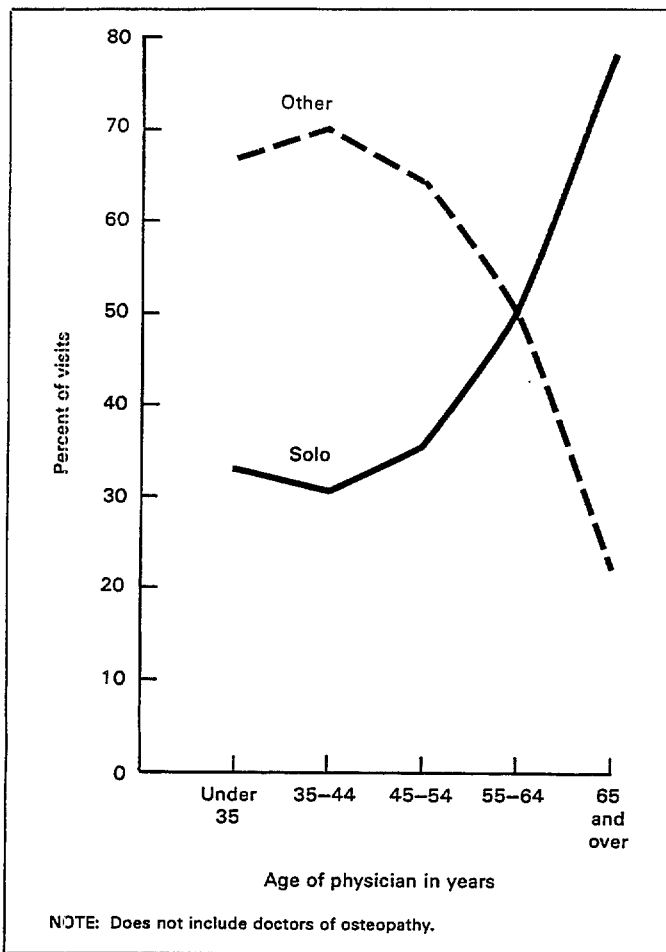


Figure 2. Percent of office visits to pediatricians, by type of practice and age of physician: United States, January 1980–December 1981

tuted 19 percent of the pediatricians in 1980–81, a larger proportion than the other specialties investigated. (The next largest was psychiatry, 10 percent, followed by dermatology, 8 percent). Of all female physicians in NAMCS, pediatricians were the largest group, 30 percent. This is not surprising because pediatrics has traditionally been a popular choice of female residents in medicine.¹¹

Although the average number of weekly visits to female pediatricians in 1980–81 was lower than that to males in the same specialty, it increased from 82.1 in 1977 to 95.8 in 1980–81 while that of male pediatricians remained about the same (108.0 and 108.9).

Unlike visits to other specialists,^{10,12} there was no difference between the proportions of visits to female and male pediatricians based on the sex of the patient (table 3). The tendency of female patients to visit female physicians apparently does not include children. However, female pediatricians saw proportionately more children under 6 years of age than their male counterparts did (72 percent, compared with 63 percent), and had proportionately more new patients (13 percent, compared with 8 percent). The female pediatricians in the NAMCS universe were younger than their male counterparts, and younger physicians tend to treat proportionately more young patients and new patients.

The pattern of illness presented by patients visiting physicians of both sexes did not vary to any great degree. Major reasons for visit, principal reason for visit modules, and principal diagnosis categories were proportionately similar. One exception was in the higher proportion of visits for diseases of the nervous system and sense organs to female pediatricians (21 percent, compared with 14 percent to male pediatricians).

However, there were some differences in the pattern of treatment based on the sex of the physician. Females chose to utilize the general history and/or examination in 43 percent of their visits; males used this technique in 27 percent. The limited history and/or examination was utilized by males in 60 percent of their visits, compared with 48 percent by females in pediatric practice. Females had higher proportions of visits that included blood pressure checks (12 percent, compared with 8 percent of male pediatricians' visits), diet counseling (17 percent, compared with 11 percent of male pediatricians' visits), and family or social counseling (8 percent, compared with 4 percent of male pediatricians' visits). Medication was a type of therapy more commonly used by female than by male pediatricians. About 77 percent of females' visits included one or more drugs, compared with 71 percent of males' (table F). Two or more drugs were prescribed in 42 percent of visits to females but in only 29 percent of those to males (table 3). Male pediatricians ordered no drugs or only one drug in 71 percent of their visits while the comparable proportion for females was 58 percent.

Similar to the visit patterns of general and family practitioners, female pediatricians spent more time, on the average, with patients than male pediatricians did. In contrast to males, females had a higher proportion of relatively long visits (16 minutes or longer, 25 percent, compared with 14 percent, respectively). Relatively short visits (10 minutes or less) accounted for 25 percent of females' visits but 53 percent of males'. Females were also more likely than males to schedule return appointments for their patients.

One apparent reversal of the general trend towards multiple practice was observed in the data on female pediatricians. A higher proportion (68 percent) of their visits were to physicians in solo practice than to those in other types of practice, as opposed to male pediatricians where only 34 percent of visits were to those in solo practice. Female pediatricians also differed from female general and family practitioners where the majority of visits were to physicians in multiple practice.¹⁰ It is possible that these data resulted from the higher concentration of visits to female pediatricians in the Northeast and North Central Regions (55 percent, table 3) where visits to physicians in solo practice were more common than those in the South and West Regions were (table C). The majority of visits to male pediatricians (53 percent) were in the South and West Regions. The greater proportion of visits to all pediatricians was in metropolitan, rather than nonmetropolitan areas, but visits to female pediatricians were more likely to be in metropolitan locations than those to males were (94 percent, compared with 84 percent, respectively). In this respect females in pediatric practice were similar to females in general and family practice.¹⁰ These results support the suggestion that female physicians prefer urban areas where services are available that enable them to perform both professional and family roles.

Patient characteristics

In the previous section the focus of this report was on the characteristics related to the physician. Profiles were developed based on the location of practice, age of the physician, and sex of the physician. In this section, the emphasis is on the demographic characteristics of patients seen by pediatricians. Statistics on the sex, race, and ethnicity of patients are presented by age of the patient in table 5. Visit rates are also shown in this table.

Sex, race, and ethnicity

The distribution of visits by sex of the patient closely parallels the distribution of children under 15 years of age in the population. Thus, pediatrics is the only one of the most frequently visited specialties where visits by males exceeded those by females. About 86 percent of the visits were made by white patients and 12 percent by black patients. By contrast, only 9 percent of all children under 15 years of age who visited all other specialties were black. Hispanic and non-Hispanic chil-

dren visited pediatricians in the same proportions as they did all other specialists, with about 6 percent Hispanic.

Visit rates

The majority of patients were children under 6 years of age (64 percent). Visit rates were highest for infants under 1 year old and declined with each older age group (figure 3 and table 5). Visit rates for white children exceeded those for black children during early infancy (under 1 year) and from 2 to 10 years of age (figure 4), but other differences between rates by race were not statistically significant.

The general rate of visits to pediatricians by children under 15 years of age increased from 82.7 per 100 population in 1975 to an average of 116.5 in 1980-81. This increase was apparent in each of the age groups listed in table G. The largest increase occurred in the rate for children under 2 years of age. One note of caution is needed when using these figures. The difference between the 2 years of data is statistically significant, but a comparison of two points in time does not necessarily indicate a trend.

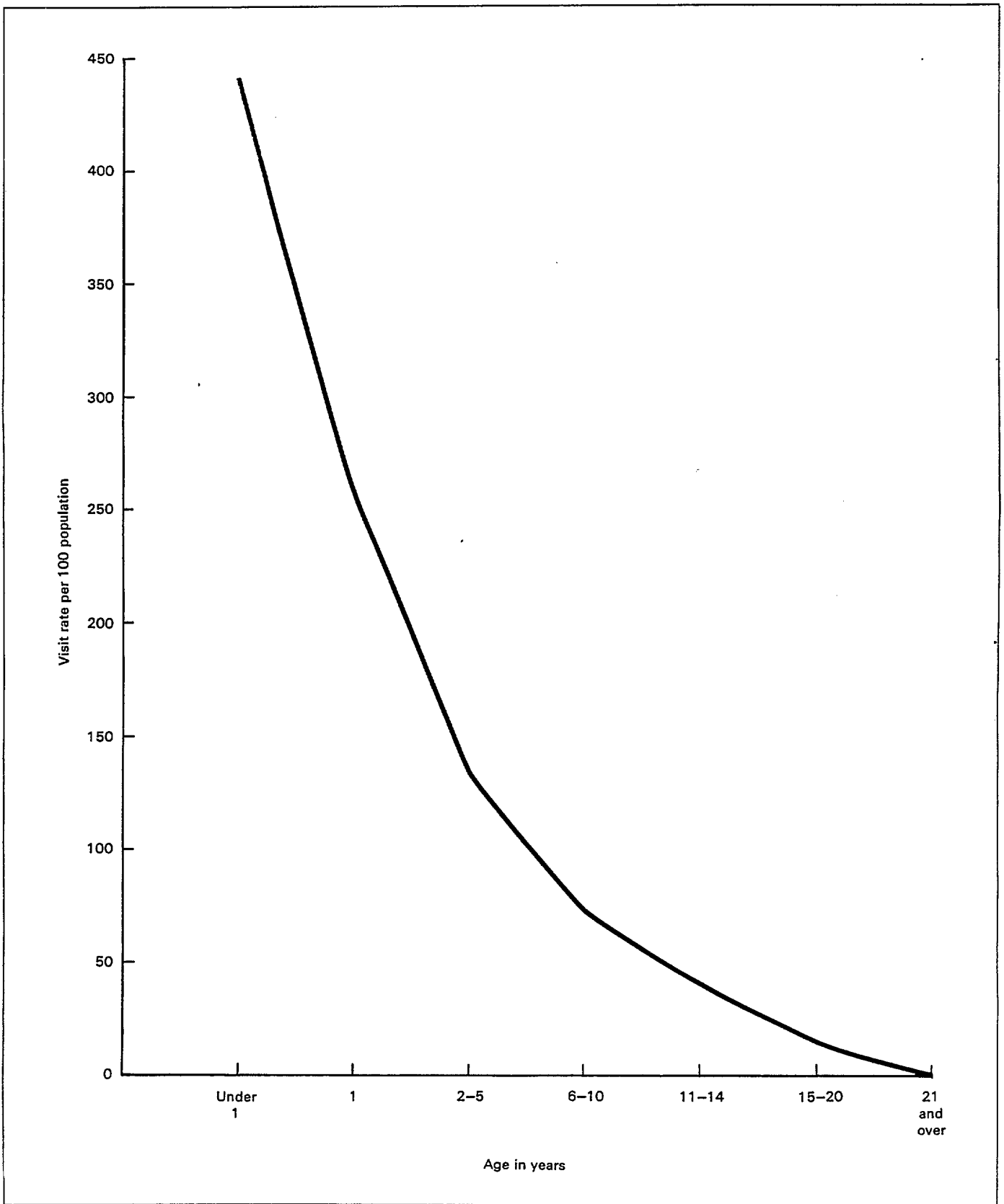


Figure 3. Average annual rate of office visits to pediatricians, by age of patient: United States, January 1980–December 1981

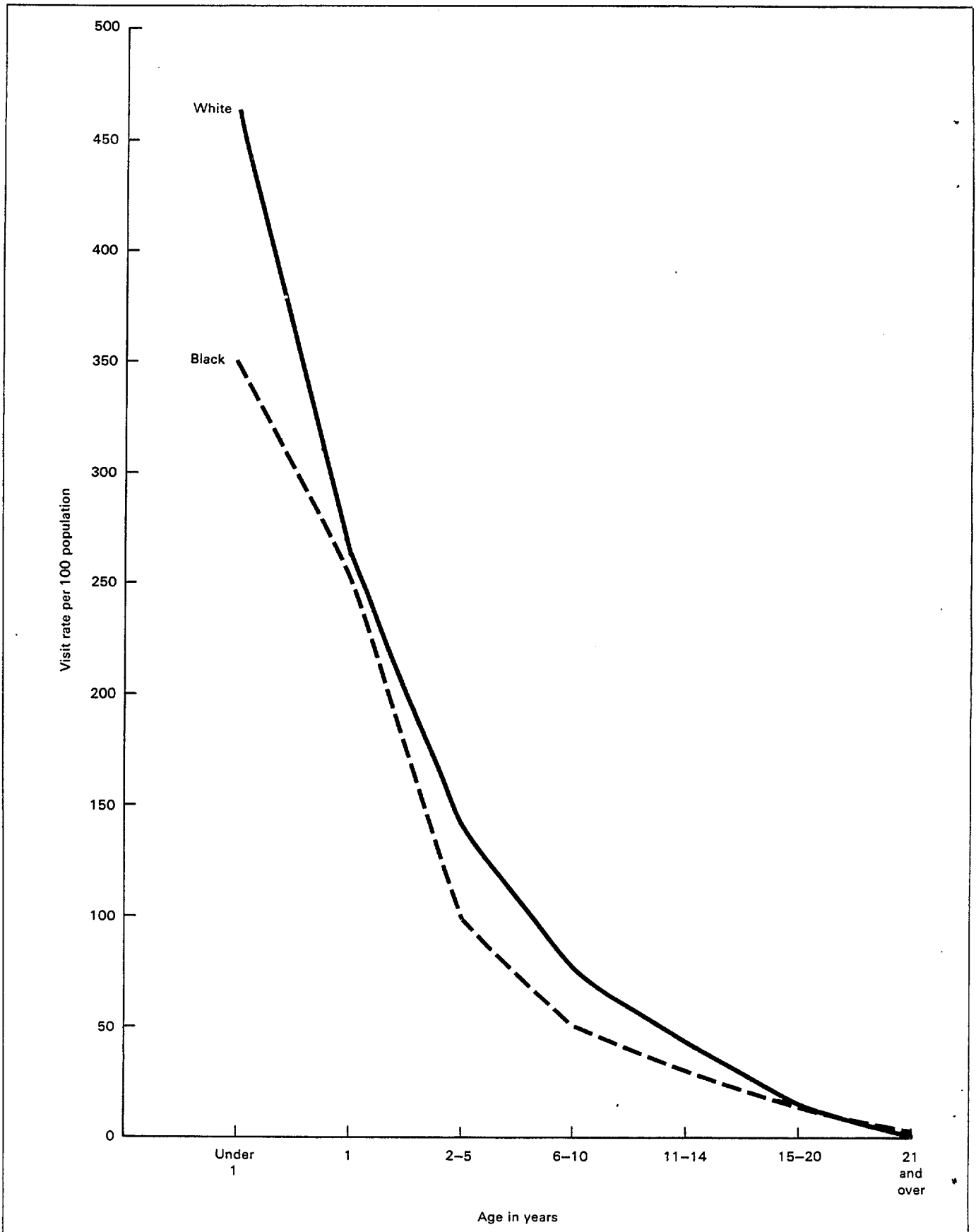


Figure 4. Average annual rate of office visits to pediatricians, by race and age of patient: United States, January 1980–December 1981

Patient condition and management

In this section, the clinical characteristics of visits are presented in relation to the sex, age, and prior visit status of patients. Condition of the patient is explored in tables 6–11 by means of patients' reasons for visit and physicians' diagnoses. In tables 12–16, statistics are presented on patient management exemplified by the pediatrician's use of diagnostic tools, nonmedication therapy, and medication therapy as well as the duration and disposition of the visit. In table 17, patients' reasons for visit are analyzed by the diagnostic services ordered or provided in their presence. The number of medications ordered or prescribed for patients with certain diagnoses are shown in table 18. To conclude the description of patient management, the duration and disposition of the visit appear with selected diagnosis categories in table 19.

Sex and age of the patient

Patterns of care differed minimally by sex of the patient, as may be expected with children's visits. There were no statistically significant differences in proportions of reasons for visit, principal diagnoses, visit status, diagnostic services, or therapy. Neither did the time spent with the patient nor the disposition of the visit differ according to the patient's sex. One of the reasons that patterns of ambulatory care are similar for boys and girls is the large amount of preventive care and treatment of acute, self-limited episodes of illness rendered by office-based pediatricians. Utilization of health care facilities is higher for boys than for girls under 15 years of age, however, when the illness or injury requires hospitalization.¹³

Infants under 12 months of age were most likely to be brought to the physician's office for nonillness care (55 percent of visits), (table 6). Acute problems caused 38 percent of their visits. But the ranks are reversed for older children where the majority of visits were caused by acute problems, with nonillness care the second leading major reason. These changes in the major reasons for visit by age of the patient are illustrated in figure 5. A small but gradual increase in visits for chronic problems may also be seen in the figure.

The epidemiological pattern of childhood is further demonstrated by the increasing proportions of visits by successively older age groups in the disease and treatment modules of the RVC. Visits classified in the disease module are usually return visits for previously diagnosed conditions; those in the treatment module often include therapy, such as allergy shots. The higher than average proportion of visits due to injuries

and adverse effects made by patients over 10 years old reflects increased participation in sports and recreational activities.

The most frequent specific reasons for visit are listed in table 7. The first 10 reasons accounted for about two-thirds of the visits. In 49 percent of the visits patients were brought to pediatricians for examinations or prophylactic inoculations. Another 35 percent of the patients presented symptoms of illness, such as fever, earache, cough, sore throat, or cold.

The most frequent reasons for visit for each age group are shown in table 8. The large number of examinations requested for patients is evident in every age group through 20 years. It is noteworthy that half of all visits by infants under 1 year were for the purpose of a well-baby examination. It is also interesting that allergy medication was among the leading reasons for visit beginning with the age group 6–10 years and it remained high on the list to adulthood.

A 1 to 1 correlation between reason for visit and diagnosis is not expected in NAMCS data. However, the principal diagnosis categories, shown in table 9, reflect the priority of patients' reasons. Diseases of the respiratory system and diseases of the nervous system and sense organs were the leading illness-related conditions requiring treatment by pediatricians for all age groups. However, the last category tended to decrease with increasing age group, with a high of 25 percent of the visits by 1-year olds to a low of 5 percent for young adults 15–20 years old. As expected, injury and poisoning accounted for a larger proportion of visits by patients 11–20 years of age than of those made by younger patients.

Specific principal diagnoses are shown in table 10 and classified by age groups in table 11. It is apparent that the relatively high proportion of visits in the category diseases of the nervous system and sense organs was due largely to otitis media. This condition accounted for 12 percent of all visits, but 23 percent of those by 1-year olds decreasing gradually to 4 percent of those by children 11–14 years of age. From infancy to 10 years of age it was the leading illness diagnosed by pediatricians. Otitis media was also the most frequent diagnosis made in 1975 when it constituted 8 percent of pediatricians' visits¹. A comparison of principal diagnosis categories in the 1975 NAMCS and the average of 1980–81 may be made using the data shown in table G. The differences between proportions of visits in the two time periods for otitis media and asthma are statistically significant, with both showing an increase. There was, however, a statistically significant decrease in visits for

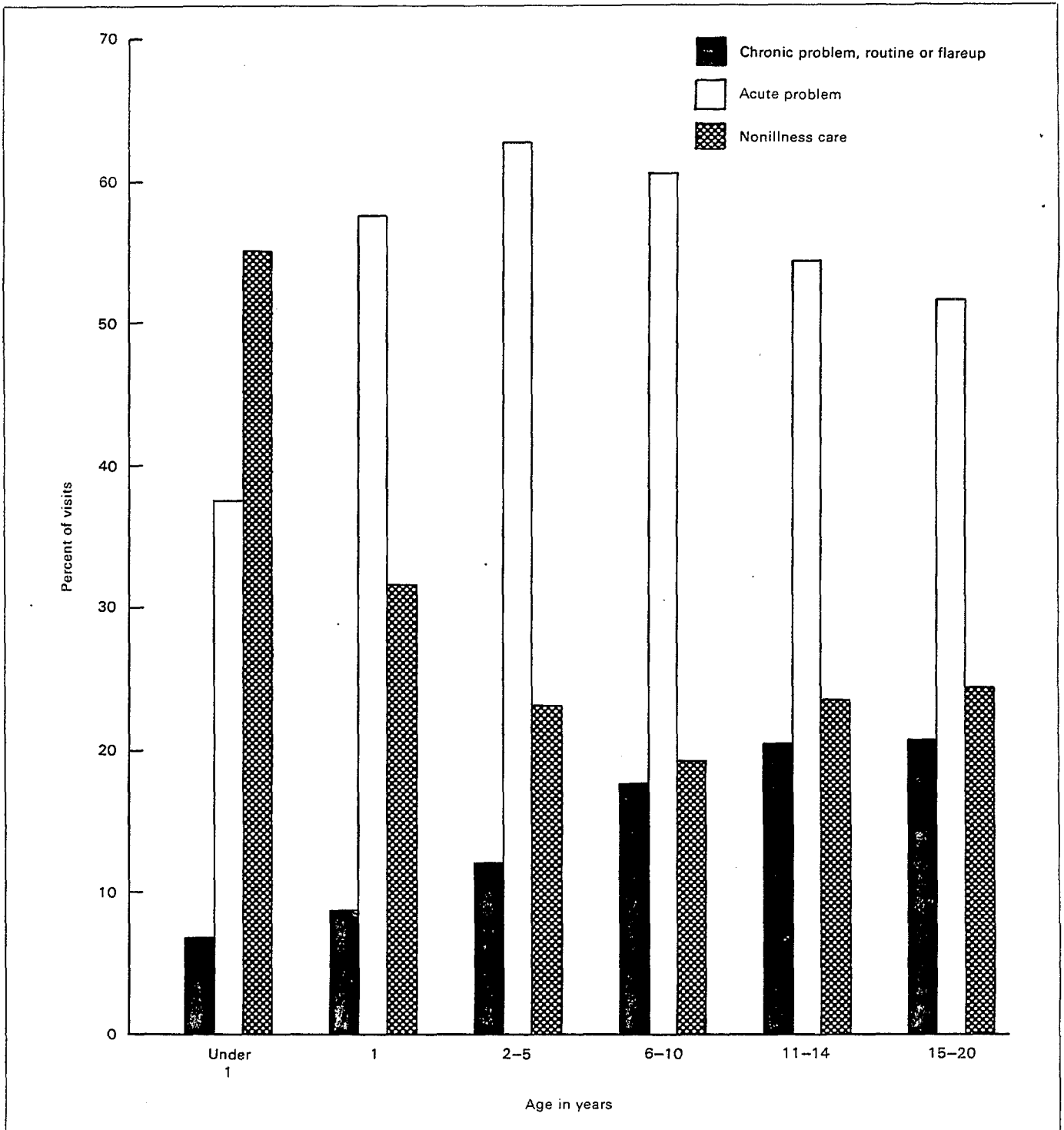


Figure 5. Percent of office visits to pediatricians, by selected major reasons for visit and age of the patient: January 1980–December 1981

contact dermatitis and other eczema. Other differences were not statistically significant.

Probably because of the consistency of diagnosis patterns across age groups, diagnostic services did not vary appreciably by age group (table 12). Blood pressure checks tended to be proportionately more frequent as the groups advanced in age, but remained less than the overall NAMCS average of 35 percent. Office surgery also increased with increasing age group.

Diet counseling, probably instructions given mothers on infant feeding, was given proportionately more often in visits by children under 1 year of age (25 percent) than in those by other children.

Current data indicate some change since 1975 in the frequencies of diagnostic tools used in pediatric visits (table G). From 1975 to 1980–81 there was a decline in the use of the general history and/or examination (from 33 percent to 29 per-

Table G. Annual visit rate by age of patient, and percent of office visits to pediatricians, by selected characteristics: United States, 1975 and 1980-81

<i>Selected characteristic</i>	1975	1980-81	<i>Selected characteristic</i>	1975	1980-81
Age	Rate per 100 population		Principal diagnosis category²—Con.		
Under 2 years	244	351	Symptoms, signs, and ill-defined conditions.....	4.2	3.1
2-5 years.....	106	133	Observation and evaluation for suspected conditions ⁵	1.6	1.3
6-10 years.....	57	72	Injury and poisoning ⁶	4.7	4.6
11-14 years.....	33	41	Supplementary classification ⁷	32.4	31.0
	Percent of visits¹		Routine infant or child health check, or general medical examination ⁸	26.7	25.9
Principal diagnosis category²			Diagnostic or therapeutic service		
Infectious and parasitic diseases ³	7.0	6.1	Limited history and/or examination.....	41.0	58.4
Streptococcal sore throat and scarlet fever.....	1.7	1.4	General history and/or examination.....	33.4	29.3
Diseases of the nervous system and sense organs.....	9.9	14.8	Clinical laboratory test.....	22.4	25.6
Otitis media.....	8.1	12.4	X-ray.....	4.1	2.3
Diseases of the respiratory system.....	28.3	28.0	Blood pressure check.....	7.7	8.5
Acute pharyngitis.....	3.9	4.8	Vision test.....	4.2	3.8
Acute tonsillitis.....	3.2	2.7	Office surgery.....	3.2	7.1
Acute laryngitis and tracheitis.....	1.1	0.6	Disposition of visit		
Acute upper respiratory infection of multiple or unspecified sites.....	6.3	6.9	No followup planned.....	23.6	15.8
Bronchitis, unqualified.....	3.7	3.1	Return at specified time.....	44.5	49.8
Asthma.....	1.6	2.7	Return if needed.....	23.6	30.6
Allergic rhinitis (hay fever).....	2.1	2.5	Telephone followup planned.....	9.9	5.6
Diseases of the skin and subcutaneous tissue.....	6.1	3.8	Referred to other physician.....	2.9	2.3
Contact dermatitis and other eczema ⁴	3.4	1.3			

¹Based on a total of 46,684,000 visits in 1975 and 128,762,000 visits in 1980-81.

²Diagnostic groups for 1975 are based on *Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA-8)*; those for 1980-81 are based on *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.

³The similar ICDA-8 category was named infective and parasitic diseases.

⁴The similar ICDA-8 category was named other eczema and dermatitis.

⁵The similar ICDA-8 category was named observation, without need for further medical care.

⁶The similar ICDA-8 category was named accidents, poisoning, and violence.

⁷The similar ICDA-8 category was named special conditions and examinations without sickness.

⁸The similar ICDA-8 category was named medical or special examination.

cent) and an increase in the use of the limited history and/or examination (from 41 percent to 58 percent). There was also an increase in the proportion of clinical laboratory tests ordered, but a decrease in X-rays. Office surgery also increased proportionately from one time period to the other. It is difficult to attribute these changes to any specific variation in the patterns of illness.

There was some variation in the percents of drug visits by different age groups (table H) but there is no ready explanation for it. For all age groups the major portion of drugs mentioned were in three categories: serums, toxoids and vaccines; anti-infective agents; and antihistamine drugs (table 13). As expected, serums, toxoids and vaccines were proportionately highest and antihistamines lowest, for the youngest group. The most frequent specific drugs named by pediatricians are listed in table 14, and also by age group in table 15. The wide variety of antibiotics selected by pediatricians included amoxicillin, penicillin, erythromycin, and ampicillin. The usual childhood immunizations are represented by poliomyelitis vaccine; diphtheria and tetanus toxoids and pertussis vaccine (DPT); and measles, mumps, rubella virus vaccine; among others. Allergy relief or shots is listed for about 4 percent of the mentions but it is not possible to identify the specific substances used. Aspirin and tylenol were both entered on Patient Record forms by physicians. Other nonprescription drugs commonly mentioned were dimetane, triaminic, novahistine, and robitussin.

A large proportion of visits to pediatricians are for routine examinations, immunizations, allergy medications or shots, or diagnostic tests which may be performed by a member of the physician's staff. Such visits are designated as lasting "0" minutes because there is no face-to-face encounter between physician and patient. Surprisingly, only 4 percent of the visits were so classified (table 16). Only in visits by patients over 10 years of age was this average exceeded by a small but statistically significant proportion. Relatively short visits (10 minutes or less) were more common among visits by patients between the ages of 1 year and 10 years than other age groups were. Relatively long visits (16 minutes or more) were more likely to be related to visits by patients over 10 years of age.

For every initial visit made to pediatricians, there were about 10 return visits (table 6). Except for psychiatry, this return visit ratio was higher than that of any other specialty. This high rate can be attributed partially to parents' awareness of the need for preventive health care. But often the physician's disposition of the visit influences the continuity of care. In about half of their visits in 1980-81, pediatricians instructed patients to return at a specified time. This is less than the NAMCS average of 61 percent for this disposition, but it may be due to the high proportion of acute cases treated by pediatricians. However, it represents an increase since 1975 when 45 percent were scheduled for return visits (table G). This instruction was most evident when patients were infants under 1 year (table 16).

Table H. Number of office visits to pediatricians, number and percent of drug visits, number of drug mentions, drug mention rate per visit, and drug intensity rate per drug visit, by selected characteristics: United States, January 1980–December 1981

<i>Selected characteristic</i>	<i>Number of visits in thousands</i>	<i>Drug visits in thousands¹</i>	<i>Percent of drug visits</i>	<i>Number of drug mentions in thousands</i>	<i>Drug mention rate per visit²</i>	<i>Drug intensity rate per drug visit³</i>
Sex						
Both sexes	128,762	92,500	71.8	146,515	1.14	1.58
Female.....	61,278	43,464	70.9	69,571	1.14	1.60
Male	67,484	49,037	72.7	76,944	1.14	1.57
Age						
Under 1 year.....	31,119	20,842	67.0	34,925	1.12	1.68
1 year	17,514	14,013	80.0	22,845	1.30	1.63
2–5 years	33,910	25,055	73.9	40,735	1.20	1.63
6–10 years	23,979	17,437	72.7	25,424	1.06	1.46
11–14 years	11,778	7,759	65.9	11,389	0.97	1.47
15–20 years	7,232	4,823	66.7	6,693	0.93	1.39
21 years and over.....	3,230	2,571	79.6	4,506	1.40	1.75
Race						
White.....	110,635	79,473	71.8	125,038	1.13	1.57
Black	15,904	11,438	71.9	19,249	1.21	1.68
All other	2,224	1,589	71.5	2,228	1.00	1.40
Ethnicity						
Hispanic	7,505	5,612	74.8	9,178	1.22	1.64
Non-Hispanic	121,257	86,889	71.7	137,337	1.13	1.58

¹Visits in which one or more drugs were ordered.

²Drug mentions divided by visits.

³Drug mentions divided by drug visits.

Prior visit status

Patients presenting new problems were likely to visit for acute problems, while patients returning to the physician for care of continuing problems were likely to visit for nonillness care (table 6). The reasons given for visits by returning patients were less likely to be expressed as symptoms than those of patients visiting with acute problems were.

Pediatricians used proportionately more general history and/or examinations, clinical laboratory tests, and X-rays with new patients than with returning patients (table 12). However, physicians were less likely to prescribe drugs for new patients than for others because 36 percent of their visits included no drugs, compared with about 28 percent of returning patients' visits.

The duration of a new patient's visit is usually longer than that of a patient the physician has seen before because sometimes the workup is more intense for the new patient, or the physician has medical data available in the returning patient's file that is not yet gathered for the new patient. About 41 percent of the visits by new patients were less than 11 minutes, compared with 61 percent of those by returning patients; 26 percent, compared with 15 percent were longer than 16 minutes. The proportionately greater use of some diagnostic procedures for new patients probably contributed to the duration disparity.

Reason for visit and diagnostic services

The relationship between patients' reasons for visit and diagnostic services is shown in table 17. Except for X-ray and

limited history and/or examination, proportionately more services were rendered during visits classified in the administrative module than in any other. These visits were chiefly examinations required for school or extracurricular activities. It is encouraging to find that 57 percent of those visits included a blood pressure check. This is a much greater proportion than average in children's visits.

Principal diagnosis and therapy, duration, disposition

On the average, medication therapy (72 percent) was more likely to be used by pediatricians than nonmedication therapy was (40 percent). It was seen in table 12 that 60 percent of the visits included no nonmedication therapy and that only medical counseling reached a proportion of 25 percent of the visits. Therefore, it was of interest to examine the rates of therapy (or more specifically, the rates of no therapy) associated with diagnosis. Visits for each diagnosis category are distributed by number of medications and the percent of visits with no nonmedication therapy in table 18.

The "None" column in the number of medications is the complement of the percent of drug visits. Therefore discussion may focus equally on the number of visits with no medication prescribed or the number of drug visits. For example, if 15 percent of the 19.1 million visits for diseases of the nervous system and sense organs had no drugs mentioned, then 85 percent were drug visits. An interesting corollary is that 72 percent of the same visits had no other type of therapeutic service.

Table J. Mean duration of office visits to pediatricians, by selected principal diagnosis categories and prior visit status: United States, January 1980–December 1981

Principal diagnosis category and ICD-9-CM code ¹	Prior visit status			
	All patients	New patients	Old patients	
			New problem	Old problem
	Mean duration in minutes			
All diagnoses	12.8	15.8	12.4	12.5
Infectious and parasitic diseases 000-139	11.4	11.0	11.7	10.9
Endocrine, nutritional and metabolic diseases, and immunity disorders 240-279	12.9	-	*12.7	12.9
Diseases of the nervous system and sense organs 320-389	11.9	15.2	12.4	11.0
Diseases of the respiratory system 460-519	12.0	16.0	12.2	11.2
Diseases of the digestive system 520-579	13.6	14.6	13.0	15.2
Diseases of the genitourinary system 580-629	14.4	*10.3	16.2	13.4
Diseases of the skin and subcutaneous tissue 680-709	11.8	11.4	10.7	15.2
Diseases of the musculoskeletal system and connective tissue 710-739	13.9	*13.7	14.4	*12.8
Symptoms, signs, and ill-defined conditions 780-799	14.0	16.6	13.2	14.3
Injury and poisoning 800-999	11.8	13.4	11.9	10.9
Supplementary classification V01-V82	13.8	16.2	13.0	13.8

¹Based on *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM).⁹

Thus, in this case a high proportion of drug utilization was associated with a low utilization of other therapy. A similar association was observed for diseases of the respiratory system where 90 percent were drug visits and about 28 percent had other therapy (the complement of 72 percent with no non-medication therapy). When visits were not illness-related this situation was somewhat different. In visits due to injury and poisoning about 47 percent were drug visits (relatively low) and about 57 percent had another form of therapy (about average). Diagnoses in the supplementary classification (chiefly examinations) were associated with drug visits in 57 percent and other therapy in about 50 percent.

These data do not necessarily indicate a causal relationship between therapy modalities, although some of the results are provocative. More indepth examination of the nature of the ill-

ness or other diagnosis is required before hypotheses may even be proposed.

Visits are distributed by duration and disposition of the visit for diagnosis categories in table 19. The largest proportion of visits in each category was in the 6-10 minute range. But on the average, visit duration varied for some categories (table J). There was also a noticeable difference in the length of the visit depending on its status. On the average, visits by new patients took 15.8 minutes while the time used for old patients was about 12.5 minutes. Longer visits by new patients was associated with five categories; diseases of the nervous system and sense organs; diseases of the respiratory system; symptoms, signs, and ill-defined conditions; injury and poisoning; and supplementary classification.

Conclusion

This report has provided a general profile of pediatric practice in the United States and an analysis of health care patterns based on practice, physician, and patient variables.

It is generally acknowledged that the nature of pediatric practice precludes great variation in the patterns of care based on such variables. Most of the patients are under 15 years of age and they present with a limited number of symptoms and conditions. Preventive care consumes much of the pediatrician's time regardless of practice or physician characteristics.

Because of the large number of females in pediatric practice,

compared with those in other specialties, the analysis by sex of the physician may be particularly meaningful. There was no evidence that gender had any appreciable effect on the pattern of patient care. Like females in general and family practice, female pediatricians saw, on the average, fewer patients than male pediatricians did, but tended to spend more time with them. Female physicians and newly established physicians of both sexes in all specialties tend to have young patients, patients who are new to the physician, and who visit for preventive care and for treatment of acute problems.

References

- ¹National Center for Health Statistics, T. Ezzati: Ambulatory medical care rendered in pediatricians' offices during 1975. *Advance Data from Vital and Health Statistics*, No. 13. DHEW Pub. No. (HRA) 77-1250. Health Resources Administration, Hyattsville, Md. Oct. 13, 1977.
- ²National Center for Health Statistics, R. O. Gagnon, J. E. DeLozier, and T. McLemore: The National Ambulatory Medical Care Survey, 1979 Summary. *Vital and Health Statistics*. Series 13, No. 66. DHHS Pub. No. (PHS) 82-1717. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1982.
- ³National Center for Health Statistics, J. Tenney, M.D., K. White, M.D., and J. Williamson, M.D.: National Ambulatory Medical Care Survey, background and methodology, United States, 1967-72. *Vital and Health Statistics*. Series 2, No. 61. DHEW Pub. No. (HRA) 74-1335. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1974.
- ⁴National Center for Health Statistics, T. Ezzati: Ambulatory care utilization patterns of children and young adults, National Ambulatory Medical Care Survey, United States January-December 1975. *Vital and Health Statistics*. Series 13, No. 39. DHEW Pub. No. (PHS) 78-1790. Public Health Service. Washington. U.S. Government Printing Office, Aug. 1978.
- ⁵American Medical Association, L. J. Goodman, E. H. Bennett, and R. J. Odem: *Group Medical Practice in the U.S., 1975*. Center for Health Services Research and Development. American Medical Association. Chicago, IL, 1976.
- ⁶National Center for Health Statistics, D. Schneider, L. Appleton, and T. McLemore: A reason for visit classification for ambulatory care. *Vital and Health Statistics*. Series 2, No. 78. DHEW Pub. No. (PHS) 79-1352. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1979.
- ⁷National Center for Health Statistics, H. Koch: The collection and processing of drug information, National Ambulatory Medical Care Survey, United States, 1980. *Vital and Health Statistics*. Series 2, No. 90. DHHS Pub. No. (PHS) 82-1364. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1982.
- ⁸American Society of Hospital Pharmacists, Inc.: *The American Hospital Formulary Service*. Washington. Jan. 1980.
- ⁹National Center for Health Statistics: *International Classification of Diseases, 9th Revision, Clinical Modification*. DHHS Pub. No. (PHS) 80-1260. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1980.
- ¹⁰National Center for Health Statistics, B. K. Cypress: Patterns of ambulatory care in general and family practice, National Ambulatory Medical Care Survey, January 1980-December 1981. *Vital and Health Statistics*. Series 13, No. 73. In press.
- ¹¹Wunderman, L. E., Female physicians in the 1970's: Their changing role in medicine, in American Medical Association, Glandon, G. L. and Shapiro, R. J. (eds), *Profile of Medical Practice 1980*, Center for Health Services Research and Development. American Medical Association. Chicago, IL, 1980.
- ¹²National Center for Health Statistics, B. K. Cypress: Characteristics of visits to female and male physicians, The National Ambulatory Medical Care Survey, United States, 1977. *Vital and Health Statistics*. Series 13, No. 49. DHHS Pub. No. (PHS) 80-1710. Public Health Service. U.S. Government Printing Office, June 1980.
- ¹³National Center for Health Statistics, E. Hing, M. G. Kovar, D. Rice: Sex differences in health and use of medical care, United States, 1979. *Vital and Health Statistics*. Series 3, No. 24. In press.
- ¹⁴National Center for Health Statistics, P. J. McCarthy: Replication, An approach to the analysis of data from complex surveys. *Vital and Health Statistics*. Series 2, No. 14. DHEW Pub. No. (HSM) 73-1269. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Apr. 1966.
- ¹⁵National Center for Health Statistics, P. J. McCarthy: Pseudo-replication, Further evaluation and application of the balanced half-sample technique. *Vital and Health Statistics*. Series 2, No. 31. DHEW Pub No. (HSM) 73-1270. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Jan. 1969.

List of detailed tables

1. Number of office visits to pediatricians by type and location of physician's practice and percent distribution by selected visit characteristics, according to type and location of physician's practice: United States, January 1980–December 1981	19	11. Number, percent, and cumulative percent of office visits to pediatricians, by age of patient and most frequent principal diagnoses: United States, January 1980–December 1981	31
2. Number of drugs mentioned in office visits to pediatricians by type and location of physician's practice and percent distribution by therapeutic category, according to type and location of physician's practice: United States, January 1980–December 1981	21	12. Number of office visits to pediatricians by sex and age of patient and prior visit status; percent of visits by diagnostic services, nonmedication therapy, sex and age of patient, and prior visit status; and percent distribution by number of medications, according to sex and age of patient and prior visit status: January 1980–December 1981	32
3. Number of office visits to pediatricians by age and sex of physician and percent distribution by selected visit characteristics, according to age and sex of the physician: United States, January 1980–December 1981	22	13. Number of drugs mentioned in office visits to pediatricians by sex and age of patient and prior visit status, and percent distribution according to sex and age of patient and prior visit status: United States, January 1980–December 1981	33
4. Number of drugs mentioned in office visits to pediatricians by age and sex of physician, and percent distribution by therapeutic category, according to age and sex of the physician: United States, January 1980–December 1981	24	14. Number, percent, and cumulative percent of drugs mentioned in office visits to pediatricians, by name of most frequently mentioned drugs: United States, January 1980–December 1981	34
5. Number of office visits to pediatricians by sex, race, and ethnicity of the patient, percent distribution by age of the patient, according to sex, race, and ethnicity of patient; and average annual rate of visits by age, sex, race, and ethnicity of patient: United States, January 1980–December 1981	25	15. Number, percent, and cumulative percent of drugs mentioned in office visits to pediatricians, by age of patient and name of most frequently mentioned drugs: United States, January 1980–December 1981	35
6. Number of office visits to pediatricians by sex and age of patient and prior visit status; percent distribution by selected visit characteristics, according to sex and age of patient and prior visits status; and return visit ratio by sex and age of patient and prior visit status: United States, January 1980–December 1981	26	16. Number of office visits to pediatricians by sex and age of patient and prior visit status, and by duration and disposition of visits, according to sex and age of patient and prior visit status: United States, January 1980–December 1981	36
7. Number, percent, and cumulative percent of office visits to pediatricians, by most frequent principal reasons for visit: United States, January 1980–December 1981	27	17. Number of office visits to pediatricians by major reason for visit and principal reason for visit module, and percent of visits by diagnostic services, major reason for visit, and principal reason for visit module: United States, January 1980–December 1981	37
8. Number, percent, and cumulative percent of office visits to pediatricians, by age of patient and most frequent principal reason for visit: United States, January 1980–December 1981	28	18. Number of office visits to pediatricians by principal diagnosis categories; percent distribution by number of medications, according to principal diagnosis categories; and percent of visits with no nonmedication therapy by principal diagnosis categories: United States, January 1980–December 1981	37
9. Number of office visits to pediatricians by sex and age of patient and prior visit status, and percent distribution by principal diagnosis categories, according to sex and age of patient and prior visit status: United States, January 1980–December 1981	29	19. Number of office visits to pediatricians by selected principal diagnosis categories, and percent distribution by duration and disposition of visits, according to selected principal diagnosis categories: United States, January 1980–December 1981	38
10. Number, percent, and cumulative percent of office visits to pediatricians, by most frequent principal diagnoses: United States, January 1980–December 1981	30		

Table 1. Number of office visits to pediatricians by type and location of physician's practice, and percent distribution by selected visit characteristics, according to type and location of physician's practice: United States, January 1980–December 1981

Selected visit characteristic	Type of practice			Geographic region				Area	
	All types of practice	Solo	Other ¹	Northeast	North Central	South	West	Metro-politan	Non-metropolitan
	Number in thousands								
All visits	128,762	48,408	80,354	35,724	26,897	48,844	17,297	110,071	18,691
	Percent distribution								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex of patient									
Female	47.6	47.5	47.7	47.7	50.0	47.2	44.8	47.3	49.0
Male	52.4	52.5	52.3	52.3	50.0	52.9	55.2	52.7	51.0
Age of patient									
Under 1 year	24.2	25.1	23.6	21.8	25.0	24.4	27.1	23.8	26.3
1 year	13.6	13.0	14.0	12.5	14.3	14.4	12.6	13.8	12.6
2–5 years	26.3	25.0	27.1	26.7	26.0	27.0	24.3	26.5	25.6
6–10 years	18.6	18.0	19.0	19.4	17.4	19.3	16.9	18.8	17.4
11–14 years	9.2	9.6	8.9	10.1	8.5	8.6	9.8	9.0	10.2
15–20 years	5.6	5.9	5.4	6.7	5.7	4.1	7.5	5.7	4.9
21 years and over	2.5	3.3	2.0	2.8	3.2	2.1	*1.8	2.4	3.0
Prior visit status									
New patient	8.7	8.0	9.1	6.5	6.4	9.0	16.0	8.5	9.8
Old patient, new problem	37.6	37.9	37.4	37.6	42.9	35.9	34.1	36.9	41.9
Old patient, old problem	53.7	54.1	53.5	56.0	50.7	55.1	49.9	54.6	48.2
Referral status									
Referred by another physician	1.5	1.7	1.4	1.6	1.2	1.6	1.4	1.5	1.5
Not referred by another physician	98.5	98.3	98.6	98.4	98.8	98.4	98.6	98.5	98.5
Major reason for visit									
Acute problem	53.7	48.6	56.7	49.4	50.7	57.3	56.7	53.4	55.3
Chronic problem, routine	9.0	13.1	6.6	9.0	7.4	9.9	9.2	9.1	8.6
Chronic problem, flare-up	4.5	3.7	5.0	2.6	6.3	4.8	4.8	4.8	2.9
Postsurgery or postinjury	1.7	1.5	1.7	1.5	2.8	1.5	*0.7	1.7	*1.4
Nonillness care	31.2	33.1	30.0	37.5	32.8	26.5	28.7	31.1	31.8
Principal reason for visit module and RVC code ²									
Symptom module S001–S999	55.9	52.2	58.1	50.3	55.2	60.0	57.0	55.6	57.9
Disease module D001–D999	5.7	6.9	5.0	6.1	6.1	4.3	8.4	6.0	4.1
Diagnostic, screening, and preventive module X100–X599	27.1	28.1	26.6	34.2	27.1	22.8	24.8	27.4	25.7
Treatment module T100–T899	5.3	6.2	4.8	4.2	4.6	7.6	*2.3	5.1	6.5
Injuries and adverse effects module J001–J999	2.9	2.6	3.1	2.3	3.1	3.0	3.7	2.9	3.1
Test results module R100–R700	*0.1	*0.2	*0.1	*0.2	*0.0	*0.1	*0.4	*0.1	*0.2
Administrative module A100–A140	1.8	2.5	1.4	2.2	3.2	1.0	*0.8	1.7	2.3
Other ³	1.2	1.3	0.9	0.5	0.7	1.2	2.6	1.2	0.2
Diagnostic service ⁴									
None	6.6	11.1	3.9	7.6	4.0	7.5	6.2	6.5	7.2
Limited history and/or examination	58.4	54.1	60.9	51.8	63.7	58.3	63.7	57.6	63.1
General history and/or examination	29.3	29.2	29.4	36.7	24.4	28.6	23.9	30.0	25.3
Clinical laboratory test	25.6	25.0	26.0	26.2	28.9	25.7	19.1	25.5	26.4
X-ray	2.3	1.9	2.6	1.9	2.7	2.2	2.7	2.3	2.5
Blood pressure check	8.5	9.8	7.7	11.0	11.4	5.5	7.4	9.0	5.6
Vision test	3.8	3.5	3.9	5.4	5.2	2.1	2.8	3.9	2.8
Other	4.2	3.1	4.8	4.4	5.3	3.0	5.3	4.3	3.6

See footnotes at end of table.

Table 1. Number of office visits to pediatricians by type and location of physician's practice, and percent distribution by selected visit characteristics, according to type and location of physician's practice: United States, January 1980–December 1981—Con.

Selected visit characteristic	Type of practice			Geographic region				Area	
	All types of practice	Solo	Other ¹	Northeast	North Central	South	West	Metro-politan	Non-metropolitan
Nonmedication therapy ⁴									
Percent distribution									
None	60.0	56.7	61.9	51.5	59.3	69.3	52.0	59.7	61.5
Physiotherapy	1.4	*0.8	1.7	1.5	*1.4	1.0	*1.9	1.4	*1.0
Office surgery	7.1	7.4	6.8	7.9	9.6	5.3	6.4	7.3	5.9
Therapeutic listening	1.3	1.3	1.3	2.0	*1.5	*0.7	*1.6	1.4	0.8
Diet counseling	11.5	13.1	10.6	13.3	12.2	9.9	11.7	11.9	9.2
Family or social counseling	4.8	6.1	4.0	8.0	3.6	2.1	7.6	4.8	4.5
Medical counseling	24.6	28.5	22.2	33.5	22.3	16.8	31.7	24.9	22.8
Other	0.9	0.7	1.0	*1.0	*0.8	*1.0	*0.6	0.7	*2.0
Number of medications									
None	28.2	26.6	29.1	26.4	29.1	24.3	41.5	27.8	30.6
1	40.6	43.6	38.8	45.0	40.3	39.2	36.0	41.0	38.2
2	23.0	21.5	23.9	23.0	22.2	25.4	17.3	23.0	23.0
3	6.1	6.2	6.0	4.7	6.8	7.3	4.4	6.1	6.1
4 or more	2.2	2.2	2.2	*1.0	1.7	3.8	*0.9	2.2	2.0
Principal diagnosis and ICD-9-CM code ⁵									
Infectious and parasitic diseases 000-139	6.1	5.3	6.6	5.9	5.6	6.9	5.2	6.1	6.3
Neoplasms 140-239	*0.2	*0.2	*0.1	*0.1	*0.1	*0.1	*0.4	*0.1	*0.3
Endocrine, nutritional and metabolic diseases, and immunity disorders 240-279	0.6	*0.6	0.6	*0.7	*0.8	*0.3	*0.8	0.6	*0.4
Mental disorders 290-319	0.5	*0.3	0.7	*0.4	*0.9	*0.5	*0.4	0.6	*0.5
Diseases of the nervous system and sense organs 320-389	14.8	13.2	15.9	13.1	14.7	15.1	17.8	14.4	17.5
Diseases of the circulatory system 390-459	*0.3	*0.2	*0.4	*0.1	*0.9	*0.2	*0.4	*0.4	*0.1
Diseases of the respiratory system 460-519	28.0	28.9	27.5	27.5	24.0	31.3	26.0	28.7	23.9
Diseases of the digestive system 520-579	2.9	3.3	2.7	2.0	3.8	3.5	1.9	2.9	3.3
Diseases of the genitourinary system 580-629	1.3	1.5	1.1	1.2	*1.5	1.2	*1.2	1.3	*1.2
Diseases of the skin and subcutaneous tissue 680-709	3.8	3.8	3.7	3.3	4.8	3.4	4.0	3.6	4.7
Diseases of the musculoskeletal system and connective tissue 710-739	0.8	*0.5	1.0	*0.8	*1.0	*0.7	*1.1	0.9	*0.8
Symptoms, signs, and ill-defined conditions 780-799	3.1	3.1	3.0	2.2	3.6	2.7	4.8	3.0	3.2
Injury and poisoning 800-999	4.6	4.0	5.0	3.8	4.5	4.5	6.9	4.7	4.1
Supplementary classification V01-V82	31.0	33.0	29.8	37.7	31.9	27.7	25.3	30.8	32.2
All other diagnoses	1.1	1.5	0.9	*0.9	*1.1	1.2	*1.7	1.1	1.3
Unknown diagnoses	0.9	*0.5	1.1	*0.4	*0.9	*0.7	*2.2	*1.0	*0.3
Duration of visit									
0 minutes ⁶	3.9	3.7	4.0	2.2	4.3	5.7	*1.8	3.0	9.3
1-5 minutes	14.9	15.3	14.7	15.3	12.4	16.8	12.5	16.2	7.1
6-10 minutes	37.6	35.7	38.7	38.5	45.1	34.7	31.8	37.2	39.7
11-15 minutes	28.5	28.1	28.7	27.9	28.2	26.8	34.9	28.0	31.3
16-30 minutes	13.3	14.8	12.4	13.9	9.4	14.1	16.2	13.6	11.8
31 minutes or longer	1.9	2.4	1.5	2.2	*0.7	1.9	2.8	2.0	0.8
Disposition of visit ⁷									
No followup planned	15.8	16.5	15.4	13.5	18.4	14.9	19.5	16.1	14.2
Return at specified time	49.8	52.8	48.0	53.1	49.9	46.5	52.0	50.1	48.1

See footnotes at end of table.

Table 1. Number of office visits to pediatricians by type and location of physician's practice, and percent distribution by selected visit characteristics, according to type and location of physician's practice: United States, January 1980–December 1981—Con.

Selected visit characteristic	Type of practice			Geographic region				Area	
	All types of practice	Solo	Other ¹	Northeast	North Central	South	West	Metro-politan	Non-metropolitan
Disposition of visit ⁷ —Con.			Percent distribution						
Return if needed	30.6	25.3	33.8	28.5	25.3	37.5	23.7	29.5	37.0
Telephone followup planned.....	5.6	6.8	4.9	7.6	4.2	4.8	6.0	6.0	3.4
Referred to other physician.....	2.3	2.4	2.2	2.9	1.9	2.1	*2.2	2.4	*1.7
Returned to referring physician.....	*0.3	*0.3	*0.3	*0.6	*0.2	*0.3	-	*0.4	*0.1
Admit to hospital.....	0.7	*0.6	0.8	*0.3	*1.0	1.0	*0.4	0.6	*1.4
Other.....	*0.1	*0.1	*0.1	*0.1	*0.1	*0.1	*0.2	*0.1	*0.2

¹Includes partnership, group, and other types of practice.

²Based on *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶

³Includes blanks; problems, complaints not elsewhere classified; entries of "none"; and illegible entries.

⁴Percents will not total 100.0 because more than 1 diagnostic service or nonmedication therapy may have been rendered during a visit.

⁵Based on *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.⁹

⁶Represents visits in which there was no face-to-face encounter between patient and physician.

⁷Percents will not total 100.0 because more than 1 disposition was possible.

Table 2. Number of drugs mentioned in office visits to pediatricians by type and location of physician's practice, and percent distribution by therapeutic category, according to type and location of physician's practice: United States, January 1980–December 1981

Therapeutic category ¹	Type of practice			Geographic region				Area	
	All types of practice	Solo	Other ²	Northeast	North Central	South	West	Metro-politan	Non-metropolitan
Number in thousands									
All categories	146,515	55,276	91,239	39,004	30,124	62,288	15,099	125,733	20,782
Percent distribution									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Antihistamine drugs.....	15.2	15.8	14.9	14.8	12.8	17.0	14.0	15.2	15.6
Anti-infective agents.....	30.1	28.4	31.2	25.6	27.9	33.6	31.6	30.4	28.4
Autonomic drugs.....	2.6	2.6	2.7	2.6	2.5	2.3	4.6	2.5	3.2
Central nervous system drugs.....	4.9	4.9	4.9	6.6	5.1	4.2	3.4	4.9	5.0
Diagnostic agents.....	4.2	5.2	3.5	5.7	6.3	2.3	3.8	4.3	3.2
Electrolytic, caloric, and water balance ...	0.6	*0.4	0.7	*0.4	1.6	*0.3	*0.3	0.6	*0.4
Expectorants and cough preparations ...	6.7	5.2	7.6	5.3	5.1	9.0	3.8	6.5	7.5
Eye, ear, nose, and throat preparations....	3.1	3.4	2.9	2.5	3.4	3.3	3.1	3.0	3.3
Gastrointestinal drugs.....	1.7	1.6	1.8	1.2	1.8	2.1	*1.6	1.8	*1.5
Hormones and synthetic substitutes ...	1.6	1.1	1.9	*0.9	*1.4	2.2	*1.1	1.7	*1.0
Serums, toxoids and vaccines.....	17.4	19.2	16.3	22.9	18.5	13.3	18.1	17.8	14.8
Skin and mucous membrane preparations.....	5.9	5.9	5.9	5.3	7.8	5.1	7.0	5.5	8.3
Spasmodic agents.....	2.2	2.5	2.1	1.8	1.7	2.4	3.7	2.1	3.4
Vitamins.....	0.9	*0.6	1.1	*0.6	1.5	0.9	*0.3	0.9	*0.6
Other, unclassified, or undetermined....	2.8	3.2	2.6	3.7	2.6	2.2	3.7	2.6	4.0

¹Based on the classification system of the *American Hospital Formulary Service*.⁸

²Includes partnership, group, and other types of practice.

Table 3. Number of office visits to pediatricians by age and sex of physician, and percent distribution by selected visit characteristics, according to age and sex of physician: United States, January 1980–December 1981—Con.

Selected visit characteristic	Age of physician ¹						Sex of physician		
	All ages	Under 35 years	35–44 years	45–54 years	55–64 years	65 years and over	Female	Male	
Nonmedication therapy ⁴ —Con.									
	Percent distribution								
Family or social counseling	4.8	2.9	4.2	4.7	6.3	9.0	7.6	4.4	
Medical counseling	24.4	15.9	27.0	19.5	29.1	46.2	27.7	23.9	
Other	0.9	*0.6	*0.7	1.4	*0.5	-	*0.5	0.9	
Number of medications									
None	28.4	32.5	28.9	25.7	31.6	23.3	23.0	29.2	
1	40.4	34.8	37.5	39.5	47.4	53.5	34.9	41.3	
2	22.9	26.1	25.5	23.7	15.8	17.2	30.7	21.6	
3	6.2	5.9	6.6	7.3	3.8	*4.5	8.8	5.7	
4 or more	2.2	*0.7	1.6	3.8	*1.4	*1.5	*2.5	2.2	
Principal diagnosis and ICD-9-CM code ⁵									
Infectious and parasitic diseases, 000–139	6.1	5.8	5.9	7.1	4.8	*5.5	5.0	6.2	
Neoplasms 140–239	*0.2	*0.1	*0.0	*0.1	*0.5	*0.2	*0.1	*0.2	
Endocrine, nutritional and metabolic diseases, and immunity disorders. 240–279	0.6	*0.9	*0.5	*0.3	*0.9	*1.2	*0.5	0.6	
Mental disorders. 290–319	0.5	*0.2	*0.7	*0.4	*0.4	*1.3	*0.5	0.5	
Diseases of the nervous system and sense organs. 320–389	14.9	28.4	14.7	12.6	11.4	9.6	21.1	13.9	
Diseases of the circulatory system 390–459	*0.3	*0.1	*0.6	*0.3	*0.2	*0.1	*0.3	*0.3	
Diseases of the respiratory system 460–519	27.9	18.3	27.0	30.7	31.5	25.1	27.1	28.0	
Diseases of the digestive system 520–579	3.0	3.3	3.1	3.1	2.4	*2.6	4.0	2.8	
Diseases of the genitourinary system 580–629	1.3	*1.3	1.5	*0.8	*1.8	*1.5	*1.6	1.2	
Diseases of the skin and subcutaneous tissue. 680–709	3.7	3.7	4.6	3.4	3.2	*2.3	2.8	3.9	
Diseases of the musculoskeletal system and connective tissues 710–739	0.8	*0.4	*1.1	1.0	*0.5	*0.4	*0.4	0.9	
Symptoms, signs, and ill-defined conditions 780–799	3.1	3.4	3.4	2.7	3.1	*2.5	3.5	3.0	
Injury and poisoning. 800–999	4.6	3.7	4.0	5.3	5.2	*4.7	3.2	4.9	
Supplementary classification. V01–V82	31.2	28.2	30.8	30.6	32.0	41.8	28.8	31.6	
All other diagnoses	1.1	*1.4	1.3	*0.8	*1.3	*1.2	*0.5	1.2	
Unknown diagnoses.	0.8	*1.0	*1.0	*0.7	*1.0	*0.3	*0.7	0.9	
Duration of visit									
0 minutes ⁶	4.0	*1.6	4.5	4.3	5.3	*0.1	4.8	3.8	
1–5 minutes	15.1	15.5	12.1	18.3	13.7	14.8	11.3	15.7	
6–10 minutes	37.1	36.1	43.9	35.1	28.1	42.6	33.2	37.7	
11–15 minutes.	28.5	26.5	24.7	29.4	37.1	22.3	25.8	29.0	
16–30 minutes.	13.5	19.5	12.2	11.3	14.6	16.8	22.1	12.1	
31 minutes or longer	1.9	*0.8	2.6	1.7	*1.2	*3.5	2.7	1.7	
Disposition of visit ⁷									
No followup planned	15.9	16.2	15.9	16.2	16.2	11.7	9.1	16.9	
Return at specified time.	50.0	58.0	53.4	44.8	49.8	45.6	58.6	48.6	
Return if needed.	30.5	26.5	29.0	34.2	28.5	30.6	28.4	30.8	
Telephone followup planned.	5.7	2.9	5.0	4.7	7.1	17.4	5.5	5.7	
Referred to other physician	2.3	*2.1	2.1	2.6	*1.7	*3.1	*2.4	2.2	
Returned to referring physician.	*0.3	*0.6	*0.2	*0.2	*0.5	*0.2	*0.4	*0.3	
Admit to hospital	0.7	*0.9	*0.3	1.0	*0.8	*0.1	*1.2	0.6	
Other.	*0.1	*0.1	*0.2	*0.1	*0.0		*0.1	*0.1	
Type of practice									
Solo.	38.2	32.8	30.3	35.4	49.8	77.9	62.0	34.4	
Other ⁸	61.8	67.2	69.8	64.6	50.2	22.1	38.0	65.6	

See footnotes at end of table.

Table 3. Number of office visits to pediatricians by age and sex of physician, and percent distribution by selected visit characteristics, according to age and sex of physician: United States, January 1980–December 1981—Con.

Selected visit characteristic	Age of physician ¹						Sex of physician	
	All ages	Under 35 years	35–44 years	45–54 years	55–64 years	65 years and over	Female	Male
Geographic region								
	Percent distribution							
Northeast	27.6	18.0	27.8	22.7	32.2	65.5	17.3	29.3
North Central	20.6	25.7	28.6	13.5	18.7	14.4	37.6	17.9
South	38.2	36.9	31.0	53.4	27.6	17.3	40.3	37.8
West	13.7	19.5	12.5	10.4	21.5	*2.8	4.8	15.1
Area								
Metropolitan	85.2	84.2	88.1	80.7	89.7	87.1	93.5	83.9
Nonmetropolitan	14.8	15.8	11.9	19.4	10.3	13.0	6.5	16.1

¹Does not include visits to doctors of osteopathy.

²Based on *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶

³Includes blanks; problems, complaints not elsewhere classified; entries of "none"; and illegible entries.

⁴Percents will not total 100.0 because more than 1 diagnostic service or nonmedication therapy may have been rendered during a visit.

⁵Based on *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.⁹

⁶Represents visits in which there was no face-to-face encounter between patient and physician.

⁷Percents will not total 100.0 because more than 1 disposition was possible.

⁸Includes partnership, group, and other types of practice.

Table 4. Number of drugs mentioned in office visits to pediatricians by age and sex of physician, and percent distribution by therapeutic category, according to age and sex of physician: United States, January 1980–December 1981

Therapeutic category ¹	Age of physician ²						Sex of physician	
	All ages ²	Under 35 years	35–44 years	45–54 years	55–64 years	65 years and over	Female	Male
Number in thousands								
All categories	144,011	16,899	44,563	54,579	20,594	7,376	23,110	120,901
Percent distribution								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Antihistamine drugs	15.2	13.6	15.8	15.2	16.8	11.0	15.5	15.2
Anti-infective agents	30.0	36.8	27.9	31.0	28.3	25.0	32.2	29.6
Autonomic drugs	2.7	*2.2	2.5	2.7	3.7	*1.7	2.7	2.6
Central nervous system drugs	5.0	2.7	5.3	4.7	5.1	9.5	3.9	5.2
Diagnostic agents	4.2	2.2	4.1	3.4	6.6	8.3	3.3	4.4
Electrolytic, caloric, and water balance	0.6	*0.2	1.2	*0.4	*0.1	*0.6	*0.6	0.6
Expectorants and cough preparations	6.7	9.8	6.2	7.8	3.9	*3.2	8.2	6.5
Eye, ear, nose, and throat preparations	3.0	*1.7	2.4	4.2	2.4	*2.6	*1.7	3.3
Gastrointestinal drugs	1.7	*1.7	1.4	1.9	*2.1	*1.3	*1.4	1.8
Hormones and synthetic substitutes	1.6	*0.9	*0.9	2.4	*1.8	*1.5	0.6	1.8
Serums, toxoids and vaccines	17.4	16.9	19.1	14.3	19.4	25.9	17.0	17.5
Skin and mucous membrane preparations	5.9	6.5	7.0	5.5	4.4	*3.7	6.9	5.7
Spasmolytic agents	2.3	*2.2	2.3	2.0	3.0	*2.3	2.2	2.3
Vitamins	0.9	*1.0	*1.0	1.0	*0.5	0.8	*1.7	0.7
Other, unclassified, or undetermined	2.8	*1.7	2.8	3.6	*1.9	*2.6	2.2	2.9

¹Based on the classification system of the *American Hospital Formulary Service*.⁸

²Does not include doctors of osteopathy.

Table 5. Number of office visits to pediatricians, by sex, race, and ethnicity of the patient; percent distribution by age of patient, according to sex, race, and ethnicity of patient; and average annual rate of visits, by age, sex, race, and ethnicity of patient: United States, January 1980–December 1981

Age of patient	Sex of patient			Race of patient			Ethnicity of patient	
	Both sexes	Female	Male	White	Black	All other	Hispanic	Non-Hispanic
Number in thousands								
All ages.....	128,762	61,278	67,484	110,635	15,904	2,224	7,503	121,257
Percent distribution								
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 year.....	24.2	23.6	24.7	23.8	25.3	32.1	27.8	23.9
1 year.....	13.6	13.5	13.7	13.2	16.6	*14.1	13.2	13.6
2–5 years.....	26.3	25.4	27.2	26.8	23.4	22.9	24.1	26.5
6–10 years.....	18.6	18.6	18.7	19.0	16.3	*16.5	20.7	18.5
11–14 years.....	9.2	9.1	9.2	9.3	8.4	*8.9	7.9	9.2
15–20 years.....	5.6	6.3	5.0	5.5	6.4	*3.8	*5.6	5.6
21 years and over.....	2.5	3.5	1.6	2.4	3.7	*1.8	*0.8	2.6
Visit rate per 100 population								
All ages.....	28.9	26.6	31.4	29.0	30.5	20.1	---	---
Under 1 year.....	441.5	421.1	461.0	463.4	351.9	327.2	---	---
1 year.....	257.6	249.0	265.6	262.2	255.2	*146.6	---	---
2–5 years.....	132.9	124.8	140.7	142.4	97.2	61.2	---	---
6–10 years.....	71.5	69.4	73.6	76.3	51.4	*39.5	---	---
11–14 years.....	41.0	39.8	42.2	43.2	31.4	*26.1	---	---
15–20 years.....	14.9	15.8	13.9	15.1	15.0	*6.9	---	---
21 years and over.....	1.1	1.4	0.8	1.0	1.9	*0.6	---	---

Table 6. Number of office visits to pediatricians by sex and age of patient and prior visit status; percent distribution by selected visit characteristics, according to sex and age of patient and prior visit status; and return visit ratio by sex and age of patient and prior visit status: United States, January 1980–December 1981

Selected visit characteristic	Sex of patient			Age of patient							Prior visit status		
	Both sexes	Female	Male	Under 1 year	1 year	2–5 years	6–10 years	11–14 years	15–20 years	21 years and over	New patient	Old patient, new problem	Old patient, old problem
	Number in thousands												
All visits.....	128,762	61,278	67,484	31,119	17,514	33,910	23,979	11,778	7,232	3,230	11,178	48,426	69,158
	Percent distribution												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Major reason for visit													
Acute problem.....	53.7	54.6	52.8	37.6	57.6	62.9	60.7	54.3	51.6	40.1	63.1	77.6	35.4
Chronic problem, routine.....	9.0	8.7	9.4	4.6	4.5	6.6	12.8	15.9	16.2	33.7	5.7	2.7	14.0
Chronic problem, flareup.....	4.5	4.4	4.6	2.2	4.4	5.8	4.9	4.6	*4.6	*9.4	*3.2	2.1	6.4
Postsurgery or postinjury.....	1.7	1.3	1.9	*0.5	*1.8	1.7	2.4	*2.0	*3.3	*1.6	*0.9	2.1	1.5
Nonillness care.....	31.2	31.0	31.3	55.2	31.7	23.0	19.2	23.2	24.3	15.1	27.1	15.6	42.8
Principal reason for visit module and RVC code ¹													
Symptom module..... S001–S999	55.9	56.8	55.1	41.6	60.4	64.6	62.0	55.0	50.0	49.7	63.7	74.1	41.9
Disease module..... D001–D999	5.7	5.6	5.9	2.9	3.9	5.8	7.5	7.6	7.6	17.4	*3.0	3.2	7.9
Diagnostic, screening, and preventive module..... X100–X599	27.1	27.9	26.5	51.5	28.8	18.9	15.7	18.1	15.6	13.9	24.5	12.8	37.6
Treatment module..... T100–T899	5.3	4.1	6.5	2.3	3.1	4.5	8.2	9.8	10.2	*7.9	*1.7	2.1	8.2
Injuries and adverse effects module.... J001–J999	2.9	3.0	2.9	*0.5	2.8	2.7	3.5	6.2	7.5	*2.4	*3.7	5.4	1.0
Test results module..... R100–R700	*0.1	*0.2	*0.1	*0.2	-	*0.2	*0.1	-	*0.2	-	-	*0.0	*0.3
Administrative module..... A100–A140	1.8	1.7	1.9	-	-	2.8	1.9	*2.7	7.1	*1.9	*1.4	1.8	1.8
Other ²	1.2	*0.7	1.1	*1.0	*1.0	*0.5	*1.1	*0.6	*1.8	*6.8	*2.0	*0.6	1.3
Prior visit status													
New patient.....	8.7	9.7	7.8	11.2	5.8	7.6	8.6	9.2	8.6	10.4	...	...	...
Old patient, new problem.....	37.6	38.2	37.1	33.0	37.7	40.4	39.5	39.2	41.3	24.3	...	...	...
Old patient, old problem.....	53.7	52.2	55.1	55.9	56.5	52.0	51.8	51.6	50.1	65.2	...	...	...
	Return visit ratio ³												
Return visit ratio.....	10.5	9.3	11.8	7.9	16.4	12.1	10.6	9.9	10.7	8.6	...	...	...

¹Based on A Reason for Visit Classification for Ambulatory Care (RVC).⁶

²Includes blanks; problems, complaints not elsewhere classified; entries of "none"; and illegible entries.

³All old patients divided by new patients.

Table 7. Number, percent, and cumulative percent of office visits to pediatricians, by most frequent principal reasons for visit: United States, January 1980–December 1981

<i>Principal reason for visit and RVC code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits²</i>	<i>Cumulative percent of visits</i>
Well baby examination or general medical examination X100, X105	32,365	25.1	25.1
Fever S010	11,537	9.0	34.1
Earache, ear infection, or other symptoms referable to the ears, not elsewhere classified S355, S365	10,406	8.1	42.2
Cough S440	8,640	6.7	48.9
Symptoms referable to throat S455	6,977	5.4	54.3
Head cold, upper respiratory infection (coryza) S445	4,478	3.5	57.8
Skin rash S860	3,536	2.7	60.5
Allergy medication T100	3,135	2.4	62.9
Nasal congestion S400	2,441	1.9	64.8
Vomiting S530	1,919	1.5	66.3
Diarrhea S595	1,752	1.4	67.7
Physical examination for school A110	1,625	1.3	69.0
Otitis media D450	1,504	1.2	70.2
Prophylactic inoculations X400	1,419	1.1	71.3
Progress visit T800	1,243	1.0	72.3
Headache, pain in head S210	1,167	0.9	73.2
Wheezing S425	1,108	0.9	74.1
Asthma D625	1,090	0.8	74.9
Suture—insertion, removal T555	1,048	0.8	75.7
Allergy, not otherwise specified S090	989	0.8	76.5
Stomach pain, cramps, and spasms S545	985	0.8	77.3
General symptoms of infants, not elsewhere classified S080	922	0.7	78.0
Abdominal pain, cramps and spasms S550	819	0.6	78.6
Hay fever (allergic rhinitis) D635	724	0.6	79.2
Skin lesion S865	653	0.5	79.7
Bronchitis D610	605	0.5	80.2
Neck symptoms S900	595	0.5	80.7
Injections T110	589	0.5	81.2

¹Based on *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶

²Based on a total of 128,762,000 visits.

Table 8. Number, percent, and cumulative percent of office visits to pediatricians, by age of patient and most frequent principal reasons for visit: United States, January 1980–December 1981

<i>Age of patient, principal reason for visit, and RVC code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits</i>	<i>Cumulative percent of visits</i>	<i>Age of patient, principal reason for visit, and RVC code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits</i>	<i>Cumulative percent of visits</i>
Under 1 year				6–10 years			
Well baby examination . . . S105	15,697	50.4	50.4	General medical examination X100	3,316	13.8	13.8
Fever S010	2,173	7.0	57.4	Symptoms referable to throat S455	2,467	10.3	24.1
Head cold, upper respiratory infection (coryza) S445	1,459	4.7	62.1	Earache, ear infection, or other symptoms referable to the ears, not elsewhere classified S355, S365	1,948	8.1	32.2
Cough S440	1,455	4.7	66.8	Fever S010	1,803	7.5	39.7
Earache, ear infection, or other symptoms referable to the ears, not elsewhere classified S355, S365	1,317	4.2	71.0	Cough S440	1,373	5.7	45.4
Skin rash S860	916	2.9	73.9	Allergy medication T100	1,221	5.1	50.5
Diarrhea S595	874	2.8	76.7	Headache, pain in head . . . S210	630	2.6	53.1
Nasal congestion S400	707	2.3	79.0	Skin rash S860	619	2.6	55.7
Vomiting S530	698	2.2	81.2	11–14 years			
General symptoms of infants S080	575	1.8	83.0	General medical examination X100	1,819	15.4	15.4
1 year				Symptoms referable to throat S455	1,106	9.4	24.8
Well baby examination . . . S105	4,675	26.7	26.7	Allergy medication T100	758	6.4	31.2
Fever S010	2,535	14.5	41.2	Earache, ear infection, or other symptoms referable to the ears, not elsewhere classified S355, S365	702	6.0	37.2
Earache, ear infection or other symptoms referable to the ears, not elsewhere classified S355, S365	1,865	10.6	51.8	Cough S440	576	4.9	42.1
Cough S440	1,353	7.7	59.5	15–20 years			
Head cold, upper respiratory infection (coryza) S445	893	5.1	64.6	General medical examination X100	1,008	13.9	13.9
Skin rash S860	594	3.4	68.0	Symptoms referable to throat S455	850	11.8	25.7
Nasal congestion S400	474	2.7	70.7	Allergy medication T100	*393	*5.4	31.1
2–5 years				Cough S440	*353	*4.9	36.0
General medical examination X100	5,743	16.9	16.9	21 years and over			
Fever S010	4,498	13.3	30.2	Hay fever (allergic rhinitis) D635	*275	*8.5	8.5
Earache, ear infection, or other symptoms referable to the ears, not elsewhere classified S355, S365	4,221	12.4	42.6	Allergy medication T100	*234	*7.2	15.7
Cough S440	3,399	10.0	52.6	Prenatal examination, routine X205	*200	*6.2	21.9
Symptoms referable to throat S455	1,879	5.5	58.1				
Head cold, upper respiratory infection (coryza) S445	1,393	4.1	62.2				
Physical examination for school A110	922	2.7	64.9				
Skin rash S860	905	2.7	67.6				

¹Based on *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶

Table 9. Number of office visits to pediatricians by sex and age of patient and prior visit status, and percent distribution by principal diagnosis categories according to sex and age of patient and prior visit status: United States, January 1980–December 1981

Principal diagnosis category and ICD–9–CM code ¹	Sex of patient			Age of patient							Prior visit status		
	Both sexes	Female	Male	Under 1 year	1 year	2–5 years	6–10 years	11–14 years	15–20 years	21 years and over	New patient	Old patient, new problem	Old patient, old problem
	Number in thousands												
All visits.	128,762	61,278	67,484	31,119	17,514	33,910	23,979	11,778	7,232	3,230	11,178	48,426	69,158
	Percent distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Infectious and parasitic diseases. 001–139	6.1	6.2	6.0	4.0	6.5	6.9	7.9	6.3	*5.9	*2.3	5.7	10.5	3.1
Neoplasms	*0.2	*0.1	*0.2	*0.2	*0.1	*0.3	-	*0.3	*0.1	-	*0.6	*0.2	*0.1
Endocrine, nutritional and metabolic diseases, and immunity disorders	0.6	*0.7	*0.5	*0.5	*0.2	*0.3	*0.8	*1.0	*1.9	*1.5		*0.4	0.9
Mental disorders. 290–319	0.5	*0.6	*0.5	*0.1	-	*0.3	*1.0	*1.1	*1.1	*4.5	*1.0	*0.7	*0.4
Diseases of the nervous system and sense organs	14.8	14.5	15.2	12.1	25.3	19.1	12.2	7.6	*5.3	*7.4	13.8	14.6	15.2
Diseases of the circulatory system	*0.3	*0.4	*0.2	*0.1	*0.2	*0.3	*0.1	*0.1	*0.9	*4.9	*0.3	*0.0	*0.5
Diseases of the respiratory system	28.0	26.6	29.3	17.3	24.5	31.8	35.9	29.3	29.4	44.6	28.3	30.1	26.5
Diseases of the digestive system	2.9	3.2	2.7	4.0	2.9	2.0	2.9	*3.2	*2.4	*2.9	*3.0	5.5	1.1
Diseases of the genitourinary system	1.3	1.9	0.7	*0.5	*0.3	1.4	*1.5	*1.9	*4.6	*2.2	*1.2	1.6	1.1
Diseases of the skin and subcutaneous tissue	3.8	4.1	3.4	3.6	3.3	3.1	4.0	6.4	*4.4	*2.4	5.3	6.6	1.6
Diseases of the musculoskeletal system and connective tissue	0.8	*0.7	1.0	*0.2	*0.2	*0.4	*1.2	*2.9	*1.9	*2.4	*0.7	1.5	*0.4
Symptoms, signs, and ill-defined conditions	3.1	3.4	2.8	3.3	*2.0	2.8	3.8	3.8	*3.0	*1.1	4.7	4.2	2.0
Injury and poisoning	4.6	4.3	4.9	*0.7	3.5	4.4	5.5	10.2	12.0	*7.1	6.9	6.3	3.1
Supplementary classification	31.0	31.6	30.4	51.0	29.8	25.2	21.1	25.0	24.8	14.8	25.8	16.1	42.2
All other diagnoses	1.1	1.0	1.3	1.9	*0.3	*1.0	*1.4	*0.5	*0.7	*1.3	1.9	1.0	1.1
Unknown diagnoses	0.9	*0.6	1.1	*0.7	*1.0	*0.9	*0.9	*0.7	*1.6	*0.5	*0.9	*0.8	0.9

¹Based on *International Classification of Diseases, 9th Revision, Clinical Modification*.⁹

Table 10. Number, percent, and cumulative percent of office visits to pediatricians, by most frequent principal diagnoses: United States, January 1980–December 1981

<i>Principal diagnosis and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits²</i>	<i>Cumulative percent of visits</i>	<i>Principal diagnosis and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits²</i>	<i>Cumulative percent of visits</i>
Routine infant or child health check, or general medical examination V20.2, V70	33,339	25.9	25.9	Desensitization to allergens V07.1	1,112	0.9	69.2
Otitis media 381, 382	15,998	12.4	38.3	Allergy, unclassified 995.3	1,057	0.8	70.0
Acute upper respiratory infections of multiple or unspecified sites 465	8,858	6.9	45.2	Influenza 487	1,051	0.8	70.8
Acute pharyngitis 462	6,144	4.8	50.0	Acute nasopharyngitis (common cold) 460	1,015	0.8	71.6
Acute bronchitis and bronchiolitis or bronchitis, not specified as acute or chronic 466, 490	4,016	3.1	53.1	Other diseases due to viruses and Chlamydiae 078	976	0.8	72.4
Acute tonsillitis 463	3,477	2.7	55.8	Pneumonia, organism unspecified 486	959	0.7	73.1
Asthma 493	3,415	2.7	58.5	Disorders of external ear . . . 380	946	0.7	73.8
Allergic rhinitis (hay fever) . . . 477	3,162	2.5	61.0	Disorders of conjunctiva . . . 372	912	0.7	74.5
Viral infections in conditions not classified elsewhere and of unspecified site 079	2,126	1.7	62.7	Chronic sinusitis 473	896	0.7	75.2
Other noninfectious gastroenteritis and colitis 558	2,121	1.6	64.3	Followup examination V67	850	0.7	75.9
Streptococcal sore throat and scarlet fever 034	1,753	1.4	65.7	General symptoms 780	813	0.6	76.5
Contact dermatitis and other eczema 692	1,723	1.3	67.0	Acute laryngitis and tracheitis 464	790	0.6	77.1
Observation and evaluation for suspected conditions . . . V71	1,621	1.3	68.3	Other disorders of urethra and urinary tract 599	756	0.6	77.7
				Impetigo 684	664	0.5	78.2
				Symptoms involving respiratory system and other chest symptoms 786	659	0.5	78.7
				Chronic pharyngitis and nasopharyngitis 472	647	0.5	79.2

¹Based on *International Classification of Diseases, 9th Revision, Clinical Modification*.⁹
²Based on a total of 128,762,000 visits.

Table 11. Number, percent, and cumulative percent of office visits to pediatricians, by age of patient and most frequent principal diagnoses: United States, January 1980–December 1981

<i>Age of patient, principal diagnosis, and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits</i>	<i>Cumulative percent of visits</i>	<i>Age of patient, principal diagnosis, and ICD-9-CM code¹</i>	<i>Number of visits in thousands</i>	<i>Percent of visits</i>	<i>Cumulative percent of visits</i>
Under 1 year²				2–5 years⁴—Con.			
Routine infant or child check V20.2	15,124	48.6	48.6	Contact dermatitis and other eczema 692	504	1.5	68.7
Otitis media 381, 382	3,200	10.3	58.9	Other noninfectious gastroenteritis and colitis. 558	469	1.4	70.1
Acute upper respiratory infection of multiple or unspecified sites. 465	2,191	7.0	65.9	6–10 years⁵			
Acute bronchitis and bronchiolitis or bronchitis, not specified as acute or chronic 466, 490	1,086	3.5	69.4	General medical examination. V70	3,655	15.2	15.2
Other noninfectious gastroenteritis and colitis. 558	789	2.5	71.9	Otitis media 381, 382	2,200	9.2	24.4
Acute pharyngitis 462	565	1.8	73.7	Acute pharyngitis 462	1,918	8.0	32.4
Viral infections in conditions classified elsewhere and of unspecified sites. 079	457	1.5	75.2	Acute upper respiratory infection of multiple or unspecified sites. 465	1,471	6.1	38.5
1 year³				Asthma 493	1,103	4.6	43.1
Routine infant or child check V20.2	4,463	25.5	25.5	Allergic rhinitis (hay fever) . . . 477	1,039	4.3	47.4
Otitis media 381, 382	4,042	23.1	48.6	Acute tonsillitis 463	984	4.1	51.5
Acute upper respiratory infection of multiple or unspecified sites. 465	1,391	7.9	56.5	Streptococcal sore throat and scarlet fever. 034	540	2.3	53.8
Acute pharyngitis 462	538	3.1	59.6	Acute bronchitis and bronchiolitis or bronchitis, not specified as acute or chronic 466, 490	519	2.2	56.0
Bronchitis, not specified as acute or chronic 490	516	2.9	62.5	Influenza 487	480	2.0	58.0
Acute tonsillitis. 463	467	2.7	65.2	Desensitization to allergens V07.1	471	2.0	60.0
2–5 years⁴				11–14 years⁶			
General medical examination. V70	6,670	19.7	19.7	General medical examination. V70	1,887	16.0	16.0
Otitis media 381, 382	5,746	16.9	36.6	Asthma 493	594	5.0	21.0
Acute upper respiratory infection of multiple or unspecified sites. 465	2,952	8.7	45.3	Allergic rhinitis (hay fever) . . . 477	593	5.0	26.0
Acute pharyngitis 462	2,008	5.9	51.2	Acute pharyngitis 462	577	4.9	30.9
Acute tonsillitis. 463	1,320	3.9	55.1	Acute upper respiratory infection of multiple or unspecified sites. 465	502	4.3	35.2
Acute bronchitis and bronchiolitis or bronchitis, not specified as acute or chronic 466, 490	1,313	3.9	59.0	Otitis media 381, 382	460	3.9	39.1
Streptococcal sore throat and scarlet fever. 034	753	2.2	61.2	15–20 years⁷			
Asthma 493	738	2.2	63.4	General medical examination. V70	1,392	19.2	19.2
Observation and evaluation for suspected conditions. V71	690	2.0	65.4	Acute pharyngitis 462	457	6.3	25.5
Viral infections in conditions classified elsewhere and of unspecified sites. 079	611	1.8	67.2	Asthma 493	*364	*5.0	30.5
				Allergic rhinitis (hay fever) . . . 477	*359	*5.0	35.5
				21 years and over⁸			
				Allergic rhinitis (hay fever) . . . 477	614	19.0	19.0
				Asthma 493	*298	9.2	28.2

¹ Based on *International Classification of Diseases, 9th Revision, Clinical Modification*.⁹

² Based on a total of 31,119,000 visits.

³ Based on a total of 17,514,000 visits.

⁴ Based on a total of 33,910,000 visits.

⁵ Based on a total of 23,979,000 visits.

⁶ Based on a total of 11,778,000 visits.

⁷ Based on a total of 7,239,000 visits.

⁸ Based on a total of 3,230,000 visits.

Table 12. Number of office visits to pediatricians by sex and age of patient and prior visit status; percent of visits by diagnostic service, nonmedication therapy, sex and age of patient, and prior visit status; and percent distribution by number of medications, according to sex and age of patient and prior visit status: United States, January 1980–December 1981

Service or therapy	Sex of patient			Age of patient							Prior visit status		
	Both sexes	Female	Male	Under 1 year	1 year	2–5 years	6–10 years	11–14 years	15–20 years	21 years and over	New patient	Old patient, new problem	Old patient, old problem
	Number in thousands												
All visits.....	128,762	61,278	67,484	31,119	17,514	33,910	23,979	11,778	7,232	3,230	11,178	48,426	69,158
	Percent of visits												
Diagnostic service ¹													
None.....	6.6	5.5	7.6	3.4	3.1	3.9	9.5	13.4	11.7	28.0	4.2	2.3	10.1
Limited history and/or examination.....	58.4	58.8	58.0	53.7	63.6	62.6	57.9	55.1	54.8	53.1	51.0	67.3	53.3
General history and/or examination.....	29.3	29.8	28.9	40.6	29.5	26.9	24.5	21.5	27.6	14.5	39.2	23.5	31.8
Clinical laboratory test.....	25.6	27.4	24.0	14.9	17.6	29.1	34.6	34.0	34.9	18.3	31.6	26.3	24.2
X-ray.....	2.3	2.4	2.2	*1.0	*2.2	1.9	2.5	4.3	*5.3	*3.6	4.5	2.9	1.5
Blood pressure check.....	8.5	8.4	8.6	*0.9	*2.2	8.1	11.9	17.1	26.2	23.2	8.1	6.6	9.9
Vision test.....	3.8	3.6	4.0	*0.5	*0.6	5.3	5.6	6.3	9.4	*0.3	*3.7	2.8	4.5
Other.....	4.2	4.1	4.3	1.5	5.3	5.2	5.7	3.6	3.9	*5.3	6.0	2.1	5.4
	Nonmedication therapy ¹												
None.....	60.0	59.0	60.8	51.5	63.0	64.3	63.0	58.2	57.5	68.7	50.7	58.8	62.2
Physiotherapy.....	1.4	1.6	1.1	*1.0	*0.7	1.3	*1.2	*2.2	*2.7	*3.3	*1.8	2.4	*0.5
Office surgery.....	7.1	6.9	7.2	3.8	5.3	7.5	8.7	11.7	12.4	*2.0	5.7	6.8	7.5
Therapeutic listening.....	1.3	1.3	1.4	*1.1	*1.6	*0.9	*1.6	1.7	*2.0	*1.7	*1.3	1.0	1.6
Diet counseling.....	11.5	12.2	10.9	24.5	12.9	6.3	5.4	5.9	6.4	*11.8	13.7	9.9	12.3
Family or social counseling.....	4.8	4.8	4.7	6.9	4.8	3.6	4.3	4.4	*3.2	4.8	4.2	2.9	6.2
Medical counseling.....	24.6	24.8	24.4	27.4	23.8	23.7	24.8	24.1	22.7	14.4	29.8	26.2	22.6
Other.....	0.7	1.0	0.8	0.2	*0.6	*0.5	*0.7	*2.4	*1.9	*0.4	1.5	0.8	0.9
	Number of medications												
	Percent distribution												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None.....	28.2	29.1	27.3	33.0	20.0	26.1	27.3	34.1	33.3	20.4	35.9	26.5	28.0
1.....	40.6	39.2	41.9	33.5	41.9	39.9	47.3	42.5	45.5	42.2	35.7	42.3	40.2
2.....	23.0	23.3	22.7	24.6	27.7	24.6	19.3	18.1	17.7	21.5	22.5	23.6	22.6
3.....	6.1	6.2	6.0	6.4	8.7	6.8	4.6	*3.3	*2.8	*9.8	4.1	5.5	6.8
4 or more.....	2.2	2.2	2.2	2.5	1.8	2.6	1.6	*2.0	*0.7	*6.0	*1.9	2.1	2.3

¹Percents will not total 100.0 because more than 1 diagnostic service or nonmedication therapy may have been rendered during a visit.

Table 13. Number of drugs mentioned in office visits to pediatricians by sex and age of patient and prior visit status, and percent distribution by therapeutic categories, according to sex and age of patient and prior visit status: United States, January 1980–December 1981

Therapeutic category	Sex of patient			Age of patient							Prior visit status		
	Both sexes	Female	Male	Under 1 year	1 year	2–5 years	6–10 years	11–14 years	15–20 years	21 years and over	New patient	Old patient, new problem	Old patient, old problem
	Number in thousands												
All categories	146,515	69,571	76,944	34,925	22,845	40,735	25,424	11,389	6,693	4,506	11,215	55,518	79,783
	Percent distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Antihistamine drugs	15.2	14.4	16.0	9.1	13.9	14.5	20.3	23.2	18.4	23.3	12.3	13.0	17.3
Anti-infective agents	30.1	30.4	29.9	20.5	33.7	36.6	34.8	25.0	28.0	17.5	33.1	35.2	26.2
Autonomic drugs	2.6	2.3	2.9	1.8	*1.4	2.3	4.3	4.1	*3.0	*3.8	*3.2	2.8	2.4
Central nervous system drugs	4.9	5.0	4.9	3.9	3.7	5.0	5.1	6.6	6.2	11.7	5.3	7.4	3.2
Diagnostic agents	4.2	4.5	3.9	2.6	2.7	4.7	5.4	6.6	7.5	*0.8	*2.7	2.7	5.4
Electrolytic, caloric, and water balance	0.6	0.8	*0.4	*1.0	*0.4	*0.0	*0.1	*0.1	*0.7	*7.1	*0.4	*0.5	0.7
Expectorants and cough preparations	6.7	6.8	6.6	4.3	7.5	8.7	7.0	6.1	*4.7	*5.9	7.7	7.7	5.8
Eye, ear, nose, and throat preparations	3.1	3.5	2.7	3.0	2.9	3.1	3.0	4.3	*2.7	*1.8	4.0	4.4	2.0
Gastrointestinal drugs	1.7	1.7	1.7	2.2	2.5	1.4	*1.1	1.1	*2.3	*0.8	*1.1	2.7	1.1
Hormones and synthetic substitutes	1.6	1.6	1.6	*1.2	*1.1	1.6	2.1	*2.1	*1.5	*3.7	*1.9	1.2	1.8
Serums, toxoids and vaccines	17.4	17.6	17.2	35.7	21.1	11.8	5.3	8.3	13.0	*5.8	12.0	9.5	23.7
Skin and mucous membrane preparations	5.9	6.2	5.7	7.3	5.2	4.8	6.2	6.5	7.3	*4.1	8.8	8.4	3.7
Spasmolytic agents	2.2	1.5	2.9	1.6	1.9	2.2	3.0	*3.4	*2.3	*2.6	*1.6	1.8	2.6
Vitamins	0.9	1.0	0.8	*1.2	*0.4	*0.8	*0.6	*0.9	*0.4	*3.8	*0.6	*0.5	1.2
Other, unclassified or undetermined	2.8	2.9	2.7	4.6	*1.6	2.5	1.8	*1.8	*2.1	*7.3	5.3	2.1	3.0

¹Based on the classification system of the *American Hospital Formulary Service*.⁸

Table 14. Number, percent, and cumulative percent of drug mentions in office visits to pediatricians, by name of most frequently mentioned drugs: United States, January 1980–December 1981

Name of drug ¹	Number of drug mentions in thousands	Percent of drug mentions ²	Cumulative percent of drug mentions	Name of drug ¹	Number of drug mentions in thousands	Percent of drug mentions ²	Cumulative percent of drug mentions
Poliomyelitis vaccine. . . .	9,307	6.4	6.4	V-Cillin (penicillin)	1,359	0.9	60.1
Diphtheria and tetanus toxoids and pertussis vaccine	9,263	6.3	12.7	Triaminic	1,238	0.8	60.9
Amoxicillin	6,519	4.4	17.1	Novahistine	1,214	0.8	61.7
Tuberculin tine test	6,079	4.1	21.2	Pediazole (erythromycin)	1,173	0.8	62.5
Allergy relief or shots	5,444	3.7	24.9	Neosporin	1,076	0.7	63.2
Amoxil (amoxicillin)	4,564	3.1	28.0	Tuss-ornade	1,015	0.7	63.9
Penicillin	3,911	2.7	30.7	Kflex	1,000	0.7	64.6
E.E.S. (erythromycin)	3,700	2.5	33.2	Phenergan with codeine	923	0.6	65.2
Dimetapp	3,500	2.4	35.6	Cortisporin	851	0.6	65.8
Ampicillin	2,796	1.9	37.5	Donnatal	842	0.6	66.4
Aspirin	2,624	1.8	39.3	Gantrisin	826	0.6	67.0
Actifed	1,967	1.3	40.6	Mycolog	743	0.5	67.5
Dimetane	1,934	1.3	41.9	Robitussin	728	0.5	68.0
Rondec	1,907	1.3	43.2	Benylin syrup	688	0.5	68.5
Phenergan	1,854	1.3	44.5	Donnagel	654	0.4	68.9
M-M-R (measles, mumps, rubella virus vaccine)	1,739	1.2	45.7	Sudafed	651	0.4	69.3
Bicillin (penicillin)	1,725	1.2	46.9	Hydrocortisone	562	0.4	69.7
Septra	1,677	1.1	48.0	Rubella virus vaccine, live	538	0.4	70.1
Larotid (amoxicillin)	1,611	1.1	49.1	Mycostatin	535	0.4	70.5
Bactrim	1,602	1.1	50.2	Poly-vi-flor	535	0.4	70.9
Tylenol	1,576	1.1	51.3	Actifed-C	517	0.4	71.3
Ceclor	1,554	1.1	52.4	Celestone	512	0.3	71.6
Erythromycin	1,496	1.0	53.4	Measles virus vaccine	510	0.3	71.9
Naaldecon	1,452	1.0	54.4	Quibron (theophylline)	491	0.3	72.2
Benadryl	1,442	1.0	55.4	Neo-synephrine	487	0.3	72.5
Pen-Vee K	1,440	1.0	56.4	Slo-phyllin (theophylline)	460	0.3	72.8
Ilosone (erythromycin)	1,410	1.0	57.4	Influenza virus vaccine, type A, B	445	0.3	73.1
Diphtheria and tetanus toxoids	1,371	0.9	58.3				
Vaccination (undetermined)	1,369	0.9	59.2				

¹Based on the physician's entry on the Patient Record form.

²Based on a total of 146,515,000 drug mentions.

Table 15. Number, percent, and cumulative percent of drugs mentioned in office visits to pediatricians, by age of patient and name of most frequently mentioned drugs: United States, January 1980–December 1981

<i>Age of patient and name of drug¹</i>	<i>Number of drug mentions in thousands</i>	<i>Percent of drug mentions</i>	<i>Cumulative percent of drug mentions</i>	<i>Age of patient and name of drug¹</i>	<i>Number of drug mentions in thousands</i>	<i>Percent of drug mentions</i>	<i>Cumulative percent of drug mentions</i>
Under 1 year²				2–5 years⁴—Con.			
Diphtheria and tetanus toxoids and pertussis vaccine	5,824	16.7	16.7	Ampicillin	797	2.0	36.4
Poliomyelitis vaccine	5,524	15.8	32.5	Allergy relief or shots	763	1.9	38.3
Amoxicillin	1,605	4.6	37.1	Dimetane	695	1.7	40.0
Tuberculin tine test	924	2.6	39.7	Actifed	676	1.7	41.7
Amoxil (amoxicillin)	867	2.5	42.2	Phenergan	626	1.5	43.2
Dimetapp	806	2.3	44.5	Bicillin (penicillin)	596	1.5	44.7
Rondec	757	2.2	46.7	Erythromycin	580	1.4	46.1
E.E.S. (erythromycin)	586	1.7	48.4	Ceclor	574	1.4	47.5
Sepra	496	1.4	49.8	Larotid (amoxicillin)	559	1.4	48.9
Tylenol	487	1.4	51.2	Bactrim	548	1.3	50.2
Vaccination (undetermined)	466	1.3	52.5	Ilosone (erythromycin)	544	1.3	51.5
				Tuss-ornade	490	1.2	52.7
				Pediazole (erythromycin)	484	1.2	53.9
				Novahistine	467	1.1	55.0
				V-Cillin (penicillin)	450	1.1	56.1
1 year³				6–10 years⁵			
M-M-R (measles, mumps, rubella virus vaccine)	1,383	6.1	6.1	Allergy relief or shots	1,937	7.6	7.6
Amoxicillin	1,249	5.5	11.6	Tuberculin tine test	1,366	5.4	13.0
Diphtheria and tetanus toxoids and pertussis vaccine	1,245	5.5	17.1	Penicillin	1,278	5.0	18.0
Poliomyelitis vaccine	1,172	5.1	22.2	Amoxicillin	1,013	4.0	22.0
Amoxil (amoxicillin)	1,102	4.8	27.0	E.E.S. (erythromycin)	773	3.0	25.0
Dimetapp	779	3.4	30.4	Amoxil (amoxicillin)	586	2.3	27.3
Tuberculin tine test	611	2.7	33.1	Dimetane	566	2.2	29.5
Ampicillin	546	2.4	35.5	Dimetapp	539	2.1	31.6
E.E.S. (erythromycin)	504	2.2	37.7	Aspirin	519	2.0	33.6
Rondec	500	2.2	39.9	Ampicillin	500	2.0	35.6
Penicillin	500	2.2	42.1	V-Cillin (penicillin)	474	1.9	37.5
Ceclor	459	2.0	44.1	Ilosone (erythromycin)	473	1.9	39.4
Actifed	446	2.0	46.1				
Sepra	426	1.9	48.0	11–14 years⁶			
				Allergy relief or shots	1,284	11.3	11.3
				Tuberculin tine test	751	6.6	17.9
				Aspirin	*326	2.9	20.8
				Penicillin	*313	2.7	23.5
2–5 years⁴				15–20 years⁷			
Amoxicillin	2,216	5.4	5.4	Allergy relief or shots	688	10.3	10.3
Tuberculin tine test	1,901	4.7	10.1	Tuberculin tine test	504	7.5	17.8
Diphtheria and tetanus toxoids and pertussis vaccine	1,857	4.6	14.7	Diphtheria and tetanus toxoids	*306	4.6	22.4
Poliomyelitis vaccine	1,794	4.4	19.1	Penicillin	*227	3.4	25.8
Amoxil (amoxicillin)	1,746	4.3	23.4				
E.E.S. (erythromycin)	1,327	3.3	26.7	21 years and over⁸			
Penicillin	1,181	2.9	29.6	Allergy relief or shots	665	14.8	14.8
Dimetapp	993	2.4	32.0				
Aspirin	959	2.4	34.4				

¹Based on the physician's entry on the Patient Record form.
²Based on a total of 34,925,000 drug mentions.
³Based on a total of 22,845,000 drug mentions.
⁴Based on a total of 40,735,000 drug mentions.
⁵Based on a total of 25,424,000 drug mentions.
⁶Based on a total of 11,389,000 drug mentions.
⁷Based on a total of 6,693,000 drug mentions.
⁸Based on a total of 4,506,000 drug mentions.

Table 16. Number of office visits to pediatricians by sex and age of patient and prior visit status, and percent distribution by duration and disposition of visits, according to sex and age of patient and prior visit status: United States, January 1980–December 1981

Duration and disposition of visit	Sex of patient			Age of patient							Prior visit status		
	Both sexes	Female	Male	Under 1 year	1 year	2–5 years	6–10 years	11–14 years	15–20 years	21 years and over	New patient	Old patient, new problem	Old patient, old problem
	Number in thousands												
All visits.....	128,762	61,278	67,484	31,119	17,514	33,910	23,979	11,778	7,232	3,230	11,178	48,426	69,158
	Percent distribution												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Duration of visit													
0 minutes ¹	3.9	3.5	4.3	2.6	3.2	2.5	5.3	7.0	6.8	*6.5	*1.6	2.6	5.2
1–5 minutes.....	14.9	14.3	15.5	9.9	15.8	14.9	18.6	16.4	16.4	22.2	7.7	15.0	16.0
6–10 minutes.....	37.6	39.2	36.1	38.6	41.4	40.4	36.9	29.9	29.3	28.4	33.3	42.5	34.8
11–15 minutes.....	28.5	27.7	29.2	34.6	26.6	28.8	23.9	26.9	26.9	21.0	31.4	27.3	28.9
16–30 minutes.....	13.3	13.7	13.0	12.0	11.9	12.1	13.3	18.6	17.5	18.3	22.6	10.7	13.7
31 minutes or longer.....	1.9	1.7	2.0	2.2	*1.1	1.5	2.1	*1.3	*3.1	*3.8	*3.4	2.0	1.5
Disposition of visit ²													
No followup planned.....	15.8	15.5	16.2	8.5	14.5	20.3	17.6	18.6	21.5	*10.9	14.7	19.6	13.4
Return at specified time.....	49.8	49.1	50.4	68.6	54.5	40.6	38.1	44.5	42.5	62.3	48.0	35.1	60.4
Return if needed.....	30.6	31.1	30.2	22.1	29.5	34.9	37.9	32.0	30.0	16.8	30.6	38.6	25.0
Telephone followup planned.....	5.6	6.0	5.3	3.6	4.1	6.2	7.8	5.9	6.6	*7.7	4.9	8.4	3.8
Referred to other physician.....	2.3	1.9	2.6	1.5	*2.3	2.0	2.1	4.5	*3.1	*4.5	*3.3	2.3	2.1
Returned to referring physician.....	*0.3	*0.4	*0.3	*0.3	*0.7	*0.2	*0.4	*0.1	*0.2	-	*2.0	*0.2	*0.2
Admit to hospital.....	0.7	0.9	*0.6	*1.0	*0.4	*0.5	*0.7	*0.6	*1.1	*2.2	*1.0	*0.5	0.8
Other.....	*0.1	*0.1	*0.1	*0.1	-	*0.1	*0.1	*0.3	-	-	*0.5	*0.1	*0.0

¹Represents visits in which there was no face-to-face encounter between patient and physician.

²Percents will not total 100.0 because more than 1 disposition was possible.

Table 17. Number of office visits to pediatricians by major reason for visit and principal reason for visit module, and percent of visits by diagnostic service, major reason for visit, and principal reason for visit module: United States, January 1980–December 1981

Major reason for visit and principal reason for visit module	Number of visits in thousands	Diagnostic service ¹							
		None	Limited history and/or examination	General history and/or examination	Clinical laboratory test	X-ray	Blood pressure check	Vision test	Other
Major reason for visit		Percent of visits							
Acute problem	69,085	1.8	73.5	17.6	24.8	3.3	4.0	*0.4	2.4
Chronic problem, routine	11,639	40.2	40.9	14.1	13.2	*2.1	6.3	*0.5	6.4
Chronic problem, flareup	5,784	2.7	69.1	21.8	19.5	*3.0	*7.1	-	5.3
Postsurgery or postinjury	2,126	13.2	69.4	*9.3	*8.4	*3.4	*5.8	*0.6	*2.1
Nonillness care	40,128	5.4	35.2	56.2	32.5	*0.5	17.2	11.3	6.7
Principal reason for visit module and RVC code ²									
Symptom module..... S001–S999	71,995	2.3	71.7	19.5	24.8	2.6	4.4	*0.4	2.6
Disease module..... D001–D999	7,366	18.5	64.0	12.2	14.0	*3.3	*3.6	*0.4	7.7
Diagnostic, screening, and preventive module..... X100–X599	34,942	3.7	34.9	57.5	33.9	*0.6	15.5	9.8	5.9
Treatment module..... T100–T899	6,869	52.0	39.1	*5.5	*5.5	*0.5	*4.4	*0.1	*3.3
Injuries and adverse effects module..... J001–J999	3,747	*4.6	70.2	15.8	*8.1	14.1	*8.6	*2.3	*3.3
Test results module..... R100–R700	*180	-	*57.2	*17.8	*30.8	*11.2	-	-	-
Administrative module..... A100–A140	2,291	-	26.1	65.4	59.0	*2.7	57.0	43.5	22.9

¹ Percents will not total 100.0 because more than 1 diagnostic service may have been rendered during a visit.

² Based on *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶

Table 18. Number of office visits to pediatricians by principal diagnosis categories; percent distribution by number of medications, according to principal diagnosis categories; and percent of visits with no nonmedication therapy by principal diagnosis categories: United States, January 1980–December 1981

Principal diagnosis category and ICD-9-CM code ¹	Number of visits in thousands	Number of medications						Percent of visits with no non-medication therapy
		Total	None	1	2	3	4 or more	
All diagnoses.....	128,762	100.0	28.2	40.6	23.0	6.1	2.2	60.0
Infectious and parasitic diseases..... 001–139	7,859	100.0	30.2	52.1	12.6	*3.2	*1.9	64.1
Neoplasms..... 140–239	*196	100.0	*56.6	*31.2	-	*12.2	-	*21.0
Endocrine, nutritional and metabolic diseases, and immunity disorders..... 240–279	765	100.0	*54.2	*27.0	*8.2	*10.1	*0.6	*26.6
Mental disorders..... 290–319	689	100.0	*43.0	*34.7	*22.3	-	-	*29.0
Diseases of the nervous system and sense organs... 320–389	19,108	100.0	15.1	41.7	31.4	8.9	2.9	71.8
Diseases of the circulatory system..... 390–459	416	100.0	*20.6	*20.0	*23.6	*26.9	*9.0	*35.5
Diseases of the respiratory system..... 460–519	36,059	100.0	9.8	48.3	30.5	7.4	4.1	71.6
Diseases of the digestive system..... 520–579	3,767	100.0	39.1	38.0	16.2	*6.1	*0.6	38.3
Diseases of the genitourinary system..... 580–629	1,646	100.0	35.9	45.0	*13.7	*2.8	*2.6	59.1
Diseases of the skin and subcutaneous tissue.... 680–709	4,839	100.0	11.5	51.4	23.5	*8.9	*4.8	58.6
Diseases of the musculoskeletal system and connective tissue..... 710–739	1,077	100.0	59.8	*33.0	*5.5	*0.8	*0.9	*40.6
Symptoms, signs, and ill-defined conditions..... 780–799	3,936	100.0	46.8	36.3	12.2	*3.2	*1.5	54.9
Injury and poisoning..... 800–999	5,943	100.0	52.8	35.8	9.3	*1.4	*0.8	42.7
Supplementary classification..... V01–V82	39,906	100.0	43.4	31.9	19.2	5.0	*0.4	50.4
All other diagnoses.....	1,458	100.0	48.0	*26.8	*21.3	*2.9	*1.0	50.5

¹ Based on *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.⁹

Table 19. Number of office visits to pediatricians by selected principal diagnosis categories, and percent distribution by duration and disposition of visits, according to selected principal diagnosis categories: United States, January 1980–December 1981

Duration and disposition	Principal diagnosis category and ICD-9-CM code ¹								
	Infectious and parasitic diseases 001-139	Diseases of the nervous system and sense organs 320-389	Diseases of the respiratory system 460-519	Diseases of the digestive system 520-579	Diseases of the genitourinary system 580-629	Diseases of the skin and subcutaneous tissue 680-709	Symptoms, signs, and ill-defined conditions 780-799	Injury and poisoning 800-999	Supplementary classification V01-V82
	Number of visits in thousands								
All visits.....	7,859	19,108	36,059	3,767	1,646	4,839	3,936	5,943	39,906
	Percent distribution								
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Duration of visit									
0 minutes ²	6.1	*2.0	4.1	*3.9	*2.7	*0.1	*0.8	*3.8	4.7
1-5 minutes.....	18.7	15.0	19.7	*10.3	*14.4	22.1	*9.3	23.1	8.7
6-10 minutes.....	40.5	45.8	39.9	38.8	30.8	40.6	36.4	33.3	32.2
11-15 minutes.....	24.0	24.9	24.5	26.3	27.4	26.8	31.5	25.2	35.9
16-30 minutes.....	9.7	11.0	9.7	18.0	*21.2	7.5	20.4	14.3	16.7
31 minutes or longer.....	*0.9	*1.3	2.1	*2.8	*3.6	*3.1	*1.7	*0.3	1.6
Disposition of visit ³									
No followup planned.....	20.9	12.0	15.9	12.4	*10.3	21.6	*11.0	21.2	16.4
Return at specified time.....	20.2	61.4	35.4	32.5	45.0	30.0	42.1	36.0	69.5
Return if needed.....	46.8	24.2	41.4	42.2	34.2	45.5	39.5	34.7	17.3
Telephone followup planned.....	11.6	3.9	9.2	14.9	*12.6	*4.3	12.0	*2.7	*0.9
Referred to other physician.....	*1.4	3.6	*1.0	*2.4	*8.7	*2.0	*4.1	*5.6	1.2
Returned to referring physician.....	*0.4	*0.3	*0.6	-	-	*0.3	*0.4	*0.1	*0.1
Admit to hospital.....	*2.4	*0.5	*0.6	*3.2	*2.0	-	*1.2	*0.9	*0.2
Other.....	-	*0.2	-	*0.3	-	-	-	*0.1	*0.1

¹Based on *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM).⁹

²Represents visits in which there was no face-to-face encounter between patient and physician.

³Percents will not total 100.0 because more than 1 disposition was possible.

Appendixes

Contents

I. Technical notes	40
Statistical design	40
Scope of the survey	40
Sample design	40
Data collection and processing	40
Field procedures	40
Data collection	41
Data processing	41
Estimation procedures	42
Inflation by reciprocals of probabilities of selection	42
Adjustment for nonresponse	42
Ratio adjustment	42
Reliability of estimates	42
Estimates of aggregates	45
Estimates of percents	45
Estimates of rates where the numerator is not a subclass of the denominator	45
Estimates of differences between two statistics	45
Tests of significance	45
Population figures and rate computation	46
Rounding of numbers	46
Systematic bias	46
II. Definitions of certain terms used in this report	47
Terms relating to the survey	47
Terms relating to the Patient Record Form	47
III. Survey instruments	50
Introductory letter from Director, NCHS	50
Patient Record Form	51
Induction Interview Form	52
IV. American Hospital Formulary Service classification system and therapeutic category codes	60

List of appendix figures

I. Approximate relative standard errors for estimated numbers of office visits based on all physician specialties (<i>A</i>), and individual specialties (<i>B</i>), 1980–81 National Ambulatory Medical Care Survey	41
II. Approximate relative standard errors for estimated numbers of drug mentions based on all physician specialties (<i>A</i>), and individual specialties (<i>B</i>), 1980–81 National Ambulatory Medical Care Survey	46

List of appendix tables

I. Distribution of physicians in the 1980–81 National Ambulatory Medical Care Survey sample and response rates, by physician specialty	43
II. Estimates of the civilian noninstitutionalized population of the United States used in computing annual visit rates in this report, by age, race, and sex: 1980–81	44

Appendix I

Technical notes^c

This report is based on data collected during 1980 and 1981 in the National Ambulatory Medical Care Survey (NAMCS), an annual sample survey of office-based physicians conducted by the Division of Health Care Statistics of the National Center for Health Statistics (NCHS). The two surveys were conducted with identical instruments, definitions, and procedures. Two years of data were combined to increase the reliability of the estimates. The annual survey design and procedures are presented in the following sections.

Statistical design

Scope of the survey

The target population of NAMCS includes office visits made within the conterminous United States by ambulatory patients to nonfederally employed physicians who are principally engaged in office-based patient care practice, but not in the specialties of anesthesiology, pathology, or radiology. Telephone contacts and nonoffice visits are excluded from NAMCS.

Sample design

The NAMCS utilizes a three-stage survey design that involves probability samples of primary sampling units (PSU's), physician practices within PSU's, and patient visits within physician practices. The first-stage sample of 87 PSU's was selected by the National Opinion Research Center (NORC) of the University of Chicago, the organization responsible for NAMCS field and data processing operations under contract to NCHS. A PSU is a county, a group of adjacent counties, or a standard metropolitan statistical area (SMSA). A modified probability-proportional-to-size procedure using separate sampling frames for SMSA's and for nonmetropolitan counties was used to select the sample PSU's. Each frame was stratified by region, size of population, and demographic characteristics of the PSU's, and was divided into sequential zones of 1 million residents; then, a random number was drawn to determine which PSU came into the sample from each zone.

The second stage consisted of a probability sample of practicing physicians, selected from the masterfiles maintained by the American Medical Association (AMA) and the American Osteopathic Association (AOA), who met the following criteria:

- Office-based, as defined by AMA and AOA.
- Principally engaged in patient care activities.

- Nonfederally employed.
- Not in the specialties of anesthesiology, pathology, clinical pathology, forensic pathology, radiology, diagnostic radiology, pediatric radiology, or therapeutic radiology.

Within each PSU, all eligible physicians were sorted by nine specialty groups: general and family medicine, internal medicine, pediatrics, other medical specialties, general surgery, obstetrics and gynecology, other surgical specialties, psychiatry, and all other specialties. Then, within each PSU, a systematic random sample of physicians was selected so that the overall probability of selecting any physician in the United States was approximately constant.

During 1980–81 the NAMCS physician sample included 5,805 physicians. Sample physicians were screened at the time of the survey to ensure that they met the aforementioned criteria; 1,124 physicians did not meet the criteria and were, therefore, ruled out of scope (ineligible) for the study. The most common reasons for being out of scope were that the physician was retired, deceased, or employed in teaching, research, or administration. Of the 4,681 inscope (eligible) physicians, 3,676 (78.5 percent) participated in the study. Of the participating physicians, 509 saw no patients during their assigned reporting period because of vacations, illnesses, or other reasons for being temporarily out of office-based practice. The physician sample size and response data by physician specialty are shown in table I.

The third stage was the selection of patient visits within the annual practices of the sample physicians. This stage involved two steps. First, the total physician sample was divided into 52 random subsamples of approximately equal size; then each subsample was randomly assigned to 1 of the 52 weeks in the survey year. Second, a systematic random sample of visits was selected by the physician during the assigned reporting week. The visit sampling rate varied for this final step from a 100 percent sample for very small practices to a 20 percent sample for very large practices. The method for determining the visit sampling rate is described later in this appendix and in the Induction Interview form in appendix III. During 1980–81, sample physicians completed 89,447 usable Patient Record forms.

Data collection and processing

Field procedures

Both mail and telephone contacts were used to enlist sample physicians for NAMCS. Initially, physicians were sent introductory letters from the Director of NCHS (see appendix III). When appropriate, a letter from the physician's specialty

^cPrepared by Thomas McLemore, Division of Health Care Statistics.

Table 1. Distribution of physicians in the 1980-81 National Ambulatory Medical Care Survey samples and response rates, by physician specialty

Physician specialty	Gross total	Out of scope	Net total	Nonrespondents	Respondents	Response rate
All specialties	5,805	1,124	4,681	1,005	3,676	78.5
General and family practice	1,340	289	1,051	272	779	74.1
Medical specialties	1,695	296	1,399	298	1,101	78.7
Internal medicine	871	158	713	182	531	74.5
Pediatrics	414	83	331	42	289	87.3
Other medical specialties	410	55	355	74	281	79.2
Surgical specialties	1,978	246	1,732	351	1,381	79.7
General surgery	521	75	446	115	331	74.2
Obstetrics and gynecology	484	71	413	63	350	84.7
Other surgical specialties	973	100	873	173	700	80.2
Other specialties	792	293	499	84	415	83.2
Psychiatry	414	96	318	43	275	86.5
Other specialties	378	197	181	41	140	77.3

organization endorsing the survey and urging his participation was enclosed with the NCHS letter. Approximately 2 weeks prior to the physician's assigned reporting period, a field representative telephoned the physician to explain briefly the study and arrange an appointment for a personal interview. Physicians who did not initially respond were usually recontacted via telephone or special explanatory letter and requested to reconsider participation in the study.

During the personal interview the field representative determined the physician's eligibility for the study, obtained his cooperation, delivered survey materials with verbal and printed instructions, and assigned a predetermined Monday-Sunday reporting period. A short induction interview concerning basic practice characteristics, such as type of practice and expected number of office visits, was conducted. Office staff who were to assist with data collection were invited to attend the instructional session or were offered separate instructional sessions.

The field representative telephoned the sample physician prior to and during the assigned reporting week to answer questions that might have arisen and to ensure that survey procedures were going smoothly. At the end of the reporting week, the participating physician mailed the completed survey materials to the field representative who edited the forms for completeness before transmitting them for central data processing. At this point problems of missing or incomplete data were resolved by telephone followup by the field representative to the sample physician; if no problems were found, field procedures were considered complete regarding the sample physician's participation in NAMCS.

Data collection

The actual data collection for NAMCS was carried out by the physician, assisted by his office staff when possible. Two data collection forms were employed by the physician: the Patient Log and the Patient Record form (see appendix III). The Patient Log, a sequential listing of patients seen in the physician's office during his assigned reporting week, served as the sampling frame to indicate the office visits for which data were to be recorded. A perforation between the patient's name and patient visit information permitted the physician to detach and retain the listing of patients, thus, assuring the anonymity of the physician's patients.

Based on the physician's estimate of the expected number of office visits and expected number of days in practice during the assigned reporting week, each physician was assigned a visit sampling rate. The visit sampling rates were designed so that about 30 Patient Record forms would be completed by each physician during the assigned reporting week. Physicians expecting 10 or fewer visits per day recorded data for all visits. Those physicians expecting more than 10 visits per day recorded data for every second, third, or fifth visit based on the predetermined sampling interval. These visit sampling procedures minimized the physician's data collection workload and maintained approximately equal reporting levels among sample physicians regardless of practice size. For physicians recording data for every second, third, or fifth patient visit, a random start was provided on the first page of the Patient Log so that the predesignated sample visits recorded on each succeeding page of the Patient Log provided a systematic random sample of patient visits during the reporting period.

Data processing

In addition to followups for missing and inconsistent data made by the field staff, numerous clerical edits were performed on data received for central data processing. These manual edit procedures proved quite efficient, reducing item non-response rates to 2 percent or less for most data items.

Information contained in item 6 (Patient's problem or reason for visit) of the Patient Record form was coded according to *A Reason for Visit Classification for Ambulatory Care (RVC)*.⁶ Diagnostic information (item 9 of the Patient Record form) was coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*.⁹ A maximum of three entries were coded from each of these items. Prior to coding, Patient Record forms were grouped into batches with approximately 650 forms per batch. Quality control for the medical coding operation involved a two-way 5-percent independent verification procedure. Error rates were defined as the number of incorrectly coded entries divided by the total number of coded entries. The estimated error rates for the 1980-81 medical coding operation were 1.7 percent for

NOTE: A list of references follows the text.

item 6 and 2.3 percent for item 9. Additionally, a dependent verification procedure was used to review and adjudicate all records in batches with excessive error rates. This procedure further reduced the estimated error rates to 1.6 percent for item 6 and 2.1 percent for item 9.

The NAMCS medication data (item 11 of the Patient Record form) was classified and coded according to a scheme developed at NCHS based on the American Society of Hospital Pharmacists' Drug Product Information File. A description of the new drug coding scheme and of the NAMCS drug data processing procedures is contained in *Vital and Health Statistics*, Series 2, No. 90.⁷ A two-way 100 percent independent verification procedure was used to control the medication coding operation. As an additional quality control, all Patient Record forms with differences between drug coders or with illegible drug entries were reviewed and adjudicated at NCHS.

Information from the Induction Interview and Patient Record forms was keypunched with 100 percent verification and converted to computer tape. At this point, extensive computer consistency and edit checks were performed to ensure complete and accurate data. Incomplete data items were imputed by assigning a value from a randomly selected Patient Record form with similar characteristics; patient sex and age, physician specialty, and broad diagnostic categories were used as the basis for these imputations.

Estimation procedures

Statistics from NAMCS were derived by a multistage estimation procedure that produces essentially unbiased national estimates and has three basic components: (1) inflation by reciprocals of the probabilities of selection, (2) adjustment for nonresponse, and (3) a ratio adjustment to fixed totals. Each component is briefly described below.

Inflation by reciprocals of probabilities of selection.

Because the survey utilized a three-stage sample design, three probabilities of selection existed: (1) the probability of selecting the PSU, (2) the probability of selecting the physician within the PSU, and (3) the probability of selecting an office visit within the physician's practice. The third probability was defined as the number of office visits during the physician's assigned reporting week divided by the number of Patient Record forms completed. All weekly estimates were inflated by a factor of 52 to derive annual estimates.

Adjustment for nonresponse

NAMCS data were adjusted to account for sample physicians who were in scope, but did not participate in the study. This adjustment was calculated in order to minimize the impact of response on final estimates by imputing to nonresponding physicians the practice characteristics of similar responding physicians. For this purpose, physicians were judged similar if they had the same specialty designation and practiced in the same PSU.

NOTE: A list of references follows the text.

Ratio adjustment

A poststratification adjustment was made within each of nine physician specialty groups. The ratio adjustment was a multiplication factor that had as its numerator the number of physicians in the universe in each physician specialty group and as its denominator the estimated number of physicians in that particular specialty group. The numerator was based on figures obtained from the AMA and AOA masterfiles, and the denominator was based on data from the sample.

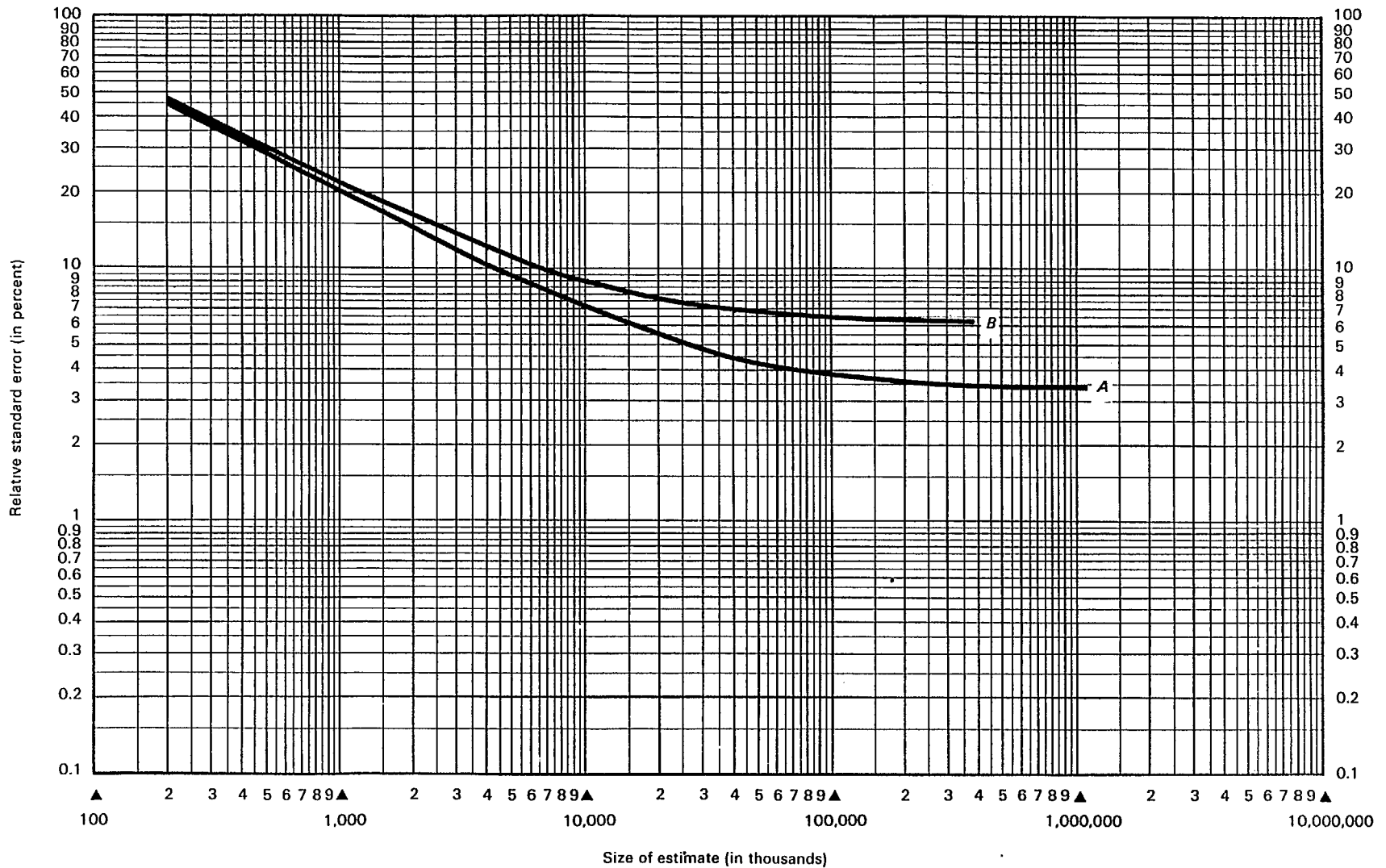
Reliability of estimates

As in any survey, results are subject to both sampling and nonsampling errors. Nonsampling errors include reporting and processing errors, as well as biases due to nonresponse and incomplete response. The magnitude of the nonsampling errors cannot be computed. However, these errors were kept to a minimum by procedures built into the survey's operation. To eliminate ambiguities and encourage uniform reporting, careful attention was given to the phrasing of questions, terms, and definitions. Also, extensive pretesting of most data items and survey procedures was performed. The steps taken to reduce bias in the data are discussed in the sections on field procedures and data collection. Quality control procedures and consistency and edit checks discussed in the data processing section reduced errors in data coding and processing. However, because survey results are subject to sampling and nonsampling errors, the total error will be larger than the error due to sampling variability alone.

Because the statistics presented in this report are based on a sample, they differ somewhat from the figures that would be obtained if a complete census had been taken using the same forms, definitions, instructions, and procedures. However, the probability design of NAMCS permits the calculation of sampling errors. The standard error is primarily a measure of sampling variability that occurs by chance because only a sample rather than the entire population is surveyed. The standard error, as calculated in this report, also reflects part of the variation that arises in the measurement process, but does not include estimates of any systematic biases that may be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error, and about 99 out of 100 that it would be less than 2½ times as large.

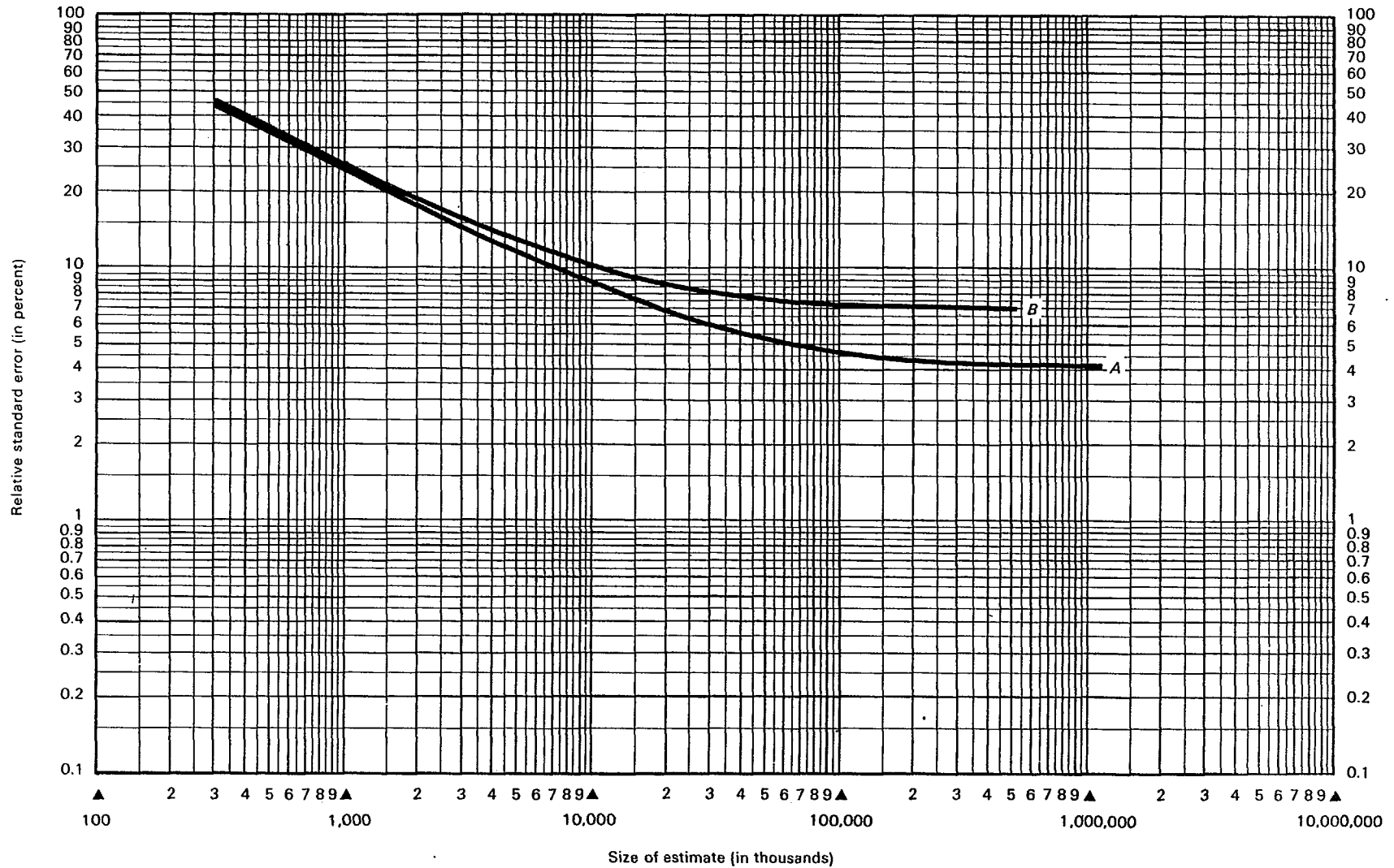
The relative standard error of an estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. For this report, an asterisk (*) precedes any estimate with more than a 30 percent relative standard error.

Estimates of sampling variability were calculated using the method of half-sample replication. This method yields overall variability through observation of variability among random subsamples of the total sample. A description of the development and evaluation of the replication technique for error estimation has been published.^{14,15} Approximate relative standard errors for aggregate estimates are presented in figures I and II.



EXAMPLE: An estimate of 20 million office visits to general surgeons (read from scale at bottom of chart) has a relative standard error of 7.7 percent (read from curve *B* on scale at left of chart) or a standard error of 1,540,000 office visits (7.7 percent of 20 million visits).

Figure 1. Approximate relative standard errors for estimated numbers of office visits based on all physician specialties (*A*), and individual specialties (*B*), 1980-81 National Ambulatory Medical Care Survey



EXAMPLE: An estimate of 60 million drug mentions (read from scale at bottom of chart) has a relative standard error of 5.1 percent (read from curve A on scale at left of chart) or a standard error of 3,060,000 drug mentions (5.1 percent of 60 million drug mentions).

Figure II. Approximate relative standard errors for estimated numbers of drug mentions based on all physician specialties (A), and individual specialties (B), 1980-81 National Ambulatory Medical Care Survey

To derive error estimates that would be applicable to a wide variety of statistics and could be prepared at moderate cost, several approximations were required. As a result, the relative standard errors shown in figures I and II should be interpreted as approximate rather than exact for any specific estimate. Directions for determining approximate relative standard errors follow.

Estimates of aggregates

Approximate relative standard errors (in percent) for aggregate statistics are presented in figures I and II. The approximate relative standard errors for aggregate estimates of office visits are shown in figure I, and the approximate relative standard errors for aggregate estimates of drug mentions are shown in figure II. In each figure, curve *A* represents the relative standard errors appropriate for estimates based on all physician specialties, and curve *B* represents relative standard errors appropriate for estimates based on an individual physician specialty. For the specific case where the aggregate estimate of interest is the number of mentions of a specific drug, for example, the number of mentions of Dyazide, figure I, curve *B* should be used to obtain approximate relative standard errors.

Instead of using figures I and II, relative standard errors for aggregate estimates may be calculated directly using the following formulae where *x* is the aggregate estimate of interest in thousands. For visit estimates based on all physician specialties,

$$RSE(x) = \sqrt{0.001111 + \frac{39.84195}{x}} \cdot 100.0$$

For visit estimates based on an individual physician specialty,

$$RSE(x) = \sqrt{0.003757 + \frac{42.88175}{x}} \cdot 100.0$$

For drug mention estimates based on all physician specialties,

$$RSE(x) = \sqrt{0.001647 + \frac{58.48328}{x}} \cdot 100.0$$

For drug mention estimates based on an individual physician specialty,

$$RSE(x) = \sqrt{0.004696 + \frac{59.50164}{x}} \cdot 100.0$$

Estimates of percents

Approximate relative standard errors (in percent) for estimates of percents may be calculated from figures I and II as follows. From the appropriate curve obtain the relative standard error of the numerator and denominator of the percents. Square each of the relative standard errors, subtract the resulting value for the denominator from the resulting value for the numerator, and extract the square root. This approximation is valid if the relative standard error of the denominator

is less than 0.05 or if the relative standard errors of the numerator and denominator are both less than 0.10.

Alternatively, relative standard errors for percentages may be calculated directly using the following formulae where *p* is the percent of interest and *x* is the base of the percent in thousands. For visit percentages based on all physician specialties,

$$RSE(p) = \sqrt{\frac{39.84195 \cdot (1-p)}{p \cdot x}} \cdot 100.0$$

For visit percentages based on an individual physician specialty,

$$RSE(p) = \sqrt{\frac{42.88175 \cdot (1-p)}{p \cdot x}} \cdot 100.0$$

For drug mention percentages based on all physician specialties,

$$RSE(p) = \sqrt{\frac{58.48328 \cdot (1-p)}{p \cdot x}} \cdot 100.0$$

For drug mention percents based on an individual physician specialty,

$$RSE(p) = \sqrt{\frac{59.50164 \cdot (1-p)}{p \cdot x}} \cdot 100.0$$

Estimates of rates where the numerator is not a subclass of the denominator

Approximate relative standard errors for rates in which the denominator is the total United States population or one or more of the age-sex-race groups of the total population are equivalent to the relative standard error of the numerator that can be obtained from figures I or II.

Estimates of differences between two statistics

The relative standard errors shown in this appendix are not directly applicable to differences between two sample estimates. The standard error of a difference is approximately the square root of the sum of squares of each standard error considered separately. This formula represents the standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases.

Tests of significance

In this report, the determination of statistical inference is based on the *t*-test with a critical value of 1.96 (0.05 level of significance). Terms relating to differences, such as "higher," and "less" indicate that the differences are statistically significant. Terms such as "similar" or "no difference" mean that no statistical significance exists between the estimates being compared. A lack of comment regarding the difference between any two estimates does not mean that the difference was tested and found to be not significant.

Table II. Estimates of the civilian noninstitutionalized population of the United States used in computing average annual visit rates in this publication, by age, sex, and race of patient: United States, 1980-81

Age	Sex			Race		
	Both sexes	Male	Female	White	Black	All other
All ages ¹	222,674	107,429	115,244	191,052	26,107	5,515
Under 1 year.....	3,524	1,804	1,720	2,846	572	109
1 year.....	3,400	1,740	1,661	2,776	518	107
2-5 years.....	12,754	6,522	6,232	10,425	1,913	417
6-10 years.....	16,759	8,568	8,190	13,785	2,511	463
11-14 years.....	14,354	7,351	7,002	11,860	2,117	377
15-20 years.....	24,313	12,118	12,195	20,309	3,393	612
21 years and over.....	147,570	69,326	78,245	129,052	15,083	3,430

¹ Figures may not add to totals due to rounding.

NOTE: Excludes Alaska and Hawaii.

Population figures and rate computation

The population figures used in computing annual visit rates are presented in table II. The figures are based on an average of the July 1, 1980, and July 1, 1981, estimates of the civilian noninstitutionalized population of the United States provided by the U.S. Bureau of the Census. Because NAMCS includes data for only the conterminous United States, the original population estimates were modified to account for the exclusion of Alaska and Hawaii from the study. For this reason, the population estimates should not be considered official and are presented here solely to provide denominators for rate computations.

Estimates of numbers of visits and drug mentions in this report are for a 2-year period, but ratios and rates represent average annual estimates. For example, the average annual visit rates are calculated as follows. The numerator is obtained by dividing the estimated number of office visits for 1980-81 by 2 to obtain an average annual number of office visits. This number is then divided by the appropriate population figure to obtain an average annual visit rate. As previously discussed, estimates of reliability for average annual visit rates may be calculated from figures I and II.

Rounding of numbers

Estimates presented in this report are rounded to the nearest thousand. For this reason detailed figures within tables do not always add to totals. Rates and percents are calculated on the basis of the original, unrounded figures and may not necessarily agree precisely with percents calculated from rounded data.

Systematic bias

No formal attempt was undertaken to determine or measure systematic bias in the NAMCS data. But it should be noted

that there are several factors affecting the data which indicate that these data underrepresent the total number of office visits. Some of these factors are briefly discussed below.

- Physicians who participated in NAMCS did a thorough and conscientious job in keeping the Patient Log; however, post survey interviews with participating physicians indicate that a small number of patient visits may have been accidentally omitted from the Patient Log; although this number is quite small, such omissions would result in an undercoverage of office visits.

The same post survey interviews indicate that the inclusion of patient visits that did not actually occur was infrequent and would have a negligible effect on survey estimates.

- As previously stated, the physician universe for the 1980-81 NAMCS included all nonfederal, office-based, patient-care physicians on the AMA and AOA masterfiles. The NAMCS was designed to provide statistically unbiased estimates of office visits to this designated population. Not included in the universe were physicians who were classified as federally employed; or hospital-based; or who were principally engaged in research, teaching, administration, or other nonpatient care activity. Consequently, ambulatory patient visits to these physicians in an office setting would not be included in NAMCS estimates. In an attempt to measure the number of office visits to physicians not in the NAMCS universe, a NAMCS Complement Survey was conducted in 1980. This study involved a sample of approximately 2,000 physicians selected from among the 230,000 physicians in the AMA and AOA masterfiles who were not eligible (in scope) for the 1980 NAMCS. Details of the Complement Survey methodology and results are forthcoming. Preliminary results indicate that about 17 percent of the Complement Survey physicians saw some ambulatory patients in an office setting and that an estimated 69 million office visits were made to these physicians in 1980.

Appendix II

Definitions of certain terms used in the report

Terms relating to the survey

Office—Premises identified by physicians as locations for their ambulatory practices. The responsibility over time for patient care and professional services rendered there generally resides with the individual physician rather than with any institution.

Ambulatory patient—An individual seeking personal health services who is neither bedridden nor currently admitted to any health care institution on the premises.

Physician—Classified as either:

- *In scope*—All duly licensed doctors of medicine or doctors of osteopathy currently in practice who spend some time caring for ambulatory patients at an office location.
- *Out of scope*—Those physicians who treat patients only indirectly, including physicians in the specialties of anesthesiology, pathology, forensic pathology, radiology, therapeutic radiology, and diagnostic radiology, and the following physicians:
 - Physicians who are federally employed, including those physicians in military service.
 - Physicians who treat patients only in an institutional setting, for example, patients in nursing homes and hospitals.
 - Physicians employed full time in industry or by an institution and having no private practice, for example, physicians who work for the Veterans' Administration or the Ford Motor Company.
 - Physicians who spend no time seeing ambulatory patients, for example, physicians who only teach, are engaged in research, or are retired.

Patients—Classified as either:

- *In scope*—All patients seen by the physician or a staff member in the office of the physician.
- *Out of scope*—Patients seen by the physician in a hospital, nursing home, or other extended care institution, or in the patient's home. (Note: If the physician has a private office, meeting the definition of "office," located in a hospital, the ambulatory patients seen there are considered in scope.) The following types of patients are considered out of scope:
 - Patients seen by the physician in an institution, including outpatient clinics of hospitals, for whom the institution has primary responsibility over time.

- Patients who contact and receive advice from the physician via telephone.
- Patients who come to the office only to leave a specimen, to pick up insurance forms, or to pay a bill.
- Patients who come to the office only to pick up medications previously prescribed by the physician.

Visit—A direct, personal exchange between an ambulatory patient and a physician or a staff member for the purpose of seeking care and rendering health services.

Physician specialty—Principal specialty, including general practice, as designated by the physician at the time of the survey. Those physicians for whom a specialty was not obtained were assigned the principal specialty recorded in the physician master files maintained by the American Medical Association or the American Osteopathic Association.

Region of practice location—The four geographic regions, excluding Alaska and Hawaii, that correspond to those used by the U.S. Bureau of the Census:

Region	States included
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont
North Central . . .	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin
South	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia
West	Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming

Metropolitan status of practice location—A physician's practice is classified by its location in a metropolitan or non-metropolitan area. Metropolitan areas are standard metropolitan statistical areas (SMSA's) as defined by the U.S. Office of Management and Budget. The definition of an individual SMSA involves two considerations: first, a city or cities of specified population that constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with "contiguous" counties that are metropolitan in character so that the periphery of the specific metropolitan area may be determined. SMSA's may

cross State lines. In New England, SMSA's consist of cities and towns rather than counties.

Terms relating to the Patient Record Form

Age—The age calculated from date of birth was the age at last birthday on the date of visit.

Race—White, Black, Asian or Pacific Islander, or American Indian or Alaskan Native. Physicians were instructed to mark the category they judged to be the most appropriate for each patient based on observation or prior knowledge. The following definitions were provided to the physician:

- *White*—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
- *Black*—A person having origins in any of the black racial groups of Africa.
- *Asian or Pacific Islander*—A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
- *American Indian or Alaskan Native*—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

Ethnicity—Category judged by the physician to be the most appropriate. The following definitions were provided:

- *Hispanic origin*—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- *Not Hispanic*—Any person not of Hispanic origin.

Patient's complaint(s), symptom(s), or other reason(s) for this visit (in patient's own words)—The patient's principal problem, complaint, symptom, or other reason for this visit as expressed by the patient. Physicians were instructed to record key words or phrases verbatim to the extent possible, listing that problem first which, in the physician's judgment, was most responsible for the patient's visit.

Major reason for this visit—The one major reason (selected from the following list) for the patient's visit as judged by the physician:

- *Acute problem*—A visit primarily for a condition or illness having a relatively sudden or recent onset (within 3 months of the visit).
- *Chronic problem, routine*—A visit primarily to receive regular care or examination for a preexisting chronic condition or illness (onset of condition was 3 months or more before the visit).
- *Chronic problem, flareup*—A visit primarily to receive care for a sudden exacerbation of a preexisting chronic condition or illness.
- *Postsurgery or postinjury*—A visit primarily for followup care of injuries or for care required following surgery, for example, removal of sutures or cast.

- *Nonillness care (routine prenatal, general exam, well-baby)*—General health maintenance examinations and routine periodic examinations of presumably healthy persons, both children and adults, including prenatal and postnatal care, annual physicals, well-child examinations, and insurance examinations.

Diagnostic services this visit—Physicians were instructed to check any of the following services that were ordered or provided during the current visit:

- *Limited history and/or examination*—History or physical examination limited to a specific body site or system or concerned primarily with the patient's chief complaint, for example, pelvic examination or eye examination.
- *General history and/or examination*—History or physical examination of a comprehensive nature, including all or most body systems.
- *Pap test*—Papanicolaou test.
- *Clinical lab test*—One or more laboratory procedures or tests, including examination of blood, urine, sputum, smears, exudates, transudates, feces, and gastric content, and including chemistry, serology, bacteriology, and pregnancy test; excludes Pap test.
- *X-ray*—Any single or multiple X-ray examination for diagnostic or screening purposes; excludes radiation therapy.
- *Blood pressure check*.
- *EKG*—Electrocardiogram.
- *Vision test*—Visual acuity test.
- *Endoscopy*—Examination of the interior of any body cavity except ear, nose, and throat by means of an endoscope.
- *Mental status exam*—Any formal, clinical evaluation designed to assess the mental or emotional status of the patient.
- *Other*—All other diagnostic services ordered or provided that are not included in the preceding categories.

Principal diagnosis—The physician's diagnosis of the patient's principal problem, complaint, or symptom. In the event of multiple diagnoses, the physician was instructed to list them in order of decreasing importance. The term "principal" refers to the first-listed diagnosis. The diagnosis represents the physician's best judgment at the time of the visit and may be tentative, provisional, or definitive.

Other significant current diagnoses—The diagnosis of any other condition known to exist for the patient at the time of the visit. Other diagnoses may or may not be related to the patient's reason for visit.

Have you seen patient before?—"Seen before" means provided care for at any time in the past. Item 10b refers to the patient's current episode of illness.

Medication therapy this visit—The physician was instructed to list, using brand or generic names, all medications, including drugs, vitamins, hormones, ointments, and suppositories ordered, injected, administered, or provided this visit including prescription and nonprescription drugs, vaccinations, immunization, and desensitization agents. Also included are

drugs and medications ordered or provided prior to the visit that the physician instructed or expected the patient to continue taking. Medications for the principal diagnosis are listed in item 11a; all other drugs are listed in item 11b.

Nonmedication therapy—Physicians were instructed to check any of the following services that were ordered or provided during the current visit:

- *Physiotherapy*—Any form of physical therapy ordered or provided, including any treatment using heat, light, sound, or physical pressure or movement; for example, ultrasonic, ultraviolet, infrared, whirlpool, diathermy, cold, and manipulative therapy.
- *Office surgery*—Any surgical procedure performed in the office this visit, including suture of wounds, reduction of fractures, application or removal of casts, incision and draining of abscesses, application of supportive materials for fractures and sprains, irrigations, aspirations, dilations, and excisions.
- *Family planning*—Services, counseling, or advice that might enable patients to determine the number and spacing of their children, including both contraception and infertility services.
- *Psychotherapy or therapeutic listening*—All treatments designed to produce a mental or emotional response through suggestion, persuasion, reeducation, reassurance, or support, including psychological counseling, hypnosis, psychoanalysis, and transactional therapy.
- *Diet counseling*—Instructions, recommendations, or advice regarding diet or dietary habits.
- *Family or social counseling*—Advice regarding problems of family relationships, including marital or parent-child problems, or social problems, including economic, educational, occupational, legal, or social adjustment difficulties.
- *Medical counseling*—Instructions and recommendations regarding any health problem, including advice or counsel about a change of habit or behavior. Physicians were instructed to check this category only if medical counseling was a significant part of the treatment. Family planning, diet counseling, and family or social counseling are excluded.
- *Other*—Treatments or nonmedication therapies ordered or provided that are not listed or included in the preceding categories.

Was patient referred for this visit by another physician?—Referrals are any visits that are made at the advice or direction of a physician other than the one being visited. The interest is in referrals for the current visit and not in referrals for any prior visit.

Disposition this visit—Eight categories are provided to describe the physician's disposition of the case. The physician was instructed to check as many of the categories as apply:

- *No followup planned*—No return visit or telephone contact was scheduled for the patient's problem.
- *Return at specified time*—Patient was told to schedule an appointment or was instructed to return at a particular time.
- *Return if needed, P.R.N.*—No future appointment was made, but the patient was instructed to make an appointment with the physician if the patient considered it necessary.
- *Telephone followup planned*—Patient was instructed to telephone the physician on a particular day to report either on progress, or if the need arose.
- *Referred to other physician*—Patient was instructed to consult or seek care from another physician. The patient may or may not return to this physician at a later date.
- *Returned to referring physician*—Patient was instructed to consult again with the referring physician.
- *Admit to hospital*—Patient was instructed that further care or treatment would be provided in a hospital. No further office visits were expected prior to hospital admission.
- *Other*—Any other disposition of the case not included in the preceding categories.

Duration of this visit—Time the physician spent with the patient, not including time the patient spent waiting to see the physician, time the patient spent receiving care from someone other than the physician without the presence of the physician, and time the physician spent in reviewing such things as records and test results. If the patient was provided care by a member of the physician's staff but did not see the physician during the visit, the duration of visit was recorded as 0 minutes.

Appendix III

Survey instruments



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
OFFICE OF HEALTH RESEARCH, STATISTICS AND TECHNOLOGY
HYATTSVILLE, MARYLAND 20782

NATIONAL AMBULATORY
MEDICAL CARE SURVEY

Endorsing Organizations

American Academy
of Dermatology

American Academy of
Family Physicians

American Academy
of Neurology

American Academy of
Orthopaedic Surgeons

American Academy
of Pediatrics

American Association of
Neurological Surgeons

American College of
Emergency Physicians

American College of
Obstetricians and
Gynecologists

American College
of Physicians

American College of
Preventive Medicine

American Osteopathic
Association

American Society of
Colon and Rectal
Surgeons

American Psychiatric
Association

American Society of
Internal Medicine

American Society of
Plastic and Reconstructive
Surgeons, Inc.

American Urological
Association

Association of American
Medical Colleges

National Medical
Association

The National Center for Health Statistics, as part of its continuing program to provide information on the health status of the American people, is conducting a National Ambulatory Medical Care Survey (NAMCS).

The purpose of this survey is to collect information about ambulatory patients, their problems, and the resources used for their care. The resulting published statistics will help your profession plan for more effective health services, determine health manpower requirements, and improve medical education.

Since practicing physicians are the only reliable source of this information, we need your assistance in the NAMCS. As one of the physicians selected in our national sample, your participation is essential to the success of the survey. Of course, all information that you provide is held in strict confidence.

Many organizations and leaders in the medical profession have expressed their support for this survey, including those shown to the left. In particular, your own specialty society has reviewed the NAMCS program and supports this effort (see enclosure). They join me in urging your cooperation in this important research.

Within a few days, a survey representative will telephone you for an appointment to discuss the details of your participation. We greatly appreciate your cooperation.

Sincerely yours,

Dorothy P. Rice
Director

Enclosure

C No.499932

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 re-leased to other persons or used for any other purpose.

Department of Health, Education, and Welfare
Public Health Service
Office of Health Research, Statistics, and Technology
National Center for Health Statistics

C No.499932

PATIENT LOG

As each patient arrives, record name and time of visit on the log below. For the patient entered on line #3, also complete the patient record to the right.

PATIENT'S NAME TIME OF VISIT

1		a.m.	
		p.m.	
2		a.m.	
		p.m.	
3		a.m.	
		p.m.	

Record items 1-15 for this patient.

CONTINUE LISTING PATIENTS ON NEXT PAGE

PATIENT RECORD
NATIONAL AMBULATORY MEDICAL CARE SURVEY

1. DATE OF VISIT

Month / Day / Year

2. DATE OF BIRTH

Month / Day / Year

3. SEX

- 1 FEMALE
- 2 MALE

4. COLOR OR RACE

- 1 WHITE
- 2 BLACK
- 3 ASIAN/PACIFIC ISLANDER
- 4 AMERICAN INDIAN/ALASKAN NATIVE

5. ETHNICITY

- 1 HISPANIC ORIGIN
- 2 NOT HISPANIC

6. PATIENT'S COMPLAINT(S), SYMPTOM(S), OR OTHER REASON(S) FOR THIS VISIT [In patient's own words]

- a. MOST IMPORTANT
- b. OTHER

7. MAJOR REASON FOR THIS VISIT [Check one]

- 1 ACUTE PROBLEM
- 2 CHRONIC PROBLEM, ROUTINE
- 3 CHRONIC PROBLEM, FLAREUP
- 4 POST SURGERY/POST INJURY
- 5 NON-ILLNESS CARE (ROUTINE PRENATAL, GENERAL EXAM, WELL BABY, ETC.)

8. DIAGNOSTIC SERVICES THIS VISIT [Check all ordered or provided]

- 1 NONE
- 2 LIMITED HISTORY/EXAM.
- 3 GENERAL HISTORY/EXAM.
- 4 PAP TEST
- 5 CLINICAL LAB TEST
- 6 X-RAY
- 7 BLOOD PRESSURE CHECK
- 8 EKG
- 9 VISION TEST
- 10 ENDOSCOPY
- 11 MENTAL STATUS EXAM.
- 12 OTHER (Specify)

9. PHYSICIAN'S DIAGNOSES

- a. PRINCIPAL DIAGNOSIS/PROBLEM ASSOCIATED WITH ITEM 6.
- b. OTHER SIGNIFICANT CURRENT DIAGNOSES

10. HAVE YOU SEEN PATIENT BEFORE?

- 1 YES
- 2 NO

IF YES, FOR THE CONDITION IN ITEM 9a?

- 1 YES
- 2 NO

11. MEDICATION THERAPY THIS VISIT NONE

[Using brand or generic names, record all new and continued medications ordered, injected, administered, or otherwise provided at this visit. Include immunizing and desensitizing agents]

a. FOR PRINCIPAL DIAGNOSES IN ITEM 9a.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

b. FOR ALL OTHER REASONS

- 1. _____
- 2. _____
- 3. _____
- 4. _____

12. NON-MEDICATION THERAPY [Check all services ordered or provided this visit]

- 1 NONE
- 2 PHYSIOTHERAPY
- 3 OFFICE SURGERY
- 4 FAMILY PLANNING
- 5 PSYCHOTHERAPY/THERAPEUTIC LISTENING
- 6 DIET COUNSELING
- 7 FAMILY/SOCIAL COUNSELING
- 8 MEDICAL COUNSELING
- 9 OTHER (Specify)

13. WAS PATIENT REFERRED FOR THIS VISIT BY ANOTHER PHYSICIAN?

- 1 YES
- 2 NO

14. 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
- 6 RETURNED TO REFERRING PHYSICIAN
- 7 ADMIT TO HOSPITAL
- 8 OTHER (Specify)

15. DURATION OF THIS VISIT [Time actually spent with physician]

Hours

CONFIDENTIAL*
NORC-4284

Form Approved
OMB No. 68R1498

FOR OFFICE USE ONLY:

(BATCH NO.)

--	--

5-6/

(LOG NO.)

--	--	--	--

7-10/

NATIONAL AMBULATORY MEDICAL CARE SURVEY
INDUCTION INTERVIEW

BEFORE STARTING INTERVIEW

1. ENTER PHYSICIAN I.D. NUMBER IN BOX TO RIGHT.
2. ENTER DATES OF ASSIGNED REPORTING WEEK IN Q. 2, P. 2.

(Phys. ID Number)

--	--	--	--

1-4/

TIME _____ AM
BEGAN: _____ PM

Doctor, before I begin, let me take a minute to give you a little background about this survey.

Although ambulatory medical care accounts for nearly 90 percent of all medical care received in the United States, there is no systematic information about the characteristics and problems of people who consult physicians in their offices. This kind of information has been badly needed by medical educators and others concerned with the medical manpower situation.

In response to increasing demands for this kind of information, the National Center for Health Statistics, in close consultation with representatives of the medical profession, has developed the National Ambulatory Medical Care Survey.

Your own task in the survey is simple, carefully designed, and should not take much of your time. Essentially, it consists of your participation during a specified 7-day period. During this period, you simply check off a minimal amount of information concerning patients that you see.

Now, before we get into the actual procedures, I have a few questions to ask about your practice. The answers you give me will be used only for classification and * analysis, and of course all information you provide is held in strict confidence.

1. First, you are a _____.
(ENTER SPECIALTY FROM CODE ON FACE SHEET LABEL.)

Is that right?

Yes X
No (ASK A) Y

A. IF NO: What is your specialty (including general practice)?

(Name of Specialty)

--	--	--

11-13/

* The National Ambulatory Medical Care Survey is authorized by Congress in Public Law 93-353, section 308. It is a voluntary study and there are no penalties for refusing to answer any question. All information collected is confidential and will be used only to prepare statistical summaries. No information which will identify an individual or a physician's practice will be released.

2. Now, doctor, this study will be concerned with the ambulatory patients you will see in your office during the week of (READ REPORTING DATES ENTERED BELOW).

_____ / _____ (that's a _____ (that's a
month date Monday) through month date Sunday)

Are you likely to see any ambulatory patients in your office during that week?

Yes (GO TO Q. 3) . . X

No (ASK A) Y

A. IF NO: Why is that? RECORD VERBATIM, THEN READ PARAGRAPH BELOW

Since it's very important, doctor, that we include any ambulatory patients that you do happen to see in your office during that week, I'd like to leave these forms with you anyway--just in case your plans change. I'll plan to check back with your office just before (STARTING DATE) to make sure, and I can explain them in detail then, if necessary.

GIVE DOCTOR THE A PATIENT RECORD FORMS AND GO TO Q. 9, P. 6.

3. A. At what office location will you be seeing ambulatory patients during that 7-day period? RECORD UNDER A BELOW AND THEN CODE B.

B. FOR EACH OFFICE LOCATION ENTERED IN A, CODE YES OR NO TO "IN SCOPE."

IN SCOPE (Yes)

OUT OF SCOPE (No)

Private offices
 Free-standing clinics
 (non-hospital based)
 Groups, partnerships
 Kaiser, HIP, Mayo Clinic
 Neighborhood Health Centers
 Privately operated clinics
 (except family planning)

Hospital emergency rooms
 Hospital outpatient departments
 College or university infirmaries
 Industrial outpatient facilities
 Family planning clinics
 Government-operated clinics
 (VD, maternal & child health, etc.)

IN CASE OF DOUBT, ASK: Is that (clinic/facility/institution) hospital based?
 Is that (clinic/facility/institution) government operated?

C. Is that all of the office locations at which you expect to see ambulatory patients during that week?

Yes X
 No Y

IF NO: OBTAIN ADDITIONAL OFFICE LOCATION(S), ENTER IN "A" BELOW, AND REPEAT.

A. Office Location	B. In Scope?	
	Yes	No
(1) _____	1	0
(2) _____	1	0
(3) _____	1	0
(4) _____	1	0

TOTAL IN-SCOPE LOCATIONS:

14/

IF ALL LOCATIONS ARE OUT OF SCOPE, THANK THE DOCTOR AND LEAVE.

4. A. During that week (REPEAT DATES), how many ambulatory patients do you expect to see in your office practice? (DO NOT COUNT PATIENTS SEEN AT [OUT-OF-SCOPE LOCATIONS] CODED IN 3-B.)

ENTER TOTAL UNDER "A" BELOW AND CIRCLE NUMBER CATEGORY ON APPROPRIATE LINE.

- B. And during those seven days (REPEAT DATES IF NECESSARY), on how many days do you expect to see any ambulatory patients? COUNT EACH DAY IN WHICH DOCTOR EXPECTS TO SEE ANY PATIENTS AT AN IN-SCOPE OFFICE LOCATION.

CIRCLE NUMBER OF DAYS IN APPROPRIATE COLUMN UNDER "B" BELOW.

DETERMINE PROPER PATIENT LOG FORM FROM CHART BELOW. READ ACROSS ON "TOTAL PATIENTS" LINE UNDER "A" AND CIRCLE LETTER IN APPROPRIATE "DAYS" COLUMN UNDER "B."

THIS LETTER TELLS YOU WHICH OF THE FOUR PATIENT LOG FORMS (A, B, C, D) SHOULD BE USED BY THIS DOCTOR.

LOG FORM DESCRIPTION	A. Expected total patients during survey week.	B. Total days in practice during week.									
A--Patient Record is to be completed for <u>ALL</u> patients listed on Log. 15-17/	ENTER TOTAL FROM Q. 4-A. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>				18/						
	1- 12 PATIENTS	1	2	3	4	5	6	7			
	13- 25 "	A	A	A	A	A	A	A			
B--Patient Record is to be completed for every <u>SECOND</u> patient listed on Log.	26- 39 "	C	B	A	A	A	A	A			
	40- 52 "	C	B	B	A	A	A	A			
	53- 65 "	D	C	B	B	A	A	A			
	66- 79 "	D	C	B	B	B	A	A			
C--Patient Record is to be completed for every <u>THIRD</u> patient listed on Log.	80- 92 "	D	D	C	B	B	B	B			
	93-105 "	D	D	C	B	B	B	B			
	106-118 "	D	D	C	C	B	B	B			
	119-131 "	D	D	C	C	B	B	B			
	132-145 "	D	D	D	C	C	B	B			
*D--Patient Record is to be completed for every <u>FIFTH</u> patient listed on Log.	146-158 "	D	D	D	C	C	B	B			
	159-171 "	D	D	D	C	C	C	C			
	172-184 "	D	D	D	C	C	C	C			
	185-197 "	D	D	D	D	D	D	D			
	198-210 "	D	D	D	D	D	D	D			
	211+ "	D	D	D	D	D	D	D			

* In the rare instance the physician will see more than 500 patients during his assigned reporting week, give him two D Patient Log Folios and instruct him to complete a patient record form for only every tenth patient. Then you are to draw an X through the Patient Record on every other page of the two folio pads, starting with Page 1 of the pad. The physician then completes the Patient Log on every page, but completes the Patient Record on every second page.

5. FIND LOG FOLIO WITH APPROPRIATE LETTER AND CIRCLE LETTER, ENTER FIRST FOUR NUMBERS OF THE FORM AND NUMBER OF LINES STAMPED "BEGIN ON NEXT LINE" FOR THE B-C-D LOG FORMS (if no lines are stamped, enter "0") BELOW.

Letter	FOLIO				No. Lines Stamped "BEGIN ON NEXT LINE"	FOR OFFICE USE ONLY Number patient record forms completed.
	Number					
A						
B						
C						
D						

19-23/
24-26/

6. HAND DOCTOR HIS FOLIO AND EXPLAIN HOW FORMS ARE TO BE FILLED OUT. SHOW DOCTOR INSTRUCTIONS ON THE POCKET OF FOLIO, ITEMS 8 AND 11 ON CARDS IN POCKET OF FOLIO AND ITEM DEFINITIONS ON THE BACK OF FOLIO, TO WHICH HE CAN REFER AFTER YOU LEAVE.

EMPHASIZE THAT EVERY PATIENT VISIT EXCEPT ADMINISTRATIVE PURPOSE ONLY IS TO BE RECORDED ON THE LOG FOR ENTIRE REPORTING PERIOD. FOR EXAMPLE, IF A MEDICAL ASSISTANT GAVE THE PATIENT AN INOCULATION, OR A TECHNICIAN ADMINISTERED AN ELECTROCARDIOGRAM AND THE PATIENT DID NOT SEE THE DOCTOR, THIS VISIT MUST STILL BE LISTED ON THE LOG.

RECORD VERBATIM BELOW ANY CONCERN, PROBLEMS OR QUESTIONS THE DOCTOR RAISES.

7. IF DOCTOR EXPECTS TO SEE AMBULATORY PATIENTS AT MORE THAN ONE IN-SCOPE LOCATION DURING ASSIGNED WEEK, TELL HIM YOU WILL DELIVER THE FORMS TO THE OTHER LOCATION(S). ENTER THE FORM LETTER AND NUMBER(S) AND NUMBER OF LINES STAMPED "BEGIN ON NEXT LINE" FOR THE B-C-D LOG FOR THOSE LOCATIONS BELOW, BEFORE DELIVERING FORM(S).

Location	FOLIO				No. Lines Stamped "BEGIN ON NEXT LINE"	FOR OFFICE USE ONLY: Number patient record forms completed
	Letter	Number				

27-31/
32-34/
35-39/
40-42/
43-47/
48-50/

8. During the survey week (REPEAT EXACT DATES), will anyone be available to help you in filling out these records (at each IN-SCOPE location)?

Yes (ASK A) 1 51/
No 2

A. IF YES: Who would that be?

RECORD NAME, POSITION AND LOCATION.

NAME	POSITION	LOCATION
_____	_____	_____
_____	_____	_____
_____	_____	_____

PERSONALLY BRIEF EACH PERSON LISTED ABOVE.

EMPHASIZE THAT EVERY PATIENT VISIT DURING THE ENTIRE WEEK IS TO BE RECORDED ON THE LOG EXCEPT "ADMINISTRATIVE PURPOSE ONLY."

9. Do you have a solo practice, or are you associated with other physicians in a partnership, in a group practice, or in some other way?

Solo. (GO TO Q. 10) . . . 1 52/
Partnership . . (ASK A-C) . . . 2
Group (ASK A-C) . . . 3
<--- Other (SPECIFY AND ASK A-C) . . 4

IF PARTNERSHIP, GROUP, OR OTHER:

A. Is this a prepaid group practice? Yes . . (ASK [1]) . . . 1 53/
No 2

[1] IF YES TO A: What per cent of patients are prepaid? _____ per cent 54-56/

B. How many other physicians are associated with you? NUMBER OF PHYSICIANS: _____ 57-59/

C. What are the specialties of the other physicians associated with you? (How many of these are there?)

Specialty	Number of Physicians
(1) _____	_____
(2) _____	_____
(3) _____	_____
(4) _____	_____
(5) _____	_____

D. CIRCLE ONE:

All physicians in this partnership/group practice have the same specialty 1 60/
More than one specialty in this partnership/group practice . . 2

10. Now I have just one more question about your practice. (NOTE: IF DOCTOR PRACTICES IN LARGE GROUP, THE FOLLOWING INFORMATION CAN BE OBTAINED FROM SOMEONE ELSE.)

- A. What is the total number of full-time (35 hours or more per week) employees of your (partnership/group) practice? Include persons regularly employed who are now on vacation, temporarily ill, etc. Do not include other physicians. RECORD ON BOTTOM LINE OF COLUMN A BELOW.
 - (1) How many of these full-time employees are a . . . (READ CATEGORIES BELOW AS NECESSARY AND RECORD NUMBER OF EACH IN COLUMN A.)
- B. And what is the total number of part-time (less than 35 hours per week) employees of your (partnership/group) practice? Again, include persons regularly employed who are now on vacation, ill, etc. Do not include other physicians. RECORD ON BOTTOM LINE OF COLUMN B BELOW.
 - (1) How many of these part-time employees are a . . . (READ CATEGORIES BELOW AS NECESSARY AND RECORD NUMBER OF EACH IN COLUMN B.)

Employees	A. Full-time (35 or more hours/week)	B. Part-time (Less than 35 hours/week)
(1) Registered Nurse	11-13/	35-37/
(2) Licensed Practical Nurse	14-16/	38-40/
(3) Nursing Aide	17-19/	41-43/
(4) Physician Assistant*	20-22/	44-46/
(5) Technician	23-25/	47-49/
(6) Secretary or Receptionist	26-28/	50-52/
(7) Other (SPECIFY) _____	29-31/	53-55/
TOTAL:	32-34/	TOTAL: 56-58/

* Physician Assistant must be a graduate of an accredited training program for Physician Assistants (Physician Extenders, Medex, etc.) or certified by the National Board of Medical Examiners through the Certification Exam for Assistant to the Primary Care Physician.

BEFORE YOU LEAVE, AGAIN STRESS THAT EACH AND EVERY AMBULATORY PATIENT SEEN BY THE DOCTOR OR HIS STAFF DURING THE 7-DAY PERIOD AT ALL IN-SCOPE OFFICE LOCATIONS (REPEAT THEM) IS TO BE INCLUDED IN THE SURVEY, THAT EACH PATIENT IS TO BE RECORDED ON THE LOG, AND ONLY THE APPROPRIATE NUMBER OF PATIENT RECORDS COMPLETED.

Thank you for your time, Dr. _____. If you have any (more) questions, please feel free to call me. My phone number is written in the folio. I'll call you on Monday morning of your survey week just to remind you.

11. TIME INTERVIEW ENDED AM
PM

12. DATE OF INTERVIEW
(Month) (Day) (Year)

COMMENTS:

INTERVIEWER NUMBER

--	--	--	--	--

INTERVIEWER'S SIGNATURE

FOR OFFICE USE ONLY:

No. of Patients Seen:

--	--	--

59-61/

Total Days in Practice during Week:

--

62/

Appendix IV

American Hospital Formulary

Service classification system

and therapeutic category codes

AMERICAN HOSPITAL FORMULARY SERVICE CLASSIFICATION SYSTEM AND THERAPEUTIC CATEGORY CODES (AHFS#)

(Classifications in parentheses are provisional but may be used in DPIF)

AMERICAN HOSPITAL FORMULARY SERVICE CLASSIFICATION SYSTEM	36:00 DIAGNOSTIC AGENTS	60:00 GOLD COMPOUNDS
	36:04 Adrenocortical Insufficiency	64:00 HEAVY METAL ANTAGONISTS
	36:08 Amyloidosis	68:00 HORMONES AND SYNTHETIC SUBSTITUTES
	36:12 Blood Volume	68:04 Adrenals
	36:16 Brucellosis	68:08 Androgens
	36:18 Cardiac Function	68:12 Contraceptives
	36:24 Circulation Time	68:16 Estrogens
	36:25 (Cystic Fibrosis)	68:18 Gonadotropins
	36:26 Diabetes Mellitus	68:20 Insulins and Anti-Diabetic Agents
	36:28 Diphtheria	68:20.08 Insulins
	36:30 Drug Hypersensitivity	68:24 Parathyroid
	36:32 Fungi	68:28 Pituitary
	36:34 Gallbladder Function	68:32 Progestogens
	36:36 Gastric Function	68:34 Other Corpus Luteum Hormones
	36:38 Intestinal Absorption	68:36 Thyroid and Antithyroid
	36:40 Kidney Function	
	36:44 Liver Function	72:00 LOCAL ANESTHETICS
	36:48 Lymphogranuloma Venereum	76:00 OXYTOCICS
	36:52 Mumps	78:00 RADIOACTIVE AGENTS
	36:56 Myasthenia Gravis	80:00 SERUMS, TOXOIDS AND VACCINES
	36:60 Myxedema	80:04 Serums
	36:61 Pancreatic Function	80:08 Toxoids
	36:62 Phenylketonuria	80:12 Vaccines
	36:64 Pheochromocytoma	84:00 SKIN AND MUCOUS MEMBRANE PREPARATIONS
	36:66 Pituitary Function	84:04 Anti-Infectives
	36:68 Roentgenography	84:04.04 Antibiotics
	36:72 Scarlet Fever	84:04.08 Fungicides
	36:76 Sweating	84:04.12 Scabicides and Pediculicides
	36:78 (Thyroid Function)	84:04.16 Misc. Local Anti-Infectives
	36:80 Trichinosis	84:06 Anti-Inflammatory Agents
	36:84 Tuberculosis	84:08 Antipruritics and Local Anesthetics
	36:88 Urine Contents	84:12 Astringents
	40:00 ELECTROLYTIC, CALORIC, AND WATER BALANCE	84:16 Cell Stimulants and Proliferants
	40:04 Acidifying Agents	84:20 Detergents
	40:08 Alkalinizing Agents	84:24 Emollients, Demulcents and Protectants
	40:10 Ammonia Detoxicants	84:24.04 Basic Lotions and Liniments
	40:12 Replacement Solutions	84:24.08 Basic Oils and Other Solvents
	40:16 Sodium-Removing Resins	84:24.12 Basic Ointments and Protectants
	40:18 Potassium-Removing Resins	84:24.16 Basic Powders and Demulcents
	40:20 Caloric Agents	84:28 Keratolytic Agents
	40:24 Salt and Sugar Substitutes	84:32 Keratoplastic Agents
	40:28 Diuretics	84:36 Miscellaneous Agents
	40:36 Irrigating Solutions	84:50 Pigmenting & Depigmenting Agents
	40:40 Uricosuric Agents	84:50.04 Depigmenting Agents
	44:00 ENZYMES	84:50.06 Pigmenting Agents
	48:00 EXPECTORANTS AND COUGH PREPARATIONS	84:80 Sunscreen Agents
	52:00 EYE, EAR, NOSE AND THROAT PREPARATIONS	86:00 SPASMOLYTIC AGENTS
	52:04 Anti-Infectives	88:00 VITAMINS
	52:04.04 Antibiotics	88:04 Vitamin A
	52:04.06 Antivirals	88:08 Vitamin B Complex
	52:04.08 Sulfonamides	88:12 Vitamin C
	52:04.12 Misc. Anti-Infectives	88:16 Vitamin D
	52:08 Anti-Inflammatory Agents	88:20 Vitamin E
	52:10 Carbonic Anhydrase Inhibitors	88:24 Vitamin K Activity
	52:12 Contact Lens Solutions	88:28 Multivitamin Preparations
	52:16 Local Anesthetics	92:00 UNCLASSIFIED THERAPEUTIC AGENTS
	52:20 Miotics	94:00 (DEVICES)
	52:24 Mydratics	96:00 (PHARMACEUTIC AIDS)
	52:28 Mouth Washes and Gargles	
	52:32 Vasoconstrictors	
	52:36 Unclassified Agents	
	56:00 GASTROINTESTINAL DRUGS	
	56:04 Antacids and Adsorbents	
	56:08 Anti-Diarrhea Agents	
	56:10 Antiflatulents	
	56:12 Cathartics and Laxatives	
	56:16 Digestants	
	56:20 Emetics and Anti-Emetics	
	56:24 Lipotropic Agents	
	56:40 Misc. GI Drugs	
04:00 ANTIHISTAMINE DRUGS		
08:00 ANTI-INFECTIVE AGENTS		
08:04 Amebicides		
08:08 Anthelmintics		
08:12 Antibiotics		
08:12.02 Aminoglycosides		
08:12.04 Antifungal Antibiotics		
08:12.06 Cephalosporins		
08:12.08 Chloramphenicol		
08:12.12 Erythromycins		
08:12.16 Penicillins		
08:12.24 Tetracyclines		
08:12.24 Other Antibiotics		
08:16 Antituberculosis Agents		
08:18 Antivirals		
08:20 Plasmodicides		
08:24 Sulfonamides		
08:26 Sulfones		
08:28 Treponemicides		
08:32 Trichomonocides		
08:36 Urinary Germicides		
08:40 Other Anti-Infective		
10:00 ANTINEOPLASTIC AGENTS		
12:00 AUTONOMIC DRUGS		
12:04 Parasympathomimetic Agents		
12:08 Parasympatholytic Agents		
12:12 Sympathomimetic Agents		
12:16 Sympatholytic Agents		
12:20 Skeletal Muscle Relaxants		
16:00 BLOOD DERIVATIVES		
20:00 BLOOD FORMATION AND COAGULATION		
20:04 Anemia Drugs		
20:04.04 Iron Preparations		
20:04.08 Liver and Stomach Preparations		
20:12 Coagulants and Anticoagulants		
20:12.04 Anticoagulants		
20:12.08 Antiheparin Agents		
20:12.12 Coagulants		
20:12.16 Hemostatics		
20:40 Thrombolytic Agents		
24:00 CARDIOVASCULAR DRUGS		
24:04 Cardiac Drugs		
24:06 Antilipemic Agents		
24:08 Hypotensive Agents		
24:12 Vasodilating Agents		
24:16 Sclerosing Agents		
28:00 CENTRAL NERVOUS SYSTEM DRUGS		
28:04 General Anesthetics		
28:08 Analgesics and Antipyretics		
28:10 Narcotic Antagonists		
28:12 Anticonvulsants		
28:16 Psychotherapeutic Agents		
28:16.04 Antidepressants		
28:16.08 Tranquilizers		
28:16.12 Other Psychotherapeutic Agents		
28:20 Respiratory and Cerebral Stimulants		
28:24 Sedatives and Hypnotics		

Copyright ©1980. Drug Products Information File; American Society of Hospital Pharmacists, Bethesda, Maryland. All rights reserved. Reprinted with permission.