# Patterns of Ambulatory Care in General and Family Practice: The National Ambulatory Medical Care Survey

United States, January 1980– December 1981

Data on the ambulatory medical care provided during visits to office-based general and family practice physicians are presented. Individual practice profiles are drawn for female and male physicians, for different age groups of physicians, for physicians in the four major geographic regions, and for those in metropolitan and nonmetropolitan areas. Descriptors of practice include patient demographic characteristics, prior visit status, and patient condition. Data are also presented on the patient management techniques utilized, including diagnostic services, medication therapy, and nonmedication therapy.

Data From the National Health Survey Series 13, No. 73

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#### 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

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## Patterns of Ambulatory Care in General and Family Practice: 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 non-Federal, office-based general and family practice physicians in the conterminous United States during the calendar years 1980-81. It is the first in a planned 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 general and family practitioners (GFP's) was published in Advance Data from Vital and Health Statistics No. 15.<sup>1</sup> 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 GFP's among other specialists, were presented in Vital and Health Statistics, Series 13, No. 66.<sup>2</sup>

Detailed information on the background and methodology of the survey was published in *Vital and Health Statistics*, Series 2, No. 61.<sup>3</sup> 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 are also 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 1,340 general and family practice physicians in the sample of whom 289 were out of scope. Of 1,051 eligible GFP's, 779 participated (74.1 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 89,477 visits including 23,055 visits to GFP's.

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. Because the statistics in this report 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 entitled "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. The highest proportion of visits, about 33 percent, were made to the offices of general and family practice physicians. This proportion equals that of the next three ranking specialties combined. Although the volume of visits to GFP's has been consistently greater than that of any other specialty, visits to GFP's declined from 41 percent of total visits in 1975 to 33 percent in 1980 while the proportions of the next three ranking specialties either remained constant or increased slightly.<sup>2</sup> This decrease in the proportion of visits to GFP's can be attributed largely to a corresponding decrease in the proportion of these doctors in office-based practices. From 1975 through 1980, GFP's decreased as a proportion of all non-Federal, office-based physicians, from 22 percent in 1975 to 18 percent in 1980.<sup>4</sup>

The following sections of this report describe ambulatory care provided by general and family practice physicians 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). Because visits to GFP's constitute the largest proportion of NAMCS visits, many of the statistics presented in this report resemble those in the summary of *all* NAMCS visits. It should be kept in mind when reading this report that data are restricted to general and family practice and should not be generalized to the universe of all physicians.



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

# 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<sup>a</sup> medical practice over a 40-year period.<sup>5</sup> A decline in the proportion of visits to physicians in solo practice since 1975 reflects a continued trend towards multiple practice. In 1980-81 physicians in solo practice accounted for 64 percent of all visits to GFP's (table A), a decrease from the 73 percent reported in NAMCS in 1975.1 However, there were regional differences in the distribution of visits by type of practice. Preference for solo practice is apparent in the Northeast and South Regions where 74 percent and 69 percent of visits, respectively, were made to such offices. But in the West and North Central Regions less than average proportions of visits were to solo practices (54 percent and 57 percent). In metropolitan areas visits to physicians in solo practice or other practices were about evenly divided, but in nonmetropolitan areas multiple practice visits exceeded those of solo practice.

Selected characteristics of visits to GFP's are distributed by type of practice in table 1. Compared with patients visiting solo practitioners, patients seen by physicians having other practice arrangements were younger, more likely to be visiting the physician for the first time, more likely to present acute problems, and more likely to receive nonillness care.

Patients' principal reasons for visits to GFP's also differed based on the type of practice. In NAMCS patients' reasons for visit, expressed as closely as possible in the patient's own words, are recorded by the physician in item 6 of the Patient Record. The reason given by the patient, 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 Classifi*cation for Ambulatory Care (RVC).<sup>6</sup> These modules are listed in table 1. (Specific reasons for visit are discussed in the section entitled "Patient condition and management.") Patients visiting solo practice physicians were more likely to describe a symptom or give the name of a disease as their reason for visit than those visiting group practice offices were. But a pre-

| Table A.  | Number of office visits to general and family practitioners |
|-----------|---|
| and perc  | ent distribution by type of practice, according to location |
| of physic | ian's practice: United States, January 1980-December 1981   |

|   | Number of                              | Түр                              | Type of practice             |                              |  |  |
|---|--|----------------------------------|------------------------------|------------------------------|--|--|
| Location of practice                        | visits in<br>thousands                 | Total                            | Solo                         | Other <sup>1</sup>           |  |  |
|   |  | Perce                            | Percent distribution         |                              |  |  |
| All visits                                  | 381,710                                | 100.0                            | 63.5                         | 36.5                         |  |  |
| Geographic region                           |  |                                  |                              |                              |  |  |
| Northeast<br>North Central<br>South<br>West | 65,851<br>118,772<br>130,847<br>66,240 | 100.0<br>100.0<br>100.0<br>100.0 | 73.9<br>57.0<br>69.1<br>53.9 | 26.1<br>43.0<br>30.9<br>46.1 |  |  |
| Area  |  |                                  |                              |                              |  |  |
| Metropolitan<br>Nonmetropolitan             | 230,141<br>151,569                     | 100.0<br>100.0                   | 50.8<br>31.4                 | 49.2<br>68.6                 |  |  |

<sup>1</sup>Includes partnership, group, and other types of practice.

ventive health care service was more likely to be the reason in the latter type of practice than in the former.

The diagnostic tools used by GFP's to evaluate patients' symptoms or complaints are shown by type of service in table 1. These data do not measure the intensity of the physician's workup because NAMCS was designed to gather data on the types of services ordered or provided during the current visit. The Patient Record does not have the flexibility to probe whether procedures were single or multiple. Differences in the proportions of some diagnostic services provided by the two groups of physicians appear to be related to case-mix. GFP's in solo practice, where the average patient was older than that of GFP's in other types of practice, used the general history and examination proportionately more often than their counterparts in multiple practice did. However, the latter used the limited history and examination in proportionately more visits. Solo physicians made proportionately more blood pressure checks but were less likely to order clinical laboratory tests and Pap tests. These findings are consistent with those usually found in a practice serving older patients. It is not clear from the data why solo physicians were less likely to order electrocardiograms than other physicians were.

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)<sup>7</sup> in table 1. Proportions of visits to GFP's in solo practice exceeded those in other types of

<sup>&</sup>lt;sup>a</sup>The 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.

the stice when diagnoses were in the categories endocrine, nutritional and metabolic diseases, and immunity disorders; diseases of the circulatory system; and diseases of the respiratory system. Proportions of visits to physicians not in solo practice were higher for diseases of the nervous system and sense organs, diseases of the genitourinary system, and supplementary classification. The last three groups are usually relatively large when the physician's patient load is dominated by young patients. (Specific principal diagnoses are discussed in terms of patient age in the section entitled "Patient condition and management.")

The nonmedication therapy that physicians used to treat these conditions is shown in table 1. Solo physicians provided diet counseling during proportionately more visits than other physicians did, but nonsolo physicians offered medical counseling proportionately more often. These data should be interpreted in the context of the case-mix profile. If the physician treated many patients for obesity or diabetes mellitus, for example, visits that include diet counseling may be expected to be correspondingly large. On the other hand, medical counseling may be an integral part of a family planning visit or a wellbaby examination. The more visits there are for these types of care, the more medical counseling is likely to be used. Therefore, the services provided are likely to correlate with the characteristics of the patient. Other nonmedication therapy services, shown in table 1, were provided in about equal proportions by physicians practicing alone or in groups. However, medication therapy was used with greater intensity by GFP's in solo practice than by others. About 18 percent of the visits to solo physicians included three or more medications, compared with 14 percent with the same number to nonsolo physicians. Physicians in solo practice prescribed no drugs in 24 percent of their visits, compared with 31 percent with no drugs prescribed by those in other types of practice.

Estimates of drug utilization in NAMCS are based on the physicians' entries on the Patient Record form. These entries may be brand<sup>b</sup> or generic names of prescription or over-thecounter 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.<sup>8</sup>

In addition to counting the number of drugs prescribed during a visit, drug utilization may be measured by the percent of visits in which one or more drugs were ordered (drug visits) and 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. These rates are shown in table B. The findings indicate that GFP's in solo practice had a higher proportion of drug visits and a higher drug mention rate than other GFP's did. This is also a typical pattern for a practice with a relatively large proportion of elderly patients.

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).<sup>9</sup> 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. There was a statistically significant difference by type of practice in only one category. Serums, toxoids and vaccines, a group of drugs likely to be associated with young patients, was proportionately higher for physicians in multiple practice than for those in solo practice. (Additional informa-

<sup>&</sup>lt;sup>b</sup>The use of brand or trade names does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

| Table B.   | Number of office visits to general and family practitioners, number and percent of drug visits, number of drugs mentioned, | drug mention |
|------------|--|--------------|
| rate per v | visit, and drug intensity rate per drug visit, by type and location of practice: United States, January 1980-December 1981 | -            |

| Type of practice and location | Number of<br>visits<br>in<br>thousands | Drug<br>visits <sup>1</sup><br>in<br>thousands | Percent<br>of<br>drug<br>visits | Number of<br>drug<br>mentions in<br>thousands | Drug<br>mention<br>rate <sup>2</sup><br>per visit | Drug<br>intensity<br>rate <sup>3</sup><br>per drug<br>visit |
|-------------------------------|--|--|---------------------------------|---|---|---|
| Type of practice              |  |  |                                 |   |   |   |
| All types of practice         | 381,710                                | 281,101  | 73.6                            | 532.065                                       | 1.39  | 1.89  |
| Solo                          | 242,488                                | 184,744  | 76.2                            | 353,987                                       | 1.46  | 1.92  |
| Other <sup>4</sup>            | 139,222                                | 96,356   | 69.2                            | 178,078                                       | 1.28  | 1.85  |
| Geographic region             |  |  |                                 |   |   |   |
| Northeast                     | 65,851                                 | 52,171   | 79.2                            | 100,329                                       | 1.52  | 1.92  |
| North Central                 | 118,772                                | 84,193   | 70.9                            | 153,933                                       | 1.30  | 1.83  |
| South                         | 130,847                                | 101,622  | 77.7                            | 200,630                                       | 1.53  | 1.97  |
| West                          | 66,240                                 | 43,114   | 65.1                            | 77,173  | 1.17  | 1.79  |
| Area                          |  |  |                                 |   |   |   |
| Metropolitan                  | 230,141                                | 171,510  | 74.5                            | 325,423                                       | 1.41  | 1.90  |
| Nonmetropolitan               | 151,569                                | 109,590  | 72.3                            | 206,642                                       | 1.36  | 1.89  |

<sup>1</sup>A visit in which one or more drugs were prescribed.

<sup>2</sup>Drug mentions divided by number of visits.

<sup>3</sup>Drug mentions divided by number of drug visits.

<sup>4</sup>Includes partnership, group, and other types of practice.

tion on the specific drugs used by GFP's is provided in the section "Patient condition and management.")

Data on the duration and disposition of the visit were also consistent with the average age of the patients likely to be treated in a particular setting (table 1). Relatively short visits (less than 11 minutes) were proportionately more frequent in the offices of physicians in practice arrangements other than solo (51 percent) than in those of physicians in solo practice (48 percent). On the other hand, relatively long visits (16 minutes or more) that are usually associated with an older group of patients, were more common for solo physicians than for the others (20 percent, compared with 17 percent). In general, the duration of NAMCS visits increases with the increasing age of the patients. Since GFP's in solo practice tend to treat many older patients, this result may be expected.

Physicians in solo practice were also more likely than other physicians to schedule appointments for return visits; however, physicians in other practice types were more likely to tell their patients to return if needed. The instruction to return if needed is usually associated with visits for acute, often self-limiting, problems that were shown previously to be associated with visits to physicians in multiple practice.

#### Location of practice

Among the four major geographic regions, GFP's in the Northeast Region treated the highest proportion of patients over 44 years of age (49 percent); physicians in the North Central Region treated the highest proportion of patients under 15 years of age (17 percent). It is not possible to relate these statistics to the distribution of the population because the distribution of physicians confounds the issue.

The clinical profile of visits to GFP's in the Northeast Region is typical of the medical practice in which patients are likely to be over 44 years of age. Problems were more likely to be chronic in nature in this region than those in other parts of the country were. Also, blood pressure checks and general history and examinations were more likely to be used for diagnosis. Visits for endocrine, nutritional and metabolic diseases, and immunity disorders; and diseases of the circulatory system were more common in this region than in other regions; and, similar to the solo practice pattern, diet counseling was likely to be a therapeutic measure. Except for the South Region, the percent of drug visits and the drug mention rate in the Northeast exceeded those of other regions (table B). It is known from NAMCS data that drug utilization increases with patient age and such a result may be expected in the Northeast where there was a high average visit age. Anti-infective agents were used proportionately less in the Northeast Region, but otherwise distributions of drug mentions by therapeutic category were similar for all regions (table 2).

Patients who visited physicians in the North Central Region were typically younger than those in the other regions, and it was not unexpected that visits for nonillness care were proportionately higher. Also the reasons given by patients in this region were more often for preventive care, with a correspondingly higher frequency of visits in the supplementary classification of diagnoses (table 1). The proportion of visits in which there was no face-to-face encounter between patient and physician was about 5 percent, which was higher than those in the other three regions. Visits lasting less than 11 minutes were also more common there.

Patients in the South Region were more likely than those in other regions to present acute problems. The percent of drug visits and the drug mention rate for this region were similar to those of the North Central Region, except that central nervous system drugs were more likely to be prescribed in the South Region. Proportions of visits lasting more than 16 minutes were higher in the South and Northeast Regions than they were in the North Central Region.

The highest proportion of visits that included no medication was in the West Region where the percent of drug visits and drug mention rates were lower than in other regions.

Compared with GFP's in metropolitan areas, those in nonmetropolitan areas saw proportionately more patients under 25 years of age. Thus the average visit pattern in the nonmetropolitan areas was similar to others where patients were typically young.

#### Physician age and sex

The relationship of the physician's age and sex to the content and organization of general and family practice is explored in this section. It was postulated that if age is equated with the year of graduation from medical school, it may be possible to assess the influence of education and experience on the pattern of ambulatory medical care. With the growth of nontraditional practice organizations, such as health maintenance organizations and multispecialty group practices, fewer graduates (among whose number is an increasingly larger proportion of women each year) choose solo practice, while older physicians remain in established practices. It has been suggested that recency of education and experience also influence drug prescribing patterns. Therefore, in a constantly changing pharmaceutical environment, it is important to examine the effect, if any, of physician's age on prescribing patterns.

NAMCS data reveal a clear relationship between the number of visits per week and the age or sex of the physician (table C). The oldest and youngest physicians had the smallest average

Table C. Average number of office visits per week and mean duration of visits to general and family practitioners, by age and sex of physician: United States, January 1980-December 1981

| Age and sex of physician <sup>1</sup> | Average<br>number of<br>visits per<br>physician<br>per week | Mean<br>duration<br>of visit<br>in<br>minutes |
|---------------------------------------|---|---|
| Age                                   |   |   |
| All ages                              | 86.8  | 13.5  |
| Under 35 years                        | 73.4  | 14.5  |
| 35–44 years                           | 98.1  | 12.0  |
| 45–54 years                           | 102.9   | 12.7  |
| 55-64 years                           | 87.5  | 13.8  |
| 65 years and over                     | 63.5  | 15.5  |
| Sex                                   |   |   |
| Female                                | 52.0  | 16.7  |
| Male                                  | 88.3  | 13.4  |

<sup>1</sup>Does not include doctors of osteopathy.

number of visits per week, and physicians 45-54 years of age had the largest. The average number rose from about 73 visits for physicians under 35 years of age to almost 103 for those 45-54 years of age, then decreased to a low of about 64 for physicians 65 years and over. The average number of visits to male physicians (88) significantly exceeded that to female physicians (52). It was shown in a report on 1980 data that the most professionally active physicians of both sexes were those who graduated in 1951-60 (about 45-54 years of age in 1980) but males saw more patients in a typical work-week than females did regardless of the year of graduation.<sup>10</sup> Descriptions of studies of the reasons for the difference in the productivity of female and male physicians abound in the literature and will not be recapitulated here. However, the practice characteristics provided by NAMCS data may offer some additional insight into the subject. It can be seen in table C that there is an inverse relationship between the average number of visits per week and the mean duration of the visit. The two age groups with the highest average number of visits were associated with the briefest duration, and the age groups with the lowest number of visits were those with the longest duration. Women saw, on the average, fewer patients per week than men did, but tended to spend more time with them.

Characteristics of visits to general and family practice physicians 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 381.7 million and the number of drug mentions was 532.1 million; however, in tables 3 and 4 the comparable rounded totals are 321.5 million and 445.0 million. 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 60.3 million visits made in 1980– 81 to doctors of osteopathy would differ significantly from the distribution that includes them. A separate profile of visits to doctors of osteopathy was published in Advance Data No. 25.<sup>11</sup>



Figure 2. Percent of office visits to general and family practitioners, by age of patient and age of physician: United States, January 1980-December 1981

| Age and sex of physician <sup>1</sup> | All<br>visits<br>in<br>thousands | Drug<br>visits <sup>2</sup><br>in<br>thousands | Percent<br>of<br>drug<br>visits | Number of<br>drug<br>mentions in<br>thousands | Drug<br>mention<br>rate <sup>3</sup><br>per visit | Drug<br>intensity<br>rate <sup>4</sup><br>per drug<br>visit |
|---------------------------------------|----------------------------------|--|---------------------------------|---|---|---|
| Age                                   |                                  |  |                                 |   |   |   |
| All ages                              | 321,454                          | 236,117  | 73.5                            | 444,961                                       | 1.38  | 1.88  |
| Under 35 years                        | 27,963                           | 18,326   | 65.5                            | 30,670  | 1.10  | 1.67  |
| 35–44 years                           | 56,563                           | 38,440   | 68.0                            | 68,216  | 1.21  | 1.77  |
| 45-54 years                           | 92,790                           | 69,786   | 75.2                            | 131,739                                       | 1.42  | 1.89  |
| 55–64 years                           | 99,064                           | 74,653   | 75.4                            | 148,263                                       | 1.50  | 1.99  |
| 65 years and over                     | 45,074                           | 34,912   | 77.5                            | 66,072  | 1.47  | 1.89  |
| Sex                                   |                                  |  |                                 |   |   |   |
| Female                                | 7,477                            | 5,555  | 74.3                            | 10,577  | 1.41  | 1.90  |
| Male                                  | 313,977                          | 230,562  | 73.4                            | 434,384                                       | 1.38  | 1.88  |

Table D. Number of office visits to general and family practitioners, 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

<sup>1</sup>Does not include doctors of osteopathy.

<sup>2</sup>A visit in which one or more drugs were prescribed.

<sup>3</sup>Drug mentions divided by number of visits.

<sup>4</sup>Drug mentions divided by number of drug visits.

On the average, GFP's treat a more heterogeneous group of patients than other physicians do, but the distribution of visits by patient age varies with the age group of the physician. Proportions of visits by patients under 25 years of age decreased with the increasing age of the physician, and proportions of visits by patients 45 years of age and over increased (table 3). This tendency is illustrated in figure 2.

As is generally the case in NAMCS data, where there are large proportions of visits by young patients there are also relatively high proportions of visits by new patients and visits for nonillness care. About 23 percent of the visits to physicians under 35 years of age were made by new patients, compared with 12 percent to physicians 35–44 years of age, 9 percent to those 45–64 years of age, and only 8 percent to the oldest group. Nonillness care accounted for 18 percent of the visits to the youngest physicians, compared with 8 percent of those to the oldest (table 1).

Diagnoses made by physicians under 35 years of age were more likely than those of other physicians to be in the categories of diseases of the nervous system and sense organs and supplementary classification (chiefly examinations). Physicians over 65 years of age were more likely to treat patients with endocrine, nutritional and metabolic diseases, and immunity disorders; and diseases of the circulatory and musculoskeletal systems.

Probably because of the relatively high proportion of visits by older patients with endocrine and circulatory disorders, diet counseling was given in 13 percent of the visits to the oldest group of physicians. This proportion exceeded those of other age groups.

Medication therapy was also proportionately more frequent when physicians were older. One or more drugs were mentioned in 78 percent of visits to physicians 65 years of age and over, compared with 66 percent of visits to the youngest group (table D). Drug intensity rates were analyzed by age of the physician and age of the patient in an earlier report.<sup>10</sup> It was observed that drug intensity rates increased with increasing patient age regardless of the age of the physician, thus, providing evidence that the rate of drug use depends on the age of the patient and not the age of the physician.

As may be expected when the age of the patient is correlated with the age of the physician, proportions of cardiovascular drugs and diuretics increased with the increasing age group of the physician (table 4). About 25 percent of drugs mentioned by physicians 65 years of age and over were in these two categories, compared with 21 percent, 18 percent, 16 percent, and 14 percent of each of the successively younger groups.

The older the physicians the more likely they were to be in solo practice (table 3). A clear trend towards practice arrangements other than solo by more recent medical school graduates is demonstrated in figure 3.

Proportions of visits in metropolitan areas substantially exceeded those in nonmetropolitan areas when physicians were under 35 years or over 65 years of age. Only when visits were to the offices of physicians 35–44 years of age were nonmetropolitan area visits proportionately higher.

A study of the characteristics of the medical practices of females in various specialties based on 1977 NAMCS data



Figure 3. Percent of office visits to general and family practitioners, by type of practice and age of physician: United States, January 1980-December 1981

was published in *Vital and Health Statistics*, Series 13, No. 49.<sup>12</sup> The number of females in non-Federal patient care increased by 40 percent from 1977 to 1980, but in the same period the proportion of visits to female GFP's declined. In 1977, visits to GFP's accounted for 35 percent of the visits to female physicians. This proportion decreased to an average of 21 percent in 1980–81, reflecting a general decline in visits to all GFP's during the period. Some shift in the choice of specialty by female residents in medicine<sup>13</sup> may also have contributed to the decrease in visits because the comparable decline was smaller for male physicians (from 39 percent to 33 percent). It is important, therefore, to make a fresh examination of the practice profile of the female general and family practice physician, and for the first time to include drug utilization.

One of the most striking differences between visits to female and male GFP's is the proportion of visits by female patients—72 percent of the average female GFP's visits, compared with 59 percent of those to male GFP's (table 3). Moreover, these proportions have changed very little since 1977 when the comparable figures were 75 and 59 percent, respectively.

Female physicians also treat younger patients than their male counterparts do. About 44 percent of the female GFP's visits were made by patients under 25 years of age, compared with 29 percent of the male GFP's. Conversely, 45 percent of the visits to males included patients 45 years of age and over, while females saw that age group in 30 percent of their visits. Proportions of visits by patients 25–44 years of age were about the same for physicians of both sexes.

Female physicians treated proportionately more new patients than male physicians did, and provided more nonillness care. They also ordered proportionately more Pap tests and clinical laboratory tests, which is not surprising in view of the higher proportion of visits by female patients. Differences between percents of other diagnostic services were not statistically significant.

As expected, diagnoses rendered by female and male physicians were related to the characteristics of the patients they were likely to see. Male physicians, with an older case load, treated proportionately more patients with circulatory diseases. Female physicians, with a predominantly young and female case load, had more visits by patients with diseases of the genitourinary system. Visits with diagnoses in the supplementary classification (chiefly gynecological examinations) were also proportionately higher for female physicians than for males.

Women provided medical counseling in a larger proportion of their visits than men did, which is consistent with the general pattern of the female and youth dominated patient load.

Drug utilization was similar for female and male physicians despite the differences in patients. There were no statistically significant differences in the proportions by the number of drugs prescribed during a visit (table 3), in the percent of drug visits, or in the drug utilization rates (table D). Data for 1980, which were presented in a previous report,<sup>10</sup> also indicated that there was little difference in drug utilization based on the sex of the physician when the sex and age of the patient were also considered. The earlier report provides additional detailed information on drug utilization by the sex of the physicians and by variables not considered in this report that the reader may find useful.

The practice profiles of females and males in general and family medicine also vary according to the duration and disposition of the visit, and the type and location of the practice. The mean duration of visits to female practitioners was 16.7 minutes compared with 13.4 minutes for those to males (table C). A more precise estimate of visit duration is shown in table 3 where visits are distributed by time intervals. It can be seen that 50 percent of the visits to male physicians lasted less than 11 minutes (relatively short), compared with 39 percent of those to females; and visits of 16 minutes or more duration (relatively long) constituted 19 percent of the males' visits compared with 31 percent of the females'.

No followup was planned in proportionately more of the male physicians' visits (16 percent) than of the females' (5 percent), but females instructed patients to return if needed more often (44 percent, compared with 30 percent of males' visits).

Another noteworthy difference between the medical practices of female and male GFP's occurred in the distribution of visits by type of practice. Although the majority (62 percent) of male physicians' visits were to those in solo practice, the majority of female physicians' visits (55 percent) were to those in partnership, group, or other types of practice.

The greater proportion of visits to all physicians was in metropolitan locations, but visits to women in general and family practice were more likely to be in such areas (73 percent). It has been suggested that women tend to select urban areas for medical practice because of the location of medical schools and because services are available that enable them to perform their professional duties and also meet family obligations.

### **Patient characteristics**

In the previous section the focus of the report was on the characteristics related to the physician. Profiles were developed based on the location of practice and the age and sex of the physician. In this section, the emphasis is on the demographic characteristics and visit status of patients seen by general and family practice physicians. 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. Visits classified by the patient's demographic characteristics are distributed by referral status and prior visit status in table 6.

#### Age and sex

GFP's see a broader range of patients than any other group of physicians do. On the average, 14 percent of their visits were made by patients under 15 years of age with about 5 percent in that group under 3 years of age. Of the 86 percent over 15 years of age, 15 percent were represented by patients 15-24 years of age, 27 percent were 25-44 years, 25 percent were 45-64 years, and 19 percent were 65 years of age and over.

About 18 percent of the male patients were under 15 years of age, compared with 11 percent of the females. About 44 percent of the female group were in the child-bearing years of 15-44, a statistic that is reflected by the high proportion of visits for prenatal care. (Specific diagnosis is discussed in the section entitled "Patient condition and management.")

#### Age, race, and ethnicity

Black patients were less likely to be under 15 years of age than white patients were. The differences between proportions of Hispanic and non-Hispanic age groups were not statistically significant, except for the group 25-44 years of age where proportions by visits of Hispanics exceeded those by non-Hispanics.

#### Visit rates

The visit rate was higher for children under 3 years of age (90 per 100 in the population) than for other age groups under 15 years of age, probably because of frequent periodic checkups during infancy.

For patients of both sexes, visit rates increased with the increasing age group of the patient beginning with those 6–10 years of age. However, the visit rates of all age groups of females over 14 years of age exceeded those of males.

Although visit rates increased with increasing age regard-

| Table E. | Annual ra  | te of offi | ce visits to g | general aı | nd family | y practitioner | s, |
|----------|------------|------------|----------------|------------|-----------|----------------|----|
| by age a | ind sex of | patient:   | United Sta     | tes, 1975  | 5 and 19  | 98081          |    |

| Age and sex of patient | Visit rate per<br>100 persons in<br>population |         |  |  |
|------------------------|--|---------|--|--|
|                        | 1975   | 1980-81 |  |  |
| Age                    |  | -       |  |  |
| All ages               | 113  | 86      |  |  |
| Under 15 years         | 65   | 52      |  |  |
| 15-24 years            | 96   | 69      |  |  |
| 25–44 years            | 108  | 82      |  |  |
| 45–64 years            | 152  | 109     |  |  |
| 65 years and over      | 194  | 151     |  |  |
| Sex                    |  |         |  |  |
| Female                 | 130  | 100     |  |  |
| Male                   | 95   | 71      |  |  |

less of the race of the patient, rates were higher for white patients under 45 years of age than for black patients the same age. However, for patients 45 years of age and over, visit rates were higher for black patients than for white patients.

The general rate of visits to GFP's dropped from 113 per 100 persons in the population in 1975 to 86 in 1980-81 (table E). For females, the rate fell from 130 to 100; for males, from 95 to 71. The decline was apparent in all age groups.

#### **Referral status**

Patients were rarely referred to GFP's. Only 1 percent were referred by another physician, with no significant fluctuation in proportions based on age, sex, race, or ethnicity.

#### Prior visit status

As expected, the older the patients the more likely they were to make return visits. About 75 percent of the visits by patients over 65 years of age were for care of continuing problems presented by patients the physicians had seen before, compared with 65 percent, 51 percent, and 42 percent for the next three younger groups. The return visit rate, which is the number of visits by old (returning) patients divided by the number of visits by new patients, increased from 5 return visits for each initial visit made by patients 15-24 years of age to 21 for patients 65 years of age and over. This rate was higher for females than for males, for white patients than for black patients, and for non-Hispanic than for Hispanic patients.

### Patient condition and management

In this section, the clinical characteristics of visits are presented in relation to the age, sex, and prior visit status of patients. Condition of the patient is shown by means of patients' reasons for visit and physicians' diagnoses (tables 7–10). Statistics are presented on patient management exemplified by the GFP's use of diagnostic tools, nonmedication therapy, and medication therapy (tables 11–13). In table 14, patients' reasons for visit are analyzed by the diagnostic services ordered or provided in their presence. The proportions of therapeutic services ordered or provided for patients with certain diagnoses are shown in table 15. To conclude the description of patient management, statistics on the duration and disposition of the visit appear in tables 16–17.

#### Sex of the patient

Proportionately more visits by female patients than by nales were for nonillness care, but acute problems and postsurgery or postinjury were more likely to be the major reason 'or males' visits (table 7). The principal reasons for visits expressed by female patients were more likely to be in the diagnostic, screening, and preventive module than those by males were. However, male patients proportionately more often gave reasons in the injuries and adverse effects module and the administrative module. The high incidence of female visits with reasons in the diagnostic, screening, and preventive module was due in large part to visits for prenatal care and gynecological examinations. Examinations for employment, licenses, and insurance contributed to the higher proportion of reasons in the administrative module given by males.

The diagnostic procedures physicians used to evaluate patients' problems differed depending on the sex of the patient. Higher proportions of the visits by females than by males included clinical laboratory tests and blood pressure checks. When patients were male, proportionately more visits included X-rays, electrocardiograms, and vision tests. Only 5 percent of all the visits by females included Pap tests (6 percent of females 15 years of age and over).

Although NAMCS data do not necessarily provide a 1 to 1 relationship between reason for visit and diagnosis, the distribution of diagnostic categories reflects that of the reason for visit modules. That is, among the diagnostic groups shown in table 9, the supplementary classification (chiefly examinations) was proportionately higher for female visits, and injury and poisoning was higher for those by males. Female patients were more likely to visit for chronic problems such as diseases of the genitourinary system; and endocrine, nutritional and metabolic diseases, and immunity disorders. Males were more likely to visit for diseases of the respiratory system, which are largely acute self-limiting conditions.

Statistics on nonmedication therapy were consistent with the conditions likely to be associated with visits by female or male patients. Physiotherapy and office surgery were more commonly used when males visited, and family planning, therapeutic listening, diet counseling, and family or social counseling were proportionately higher during females' visits (table 11).

Three or more medications were more likely to be ordered or prescribed during females' visits (18 percent) than during those of males (14 percent). No medication was ordered in 28 percent of visits by male patients, compared with 26 percent of those by female patients. Anti-infective agents accounted for the largest proportion of drugs mentioned during visits by male patients (20 percent) and central nervous system drugs were the next largest (16 percent, table 12). For female patients, central nervous system drugs ranked first with 19 percent and anti-infectives second with 16 percent. Central nervous system drugs, diuretics, vitamins, and hormones and synthetic substitutes were prescribed more often for female patients than for males. The category of hormones and synthetic substitutes includes oral contraceptives. Males exceeded females in mentions of antihistamine drugs, anti-infectives, cardiovascular drugs, skin and mucous membrane preparations, and spasmolytic agents.

The sex of the patient did not affect the duration of the visit because differences between proportions of visits by time intervals were not statistically significant. But patterns of visits to GFP's by female and male patients differed in the disposition of the visit (table 16). No followup plans were made in 17 percent of the visits by male patients, compared with 13 percent of those by females. Appointments for return visits were made proportionately more often for females (53 percent) than for males (48 percent), which may be one of the reasons for the higher visit rate by female patients. The return visit rate is about 9 to 1 for females, compared with about 7 to 1 for males (table 6).

#### Age of the patient

There were variations in the visit characteristics of the various age groups of patients who visited GFP's. The younger the patients the more likely they were to have acute problems, and the older the patients the more likely they were to have chronic problems (table 7). Nonillness care was proportionately most frequent in visits by patients 15–24 years of age. Patients sought health care for a wide variety of symptoms, treatments, and services. The most frequent specific reasons for all visits to GFP's are shown in table F, but the problems presented by patients varied by age group (table 8). As may be expected, well baby examination was the leading principal reason for the age group under 15 years, and prenatal examination ranked first for the age group 15–24 years. General medical examination was among the top 10 reasons in every age group and was the first ranking reason for patients 45 years of age and over; providing an indication of the average patient's interest in preventive health care.

Some diagnostic categories reflect the patients' reasons for making the visit (table 9). About 35 percent of the visits by children under 3 years of age were in the supplementary classification (chiefly examinations). About 29 percent were for treatment of diseases of the respiratory system and 12 percent for diseases of the nervous system and sense organs (a total of about 75 percent in these three categories). These categories also comprised the majority of visits by patients aged 3-5 years (67 percent). The three largest classes of diagnoses for patients aged 11-14 years were diseases of the respiratory system (21 percent), injury and poisoning (20 percent), and supplementary classification (18 percent). The same three classes were predominant in visits by patients aged 15-24 years with a total of 56 percent, and in those by patients aged 25-44 years where they constituted 43 percent of the visits. Diseases of the circulatory system, diseases of the respiratory sys-

Table F. Number and percent of office visits to general and family practitioners, by 20 most frequent principal reasons for visit: United States, January 1980-December 1981

| Principal reason for visit and RVC code <sup>1</sup>  | Number of<br>visits<br>in<br>thousands   | Percent  |
|---|--|--|
| All visits  | 381,710  | 100.0  |
| General medical examinationX100Symptoms referable to throatS455Blood pressure testX320CoughS440Head cold, upper respiratory infection(coryza)(coryza)S445Prenatal examination, routineX205Back symptomsS905Chest pain and related symptomsS050Progress visit, not otherwise specifiedT800Headache, pain in headS210HypertensionD510Abdominal pain, cramps, spasmsS550Skin rashS860Earache, or ear infectionS355 | 20,687<br>16,688<br>12,468<br>11,516<br>10,764<br>9,641<br>9,015<br>7,507<br>7,347<br>7,347<br>7,163<br>6,925<br>6,418<br>6,323<br>6,147 | 5.4<br>4.4<br>3.3<br>3.0<br>2.8<br>2.5<br>2.4<br>2.0<br>1.9<br>1.9<br>1.9<br>1.9<br>1.8<br>1.7<br>1.7<br>1.6 |
| Vertigo-dizziness       S225         Fever       S010         Weight gain       S040         Well-baby examination       X105         Low back symptoms       S910         Leg symptoms       S920  | 5,558<br>5,224<br>4,497<br>4,228<br>4,176<br>4,155   | 1.5<br>1.4<br>1.2<br>1.1<br>1.1<br>1.1   |

<sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC).<sup>6</sup>

| Table G.   | Number and percent of office visits to general and family |
|------------|---|
| practition | ners, by 20 most frequent principal diagnoses: United     |
| States, J  | anuary 1980-December 1981                                 |

| Principal diagnosis and<br>ICD-9-CM code <sup>1</sup>                            | Number of<br>visits<br>in<br>thousands | Percent |
|--|--|---------|
| All visits   | 381,710                                | 100.0   |
| Essential hypertension   | 28,612                                 | 7.5     |
| or unspecified sites   | 15,013                                 | 3.9     |
| General medical examination  | 14,061                                 | 3.7     |
| Normal pregnancy   | 10,606                                 | 2.8     |
| Diabetes mellitus  | 10,137                                 | 2.7     |
| Obesity and other hyperalimentation 278  | 8,922                                  | 2.3     |
| Acute pharyngitis  | 8,831                                  | 2.3     |
| Suppurative and unspecified otitis   | 0,710                                  | 1.0     |
| media  | 6,445                                  | 1.7     |
| Health supervision of infant or child V20  | 6,060                                  | 1.6     |
| Neurotic disorders   | 4,758                                  | 1.2     |
| Chronic sinusitis  | 4,751                                  | 1.2     |
| Other and unspecified arthropathies716<br>Certain adverse effects, not elsewhere | 4,571                                  | 1.2     |
| classified <sup>2</sup>  | 4,504                                  | 1.2     |
| parts of back  | 4,499                                  | 1.2     |
| disease  | 4,474                                  | 1.2     |
| colitis  | 4.455                                  | 1.2     |
| Acute tonsillitis  | 4.395                                  | 1.2     |
| Other disorders of soft tissue   | 4,345                                  | 1.1     |
| Allergic rhinitis (hay fever)  | 4,162                                  | 1.1     |

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM).<sup>7</sup>

<sup>2</sup>Chiefly allergy, unspecified, 995.3.

tem, and diseases of the musculoskeletal system and connective tissue were the three leading categories of diagnoses treated by GFP's when patients were 45 years of age and over. They accounted for 46 percent of visits by patients aged 45–64 years and 56 percent of those by patients 65 years of age and over.

The 20 most frequent principal diagnoses rendered by GFP's are shown in table G.<sup>c</sup> Naturally, the rank order of this list is affected by the distribution of visits according to the age of the patient. In table 10, it can be seen that the kind and order of specific diagnoses change within the five age groups. These lists of diagnoses offer a rough measure of the health status of the different age groups of patients who visit GFP's, and the degree to which age influences utilization.

The use of diagnostic procedures also changes with the age of the patients served by general and family practice physicians. Blood pressure was rarely measured when children under 11 years of age visited, but proportions of visits that included blood pressure checks increased with the increasing age of the patient, rising from 25 percent of visits by patients aged 11–14 years to about 63 percent of visits by patients 65 years

<sup>&</sup>lt;sup>c</sup>The reader will note that normal pregnancy is listed fourth in table G. The comparable diagnosis in 1975, prenatal care, was inadvertently omitted from the 1975 publication.

Table H. Number of office visits to general and family practitioners, 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 of patients: United States, January 1980-December 1981

| Selected characteristic of patient | All<br>visits<br>in<br>thousands | Drug<br>visits <sup>1</sup><br>in<br>thousands | Percent<br>of<br>drug<br>visits | Number of<br>drug<br>mentions in<br>thousands | Drug<br>mention<br>rate <sup>2</sup><br>per visit | Drug<br>intensity<br>rate <sup>3</sup><br>per drug<br>visit |
|------------------------------------|----------------------------------|--|---------------------------------|---|---|---|
| Sex                                |                                  |  |                                 |   |   |   |
| Both sexes                         | 381,710                          | 281,101  | 73.6                            | 532,065                                       | 1.39  | 1.89  |
| Female                             | 229,445                          | 170,843  | 74.5                            | 330,172                                       | 1.44  | 1.93  |
| Male                               | 152,265                          | 110,257  | 72.4                            | 201,893                                       | 1.33  | 1.83  |
| Age                                |                                  |  |                                 |   |   |   |
| Under 3 years                      | 18,377                           | 13,330   | 72.5                            | 22,038  | 1.20  | 1.65  |
| 3–5 years                          | 9,297                            | 7,366  | 79.2                            | 11,764  | 1.27  | 1.60  |
| 6–10 years                         | 11,492                           | 8,419  | 73.3                            | 12,504  | 1.09  | 1.49  |
| 11-14 years                        | 13,715                           | 8,403  | 61.3                            | 12,719  | 0.93  | 1.51  |
| 15–24 years                        | 56,230                           | 36,515   | 64.9                            | 58,485  | 1.04  | 1.60  |
| 25–44 years                        | 103,275                          | 72,004   | 69.7                            | 124,633                                       | 1.21  | 1.73  |
| 45-64 years                        | 95,458                           | 74,308   | 77.8                            | 149,707                                       | 1.57  | 2.01  |
| 65 years and over                  | 73,867                           | 60,756   | 82.3                            | 140,215                                       | 1.90  | 2.31  |
| Race                               |                                  |  |                                 |   |   |   |
| White                              | 338,479                          | 249,970  | 73.9                            | 474,148                                       | 1.40  | 1.90  |
| Black                              | 39,897                           | 28,828   | 72.3                            | 54,354  | 1.36  | 1.89  |
| All other                          | 3,334                            | 2,303  | 69.1                            | 3,564   | 1.07  | 1.55  |
| Ethnicity                          |                                  |  |                                 |   |   |   |
| Hispanic                           | 17 703                           | 12 815   | 724                             | 24 988  | 1 4 1   | 1 95  |
| Non-Hispanic                       | 364,007                          | 268,286  | 73.7                            | 507,077                                       | 1.39  | 1.89  |

<sup>1</sup>Visits in which one or more drugs were ordered.

<sup>2</sup>Drug mentions divided by visits.

<sup>3</sup>Drug mentions divided by drug visits.

of age and over (table 11). Nonmedication therapy was more likely to be not used than to be used because over 50 percent of visits, regardless of age group of the patient, included no such therapy. Medication therapy, however, was prescribed on the average in 74 percent of patients' visits (table H). The oldest group had the highest proportion of drug visits (82 percent) and patients aged 11–14 years had the lowest (61 percent).

It is not surprising to find that the largest proportions of therapeutic categories of drugs mentioned by physicians were related to the diagnoses most likely to be present in each age group. For example, serums, toxoids and vaccines accounted for 25 percent of the drugs mentioned in visits by children under 3 years of age (table 12) and cardiovascular drugs accounted for 21 percent of drugs used in visits by patients 65 years of age and over. Central nervous system drugs were mentioned in over one-fifth of the visits by patients between the ages of 25 and 64 years. Table 13 contains the names of specific drugs prescribed by GFP's for the various age groups.

Age was clearly a factor in the duration of visits. Proportions of visits more than 10 minutes long increased with the increasing age group of the patient (table 16). Disposition of the visit was also age-related. Proportions of visits with no followup planned decreased and those with scheduled appointments increased as the age of the patient increased. This finding is consistent with that of the National Medical Care Expenditure Survey in which it was observed that as the age of the patient increased, physician-initiated visits increased.<sup>14</sup>

#### **Prior visit status**

As it was with most specialists, the proportion of new patients visiting GFP's was relatively low (11 percent, table 6). Those specialties with higher than average proportions of new patients are generally those with relatively high proportions of referred patients, which is not the case with GFP's. However, patterns of care differ depending on the visit status of the patient. New patients, or patients the physician had seen before but presenting new problems, tended to present proportionately more acute than chronic problems, with the reverse true for patients returning for care of an old problem (table 7). Nonillness care was proportionately more frequent when new patients visited than when old patients visited. This resulted in differences in the classes of diagnoses likely to be rendered for the groups (table 9). The old problems presented by returning patients were proportionately more likely to be endocrine, nutritional and metabolic diseases, and immunity disorders; diseases of the circulatory system; and diseases of the musculoskeletal system and connective tissue than those of other patients were—a typical profile of patients over 44 years of age. That age group constituted 55 percent of the visits by patients the physician had seen before returning for care of an old problem. At the other end of the age range, visits by patients under 25 years of age constituted 41 percent of new patients' visits. Thus, the pattern of visits by new patients was consistent with that of young patients.

The physician's workup was likely to be comprehensive

when new patients visited (table 11). The general history and examination was used in 29 percent of such visits, compared with 12 percent of those by patients with old problems. Clinical laboratory tests, X-rays, and vision tests were also included in proportionately more new patient visits than in others. However, once a diagnosis was made, nonmedication therapeutic services differed minimally.

Visits by new patients were, on the average, longer than those by old patients reflecting the in-depth examination of these patients by the physician (table 16). About 31 percent of the visits by new patients lasted 16 minutes or more, compared with 17 percent of those by old patients with old problems.

# Reason for visit and diagnostic services

The relationship between patients' reasons for visit and the physician's workup is explored in table 14. Visits for acute problems were more likely than those for routine chronic problems to include a limited history and examination (73 percent) or X-ray (9 percent). However, visits for chronic problems were characterized by a higher proportion of blood pressure checks. Nonillness care included proportionately more general history and examinations, Pap tests, and clinical laboratory tests than other types of care did.

Proportions of the various diagnostic services associated with the reason for visit modules are also shown in table 14. At least one-fourth of the visits included blood pressure measurement or limited history and examination regardless of the reason for visit. About 22 percent of visits in the injuries and adverse effects module included X-rays, and clinical laboratory tests were included in at least 20 percent of visits in 5 of 7 modules.

# Principal diagnosis and therapeutic services

Visits with no therapeutic services ordered or provided ranged from 37 percent where diagnoses were mental disorders or endocrine, nutritional and metabolic diseases, and immunity disorders to 73 percent of those for respiratory conditions (table 15). Where proportions of certain services were higher than other services that were given for the same condition, those services were usually directly related to the problem. For example, physiotherapy was used in 1 of 4 visits when a musculoskeletal condition was diagnosed, and in 1 of 5 when an injury was diagnosed. Office surgery was performed in 15 percent of visits for skin diseases and in 17 percent of those for injuries. Family planning was considered in 7 percent of the visits where examinations were made (supplementary classification). As expected, 26 percent of the visits classified as mental disorders included therapeutic listening and 12 percent included family or social counseling. The range of mental disorders seen by GFP's is narrow, resting mainly in the group of neurotic disorders (table G). Therapeutic listening and counseling, therefore, are techniques likely to be used for treating such patients. Diet counseling was the nonmedication therapy selected proportionately most often for patients with endocrine, nutritional and metabolic diseases, and immunity disorders as well as diseases of the digestive system. The first group includes such diagnoses as diabetes mellitus and obesity.

However, drugs were the first choice of therapy for almost all classes of diagnoses. The only exception was for visits in the supplementary classification that were usually for preventive care where medication is not always indicated. Visits for diagnostic groups are classified by the number of medications associated with the visit in table 15. The complement of the percent in the "none" category is the percent of drug visits, or visits in which one or more drugs were continued or newly prescribed. For example, only 7.5 percent of the visits for diseases of the respiratory system had no drugs indicated. Thus, 92.6 percent of visits for such conditions were drug visits (the highest proportion of drug visits for any of the diagnostic categories). One medication was the most likely number in visits for all conditions where a drug was given. However, some conditions warranted the prescription of three or more drugs proportionately more often than others did. These included endocrine, nutritional and metabolic diseases, and immunity disorders (26 percent); diseases of the circulatory system (29 percent); and diseases of the respiratory system (24 percent). An in-depth analysis of the specific drugs utilized in visits by patients with selected diagnoses was published in Vital and Health Statistics, Series 13, No. 71.15

# Principal diagnosis, duration, and disposition of visit

The duration and disposition of the visit are important parameters of practice management. If the financing of medical care is linked, as has been proposed, to the diagnosis of the patient's illness, the amount of time used for examination and treatment is a necessary economic variable. Disposition of the visit is a factor in the continuity of care and in estimating episodes of illness.

The mean duration of all visits to GFP's was 13.5 minutes, but duration varied among diagnosis groups. The average duration of a visit in which the patient was seen by the physician ranged from 11.8 minutes for patients with respiratory conditions to 15.5 minutes for those with mental disorders (table J). Some of the variation may be attributed to the degree of intensity of therapeutic services offered. Diseases of the respiratory system accounted for the highest proportion of visits with no nonmedication services rendered, and it had the shortest average duration. In the same vein, proportionately more therapeutic listening was associated with mental disorders than with other conditions, probably lengthening the duration of the visit accordingly.

In every disease category except one, visits by new patients were, on the average, more time consuming than those made by returning patients were. These statistics may reflect the additional time needed to gather historical data about the new patient or to provide initial therapy. Among old patients, the average duration of a visit was not very different for those with new problems, compared with those presenting old probTable J. Mean duration of office visits to general and family practitioners, by prior visit status and principal diagnosis categories: United States, January 1980-December 1981

|   | A 11     | A/0141      | Old patients   |                |
|---|----------|-------------|----------------|----------------|
| Principal diagnosis category and ICD-9-CM code <sup>1</sup>                   | patients | patients    | New<br>problem | Old<br>problem |
|   |          | Mean durati | on in minutes  |                |
| All diagnoses   | 13.5     | 15.8        | 13.3           | 13.2           |
| Infectious and parasitic diseases   | 12.6     | 13.6        | 12.2           | 12.8           |
| Neoplasms   | 15.2     | 19.0        | 16.6           | 14.3           |
| Endocrine, nutritional and metabolic diseases, and immunity disorders 240–279 | 13.5     | 14.6        | 12.8           | 13.5           |
| Mental disorders  | 15.5     | 19.7        | 14.7           | 15.2           |
| Diseases of the nervous system and sense organs                               | 12.3     | 14.9        | 11.7           | 12.2           |
| Diseases of the circulatory system  | 13.8     | 19.2        | 14.8           | 13.4           |
| Diseases of the respiratory system  | 11.8     | 13.2        | 11.2           | 11.8           |
| Diseases of the digestive system  | 14.5     | 17.6        | 14.1           | 14.2           |
| Diseases of the genitourinary system  | 14.6     | 17.6        | 14.4           | 14.1           |
| Diseases of the skin and subcutaneous tissue                                  | 12.4     | 12.0        | 11.9           | 13.3           |
| Diseases of the musculoskeletal system and connective tissue                  | 14.3     | 19.6        | 13.6           | 13.9           |
| Symptoms, signs, and ill-defined conditions                                   | 14.8     | 19.6        | 14.5           | 13.7           |
| Injury and poisoning  | 13.5     | 15.1        | 14.4           | 12.0           |
| Supplementary classification  | 14.1     | 16.3        | 14.5           | 13.3           |

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>7</sup>

lems. The disparity was greater between the duration of visits by new patients and those by old patients, regardless of the latter's problem status. Thus, it may be assumed that the availability of basic data in the returning patient's medical file reduced the average time spent with the patient.

Principal diagnosis categories are shown in table 17 with visits distributed by proportions of duration intervals and the mode of disposition. Visits in which there was no face-to-face encounter between patient and physician, that is, the patient was seen by a member of the physician's staff, accounted for only 3 percent of the visits in GFP's offices. The only disease categories associated with higher than average proportions of such visits were endocrine, nutritional and metabolic diseases, and immunity disorders (5 percent); and injury and poisoning (6 percent).

Relatively long visits (16 minutes or more) accounted for 31 percent of visits for neoplasms and 28 percent of those for mental disorders.

GFP's arranged for continuity of care by scheduling return appointments or instructing patients to return if needed in the majority of visits regardless of the patient's diagnosis. Followup care was particularly evident for patients with endocrine, nutritional and metabolic diseases, and immunity disorders; and for patients with diseases of the circulatory system where 80 percent of each group were instructed to return at a specified time. The physician's initiative in scheduling appointments was probably the reason for the high rate of return visits made by patients with these problems.

In general, only 3 percent of the visits to GFP's culminated in referral to another physician, but visits for certain categories of disease exceeded the average. About 13 percent of the patients with neoplasms, 6 percent with diseases of the nervous system and sense organs, 4 percent with diseases of the digestive system, 6 percent with diseases of the genitourinary system, and 4 percent with musculoskeletal conditions were referred for care. Except for patients with diseases of the digestive system, of whom 6 percent were admitted to a hospital, such a disposition of a case was comparatively rare among GFP's.

### Conclusion

A major, but not unexpected, finding in this study is that the pattern of general and family practice evolves from the patient load of physicians in such practice, but that the patient profile varies among physicians. That is, although the GFP generally treats a heterogeneous group of patients, to some degree the case-mix depends on the age or sex of the physician, or the type and location of practice.

Two diverse patterns emerged from this analysis. One pattern characterized visits by relatively young patients, and the other visits by relatively old patients. Where the physician's case load was dominated by one member of the dichotomy or the other the physician's practice typically included the characteristics briefly listed below.

| "Old" patient  | "Young" patient   |
|--|---|
| Returning patients   | New patients  |
| Chronic problems   | Acute problems and non-<br>illness care   |
| Reasons in the symptom and disease modules   | Reasons in the diagnostic,<br>screening, and preventive<br>module   |
| General history and examina-<br>tion, blood pressure checks  | Limited history and examina-<br>tion, clinical laboratory tests,<br>and Pap tests   |
| Circulatory diseases; respira-<br>tory diseases; musculoskel-<br>etal diseases; endocrine,<br>nutritional and metabolic<br>diseases, and immunity dis-<br>orders | Diseases of the nervous sys-<br>tem and sense organs, dis-<br>eases of the genitourinary<br>system, and supplementary<br>classification |
| Diet counseling  | Medical counseling  |
| More than average drug ther-<br>apy  | Less than average drug ther-<br>apy   |
| Longer than average visits<br>Scheduled appointments   | Shorter than average visits<br>Patient instructed to return if<br>needed  |

These patterns were typical of certain practices that are shown below.

"Old" pattern

"Young" pattern

Solo practice Northeast Region

.

Nonsolo practice North Central and South Regions

| "Old" pattern—Con.                                   | "Young" pattern—Con.  |  |  |  |  |
|--|---|--|--|--|--|
| Metropolitan areas<br>Established (older) physicians | Nonmetropolitan areas<br>Young physicians<br>Female physicians, except for<br>the characteristics related to<br>drugs, duration, location |  |  |  |  |

Another pair of patterns were distinguishable by sex of the patient. They are briefly described below.

| Female patient  | Male patient   |
|---|--|
| Nonillness care   | Acute problems postsurgery,<br>postinjury  |
| Reasons in the diagnostic,<br>screening, and preventive<br>module   | Reasons in the injuries and<br>adverse effects module  |
| Clinical laboratory tests, Pap tests, blood pressure checks   | X-rays, electrocardiograms,<br>vision tests  |
| Diseases of the genitourinary<br>system; endocrine, nutri-<br>tional and metabolic dis-<br>eases, and immunity disor-<br>ders       | Respiratory diseases   |
| Family planning services,<br>therapeutic listening, diet<br>counseling, family and so-<br>cial counseling, 3 or more<br>medications | Physiotherapy, office surgery,<br>visits with no medication<br>prescribed  |
| Central nervous system drugs,<br>anti-infectives, vitamins, hor-<br>mones   | Anti-infectives, central nerv-<br>ous system drugs, antihis-<br>tamines, cardiovascular drugs,<br>skin and mucous membrane<br>preparations, spasmolytic<br>drugs |
| Scheduled appointments  | No followup  |

One of the reasons the profile of the female physician did not completely fit the pattern described for "young" patients was because of the relatively large proportion of visits by women. The practice profile of the female physician is more aptly described as the "young and female" pattern.

### References

<sup>1</sup>National Center for Health Statistics, B. K. Cypress: National Ambulatory Medical Care Survey of visits to general and family practitioners, January-December 1975. *Advance Data from Vital and Health Statistics*, No. 15. DHEW Pub. No. (PHS) 78-1250. Public Health Service. Hyattsville, Md. Dec. 14, 1977.

<sup>2</sup>National 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.

<sup>3</sup>National 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.

<sup>4</sup>American Medical Association, Lorna E. Wunderman: *Physician Distribution and Medical Licensure in the U.S., 1979.* Center for Health Services Research and Development. American Medical Association. Chicago, Ill., 1980.

<sup>5</sup>American 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, Ill., 1976.

<sup>6</sup>National 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.

<sup>7</sup>National 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.

<sup>8</sup>National 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.

<sup>9</sup>American Society of Hospital Pharmacists, Inc.: The American Hospital Formulary Service. Washington. Jan. 1980.

<sup>10</sup>National Center for Health Statistics, B. K. Cypress: Drug Utilization in general and family practice by characteristics of physicians and office visits, National Ambulatory Medical Care Survey, 1980. *Advance Data from Vital and Health Statistics*, No. 87. DHHS Pub. No. (PHS) 81–1250. Public Health Service. Hyattsville, Md. Jan. 1983.

<sup>11</sup>National Center for Health Statistics, H. Koch: Office visits to doctors of osteopathy, National Ambulatory Medical Care Survey, United States, 1975. *Advance Data from Vital and Health Statistics*, No. 35. DHEW Pub. No. (PHS) 78–1250. Public Health Service. Hyattsville, Md. Mar. 22, 1978.

<sup>12</sup>National 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.

<sup>13</sup>Wunderman, L. E.: Female physicians in the 1970's, Their changing role in medicine, in G. L. Glandon and R. J. Shapiro (eds), *Profile of Medical Practice 1980*, Center for Health Services Research and Development. American Medical Association. Chicago, Ill., 1980.

<sup>14</sup>National Center for Health Services Research, L. F. Rossiter: Who initiates visits to physicians? *National Health Care Expenditures Study.* Data Preview 3. DHHS Pub. No. (PHS) 80–3278. Public Health Service. Hyattsville, Md., Sept. 1980.

<sup>15</sup>National Center for Health Statistics, B. K. Cypress: Medication therapy in office visits for selected diagnoses, National Ambulatory Medical Care Survey, 1980. *Vital and Health Statistics*. Series 13, No. 71. DHHS Pub. No. (PHS) 82–1732. Public Health Service. Washington. U.S. Government Printing Office, Jan. 1983.

<sup>16</sup>National 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.

<sup>17</sup>National Center for Health Statistics, P. J. McCarthy: Pseudoreplication, Further evaluation and application of the balanced halfsample 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.

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|  | 75   | pe of practi   | ce   | Geographic region  |  |  | Area   |  |  |
|--|--|--|--|--|--|--|--|--|--|
| Selected visit characteristic  | All<br>types of<br>practice                              | Solo   | Other <sup>1</sup>                                       | Northeast  | North<br>Central   | South  | West   | Metro-<br>politan  | Non-<br>metro-<br>politan                                |
|  |  |  | <u></u>  | Numb   | er in thousa   | nds  |  |  |  |
| All visits   | 381,710  | 242,488  | 139,222  | 65,851   | 118,772  | 130,847  | 66,240   | 230,141  | 151,569  |
|  |  |  |  | Perce  | ent distributi   | on   |  |  |  |
| Total  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  |
| Sex of patient   |  |  |  |  |  |  |  |  |  |
| Female   | 60.1<br>39.9   | 59.6<br>40.4   | 61.0<br>39.0   | 59.1<br>40.9   | 59.6<br>40.4   | 61.2<br>38.8   | 59.8<br>40.2   | 60.2<br>39.8   | 60.0<br>40.0   |
| Age of patient   |  |  |  |  |  |  |  |  |  |
| Under 3 years  | 4.8<br>2.4<br>3.0<br>3.6<br>14.7<br>27.1<br>25.0         | 4.0<br>2.1<br>2.7<br>3.5<br>13.8<br>26.2<br>26.8         | 6.2<br>3.0<br>3.5<br>3.8<br>16.4<br>28.5<br>21.8         | 3.1<br>2.1<br>3.6<br>14.3<br>25.1<br>28.1                | 6.5<br>3.1<br>3.8<br>3.7<br>15.5<br>26.0<br>23.1         | 4.2<br>2.4<br>2.6<br>3.4<br>14.4<br>27.7<br>25.5         | 4.8<br>1.7<br>2.8<br>3.9<br>14.6<br>29.8<br>24.4         | 3.7<br>2.1<br>2.9<br>3.5<br>14.1<br>28.9<br>26.5         | 6.5<br>3.0<br>3.2<br>15.7<br>24.2<br>22.8                |
| 65 years and over  | 19.4   | 20.8   | 16.9   | 21.1   | 18.4   | 20.0   | 18.1   | 18.4   | 20 <b>.9</b>   |
| Prior visit status   |  |  |  |  |  |  |  |  |  |
| New patient<br>Old patient, new problem<br>Old patient, old problem  | 11.3<br>32.4<br>56.3                                     | 10.3<br>31.0<br>58.8                                     | 13.0<br>35.0<br>52.0                                     | 9.2<br>29.6<br>61.2                                      | 9.4<br>34.0<br>56.6                                      | 13.3<br>33.4<br>53.3                                     | 12.8<br>30.4<br>56.9                                     | 11.6<br>32.5<br>55.9                                     | 10.9<br>32.3<br>56.8                                     |
| Referral status  |  |  |  |  |  |  |  |  |  |
| Referred by another physician Not referred by another physician  | 1.2<br>98.8  | 1.1<br>98.9  | 1.4<br>98.6  | 1.3<br>98.7  | 1.0<br>99.0  | 1.3<br>98.8  | 1.6<br>98.4  | 1.5<br>98.5  | 0.9<br>99.1  |
| Major reason for visit   |  |  |  |  |  |  |  |  |  |
| Acute problem<br>Chronic problem, routine<br>Chronic problem, flare-up<br>Postsurgery or postinjury<br>Nonillness care   | 47.8<br>25.9<br>8.5<br>3.7<br>14.2                       | 46.3<br>29.6<br>8.2<br>3.3<br>12.7                       | 50.4<br>19.4<br>9.1<br>4.3<br>16.8                       | 43.6<br>34.4<br>6.3<br>2.6<br>13.2                       | 45.9<br>22.7<br>9.0<br>4.1<br>18.4                       | 51.8<br>24.7<br>8.7<br>3.7<br>11.2                       | 47.5<br>25.4<br>9.4<br>3.9<br>13.8                       | 48.1<br>27.8<br>8.6<br>3.2<br>12.3                       | 47.3<br>23.0<br>8.3<br>4.4<br>17.0                       |
| Principal reason for visit module and RVC code <sup>2</sup>  |  |  |  |  |  |  |  |  |  |
| Symptom module S001–S999<br>Disease module D001–D999<br>Diagnostic, screening, and preventive  | 58.0<br>8.4  | 58.8<br>9.1  | 56.4<br>7.2  | 56.7<br>9.9  | 55.4<br>7.1  | 60.7<br>7.9  | 58.2<br>10.4   | 59.9<br>9.1  | 55.1<br>7.4  |
| moduleX100–X599<br>Treatment moduleT100–T899<br>Injuries and adverse effects   | 16.7<br>7.5  | 15.4<br>7.2  | 18.9<br>7.8  | 17.2<br>6.5  | 19.9<br>7.5  | 13.6<br>8.4  | 16.4<br>6.5  | 14.4<br>7.6  | 20.0<br>7.2  |
| moduleJ001–J999<br>Test results moduleR100–R700<br>Administrative moduleA100–A140<br>Other <sup>3</sup>  | 4.8<br>0.6<br>2.7<br>1.3                                 | 4.5<br>0.5<br>2.8<br>1.7                                 | 5.3<br>0.8<br>2.6<br>1.0                                 | 4.4<br>*0.3<br>2.8<br>2.2                                | 4.3<br>0.8<br>3.4<br>1.6                                 | 5.3<br>*0.4<br>2.5<br>1.2                                | 5.1<br>1.0<br>1.8<br>*0.6                                | 4.7<br>0.6<br>2.4<br>1.3                                 | 5.0<br>0.7<br>3.2<br>1.4                                 |
| Diagnostic service <sup>4</sup>  |  |  |  |  |  |  |  |  |  |
| None<br>Limited history and/or examination<br>General history and/or examination<br>Pap test<br>Clinical laboratory test<br>X-ray<br>Blood pressure check<br>Electrocardiogram | 6.4<br>65.0<br>14.6<br>3.2<br>21.6<br>6.7<br>44.7<br>2.0 | 7.1<br>62.4<br>16.4<br>2.8<br>19.5<br>5.3<br>46.5<br>1.6 | 5.2<br>69.6<br>11.5<br>3.9<br>25.3<br>9.0<br>41.5<br>2.8 | 6.0<br>60.8<br>20.4<br>2.2<br>16.1<br>5.0<br>54.8<br>2.4 | 7.4<br>66.3<br>11.6<br>3.7<br>23.5<br>7.0<br>42.0<br>1.9 | 5.4<br>65.4<br>16.7<br>2.7<br>22.9<br>6.6<br>46.0<br>1.8 | 7.1<br>66.2<br>10.3<br>4.3<br>21.3<br>8.1<br>37.0<br>2.5 | 6.7<br>63.9<br>14.9<br>3.1<br>20.4<br>6.9<br>47.0<br>2.4 | 6.1<br>66.6<br>14.2<br>3.5<br>23.4<br>6.4<br>41.2<br>1.5 |
| Vision test<br>Endoscopy<br>Mental status examination<br>Other   | 1.3<br>0.3<br>0.6<br>4.4                                 | 1.2<br>0.3<br>0.8<br>4.3                                 | 1.5<br>0.5<br>0.4<br>4.7                                 | 1.1<br>*0.1<br>1.0<br>4.4                                | 1.5<br>*0.4<br>0.6<br>2.9                                | 1.1<br>*0.3<br>*0.4<br>6.3                               | 1.6<br>*0.6<br>*0.7<br>3.6                               | 1.3<br>0.4<br>0.6<br>4.8                                 | 1.3<br>*0.3<br>0.6<br>3.9                                |

See footnotes at end of table.

Type of practice Geographic region Area Selected visit characteristic A// iVon-North Metrotypes of Soio Other<sup>1</sup> Northeast South West metro-Central politan politan practice Principal diagnosis and ICD-9-CM code5 Percent distribution Infectious and parasitic diseases . . . . . . . . . . . . . . . 001-139 3.3 3.1 3.7 2.8 3.4 3.5 3.0 3.1 3.5 1.2 1.0 1.6 1.0 1.2 1.1 1.7 1.1 1.4 Endocrine, nutritional and metabolic diseases, and immunity disorders ..... 240-279 6.2 8.2 7.3 4.5 4.8 6.8 5.8 7.4 4.5 Mental disorders ..... 290-319 2.6 2.5 2.7 3.0 2.0 3.0 2.5 2.6 2.6 Diseases of the nervous system and sense organs ..... 320-389 5.1 4.5 6.0 4.1 5.1 5.2 5.8 4.9 5.4 Diseases of the circulatory 13.1 10.9 14.4 19.0 12.7 11.7 10.7 13.3 12.8 Diseases of the respiratory 17.3 18.2 15.7 17.9 17.5 17.4 16.2 18.1 16.1 Diseases of the digestive system ...... 520-579 5.6 5.4 5.8 5.5 5.2 6.2 5.1 5.6 5.5 Diseases of the genitourinary system ..... 580-629 5.3 4.8 6.1 3.1 4.8 6.2 6.2 5.1 5.4 Diseases of the skin and subcutaneous tissue ..... 680-709 4.0 3.7 4.5 3.3 3.8 4.1 4.4 3.8 4.2 Diseases of the musculoskeletal system and connective 7.6 7.9 7.0 7.0 6.9 8.0 8.4 7.9 7.0 Symptoms, signs, and ill-defined conditions ..... 780-799 3.8 3.9 3.6 2.9 3.4 4.5 3.7 3.9 3.5 Injury and poisoning ..... 800-999 9.8 9.4 10.5 9.1 9.6 10.1 10.5 9.7 10.0 Supplementary classifi-13.0 11.5 15.5 11.0 17.1 9.9 13.7 10.8 16.3 1.0 1.1 1.2 0.9 :.4 1.1 1.0 1.1 1.1 Unknown diagnoses ..... 1.2 1.4 0.9 1.4 1.1 1.3 1.1 1.4 1.2 Nonmedication therapy<sup>4</sup> None ..... 57.7 56.8 55.4 52.2 60.9 58.4 51.1 54.0 61.1 5.5 Physiotherapy ..... 5.6 5.4 6.8 4.9 5.0 6.6 6.9 3.4 Office surgery ..... 5.5 5.2 6.1 4.4 5.9 5.5 6.0 4.9 6.5 Family planning..... 1.3 1.1 1.7 1.1 1.6 1.2 1.4 1.2 1.5 Psychotherapy or therapeutic listening..... 2.5 2.6 2.3 3.0 2.1 2.6 2.7 3.2 1.5 Diet counseling ..... 10.3 11.2 8.6 14.6 8.6 10.1 12.0 7.7 9.4 Family or social counseling ..... 1.9 1.9 2.0 2.7 1.7 1.8 1.5 1.8 2.2 Medical counseling..... 22.5 21.3 24.5 25.2 18.9 21.7 27.7 23.2 21.3 1.4 1.1 1.8 1.2 1.1 1.5 1.9 1.2 1.6 Number of medications None ..... 26.4 23.8 30.8 20.8 29.1 22.3 34.9 25.5 27.7 1..... 34.7 35.5 33.4 38.2 35.5 32.3 34.7 35.2 34.1 2.... 22.5 23.0 21.7 22.2 21.7 25.4 18.7 22.6 22.5 3..... 9.5 10.1 8.4 10.5 7.9 12.2 6.0 9.9 8.8 4 or more..... 6.9 7.6 5.7 8.4 5.8 7.8 5.8 6.9 7.0 Duration of visit 0 minutes<sup>6</sup>..... 3.1 3.3 2.9 2.6 4.9 2.1 2.7 2.7 3.8 1-5 minutes ..... 13.3 12.8 14.2 12.6 15.8 13.7 8.9 13.4 13.2 6-10 minutes ..... 35.7 35.1 36.7 38.3 37.0 34.2 33.4 35.2 36.3 28.8 28.6 29.0 29.6 26.4 29.1 31.6 28.7 28.9 16-30 minutes ..... 17.3 18.1 15.8 15.1 14.5 19.1 20.9 17.9 16.3 31 minutes or longer ..... 1.9 2.1 1.4 1.8 1.5 1.9 2.6 2.1 1.5

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

See footnotes at end of table.

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

|                                   | Tyj                         | pe of practic | ;e                 |           | Geographic       | Area  |      |                   |                           |
|-----------------------------------|-----------------------------|---------------|--------------------|-----------|------------------|-------|------|-------------------|---------------------------|
| Selected visit characteristic     | All<br>types of<br>practice | Solo          | Other <sup>1</sup> | Northeast | North<br>Central | South | West | Metro-<br>politan | Non-<br>metro-<br>politan |
| Disposition of visit <sup>7</sup> |                             |               |                    | Perce     | ent distributi   | on    |      |                   |                           |
| No followup planned               | 14.8                        | 14.3          | 15.6               | 12.5      | 15.7             | 15.7  | 13.6 | 13.7              | 16.3                      |
| Return at specified time          | 51.3                        | 52.9          | 48.4               | 56.7      | 47.4             | 51.3  | 52.8 | 52.4              | 49.5                      |
| Return if needed                  | 29.7                        | 28.6          | 31.6               | 27.4      | 30.6             | 30.6  | 28.4 | 28.8              | 31.0                      |
| Telephone followup planned        | 3.1                         | 3.2           | 3.0                | 3.2       | 4.5              | 1.8   | 3.1  | 3.6               | 2.3                       |
| Referred to other physician       | 2.8                         | 2.5           | 3.3                | 3.0       | 2.7              | 2.6   | 3.2  | 3.1               | 2.3                       |
| Returned to referring physician   | 0.2                         | 0.3           | *0.2               | *0.2      | *0.3             | *0.2  | *0.5 | 0.3               | *0.2                      |
| Admit to hospital.                | 1.2                         | 1.0           | 1.5                | *0.7      | 1.2              | 1.6   | 1.0  | 1.1               | 1,4                       |
| Other                             | 0.2                         | *0.2          | *0.2               | *0.1      | *0.2             | *0.1  | *0.3 | *0.2              | *0.1                      |

<sup>1</sup>Includes partnership, group, and other types of practice.

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

<sup>4</sup>Based on *A heason for Visit Classification for Ambulatory Care* (NC).<sup>4</sup> <sup>3</sup>Includes blanks; problems, complaints not elsewhere classified; entires of "none"; and illegible entries. <sup>4</sup>Percents will not total 100.0 because more than one service may have been rendered during a visit. <sup>5</sup>Based on *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM).<sup>7</sup> <sup>6</sup>Represents visits in which there was no face-to-face encounter between patient and physician.

<sup>7</sup>Percents will not total 100.0 because more than one disposition was possible.

#### Table 2. Number of drugs mentioned in office visits to general and family practitioners and percent distribution by therapeutic categories, according to type and location of physician's practice: United States, January 1980-December 1981

|  | T,                          | pe of practio | ce                 |           | Geographi        | Area    |        |                   |                           |
|--|-----------------------------|---------------|--------------------|-----------|------------------|---------|--------|-------------------|---------------------------|
| Therapeutic category <sup>1</sup>        | All<br>types of<br>practice | Solo          | Other <sup>2</sup> | Northeast | North<br>Central | South   | West   | Metro-<br>politan | Non-<br>metro-<br>politan |
|  |                             |               |                    | Numb      | er in thousa     | nds     |        |                   |                           |
| All categories                           | 532,065                     | 353,987       | 178,078            | 100,329   | 153,933          | 200,630 | 77,173 | 325,423           | 206,642                   |
|  |                             |               |                    | Perc      | ent distribut    | ion     |        |                   |                           |
| Total                                    | 100.0                       | 100.0         | 100.0              | 100.0     | 100.0            | 100.0   | 100.0  | 100.0             | 100.0                     |
| Antihistamine drugs                      | 6.8                         | 6.6           | 7.3                | 6.8       | 7.2              | 6.7     | 6.6    | 7.0               | 6.6                       |
| Anti-infective agents                    | 17.3                        | 16.8          | 18.1               | 13.0      | 18.1             | 18.7    | 17.3   | 16.6              | 18.3                      |
| Autonomic drugs                          | 4.4                         | 4.3           | 4.5                | 4.6       | 3.6              | 4.6     | 5.3    | 4.6               | 4.1                       |
| Blood formation and coagulation          | 1.3                         | 1.4           | 1.1                | 1.6       | 1.4              | 1.0     | 1.1    | 1.2               | 1.4                       |
| Cardiovascular drugs                     | 10.0                        | 10.3          | 9.5                | 12.1      | 10.3             | 8.7     | 10.2   | 9.8               | 10.4                      |
| Central nervous system drugs             | 17.9                        | 18.2          | 17.1               | 17.9      | 15.8             | 19.9    | 16.8   | 18.2              | 17.4                      |
| Electrolytic, caloric, and water balance | 9.2                         | 9.8           | 8.2                | 10.8      | 9.8              | 7.8     | 9.9    | 9.4               | 9.0                       |
| Expectorants and cough preparations      | 3.4                         | 3.3           | 3.5                | 3.5       | 3.4              | 3.4     | 3.3    | 3.7               | 2.9                       |
| Eye, ear, nose, and throat               |                             |               |                    |           |                  |         |        |                   |                           |
| preparations                             | 1.5                         | 1.5           | 1.6                | 1.6       | 1.8              | 1.4     | 1.3    | 1.5               | 1.5                       |
| Gastrointestinal drugs                   | 4.6                         | 4.4           | 5.0                | 3.9       | 4.2              | 5.4     | 4.1    | 4.5               | 4.7                       |
| Hormones and synthetic substitutes       | 8.2                         | 8.3           | 7.8                | 8.1       | 7.5              | 8.8     | 8.0    | 8.3               | 7.9                       |
| Serums, toxoids and vaccines             | 2.7                         | 2.3           | 3.6                | 3.2       | 3.7              | 1.6     | 2.8    | 2.6               | 2.8                       |
| Skin and mucous membrane                 |                             |               |                    |           |                  |         |        |                   |                           |
| preparations                             | 4.8                         | 4.4           | 5.5                | 3.9       | 5.3              | 4.5     | 5.5    | 4.7               | 4.8                       |
| Spasmolytic agents                       | 1.6                         | 1.7           | 1.6                | 1.9       | 1.4              | 1.6     | 1.8    | 1.6               | 1.7                       |
| Vitamins                                 | 3.7                         | 4.1           | 3.0                | 4.7       | 4.3              | 2.8     | 3.6    | 3.7               | 3.8                       |
| Other, unclassified, or undetermined     | 2.7                         | 2.7           | 2.8                | 2.4       | 2.2              | 3.1     | 2.4    | 2.6               | 2.7                       |

<sup>1</sup>Based on the classification system of the American Hospital Formulary Service.<sup>9</sup>

<sup>2</sup>Includes partnership, group, and other types of practice.

Table 3. Number of office visits to general and family practitioners and percent distribution by selected visit characteristics, according to age and sex of physician: United States, January 1980-December 1981

|   |              | Sex of physician  |                |                |                |                      |        |              |
|---|--------------|-------------------|----------------|----------------|----------------|----------------------|--------|--------------|
| Selected visit characteristic                               | All<br>ages  | Under 35<br>years | 35–44<br>years | 45–54<br>years | 55–64<br>years | 65 years<br>and over | Female | Male         |
|   |              |                   |                | Number in      | thousands      |                      |        |              |
| All visits <sup>1</sup>                                     | 321,454      | 27,963            | 56,563         | 92,790         | 99,064         | 45,074               | 7,477  | 313,977      |
|   |              |                   |                | Percent d      | istribution    |                      |        |              |
| Total   | 100.0        | 100.0             | 100.0          | 100.0          | 100.0          | 100.0                | 100.0  | 100.0        |
| Sex of patient  |              |                   |                |                |                |                      |        |              |
| Female  | 59.7<br>40.3 | 60.5<br>39.5      | 60.7<br>39.3   | 60.4<br>39.6   | 58.6<br>41 4   | 59.0<br>41 0         | 71.5   | 59.4<br>40.6 |
|   | 10.0         | 00.0              | 00.0           | 00.0           |                | 41.0                 | 20.5   | 40.0         |
| Age of patient  | - 1          |                   | 0.7            |                |                |                      |        |              |
| Under 3 years   | 5.1          | 9.1               | 8./            | 4.4            | 3.7            | 2.2                  | 9.3    | 5.0          |
| 6–10 years  | 3.0          | 47                | 3.5            | 2.8            | 2.0            | 1.0                  | 4.0    | 2.4          |
| 11–14 vears   | 3.7          | 4.7               | 2.5<br>2.1     | 3.4            | 2.5            | 2.0                  | 4.7    | 3.0          |
| 15–24 years   | 14.9         | 187               | 16.6           | 15.0           | 14.0           | 10.5                 | 20.9   | 3.7          |
| 25-44 years   | 26.5         | 32.1              | 20.0           | 26.2           | 25.0           | 10.5                 | 20.0   | 14.0         |
| 45-64 years   | 20.5         | 19.2              | 10.0           | 20.3           | 20.0           | 22.2                 | 20.0   | 20.5         |
| 65 years and over.  | 19.7         | 8.8               | 14.9           | 24.9<br>19.5   | 27.2           | 30.4<br>29.9         | 11.4   | 24.9<br>19.8 |
| Prior visit status  |              |                   |                |                |                |                      |        |              |
| Now patient   | 10.7         | 22.2              | 11 7           | 0.4            | 0.0            |                      |        |              |
| Old nations now problem                                     | 10.7         | 23.2              | 11.7           | 9.4            | 9.3            | 7.7                  | 23.3   | 10.4         |
| Old patient, new problem                                    | 33.0         | 31.7              | 33.8           | 35.5           | 35.0           | 27.8                 | 30.7   | 33.7         |
|   | 55.0         | 45.1              | 54.5           | 55.1           | 55.8           | 64.5                 | 46.0   | 55.9         |
| Referral status   |              |                   |                |                |                |                      |        |              |
| Referred by another physician                               | 1.2          | 2.2               | *0.8           | 1.4            | 1.2            | 1.1                  | *1.5   | 1.2          |
| Not referred by another physician                           | 98.8         | 97.8              | 99.2           | 98.6           | 98.8           | 98.9                 | 98.5   | 98.8         |
| Major reason for visit                                      |              |                   |                |                |                |                      |        |              |
| Acute problem   | 48.1         | 50.6              | 49.1           | 49.0           | 48.2           | 42.9                 | 47.4   | 48.1         |
| Chronic problem, routine                                    | 24.9         | 16.1              | 20.2           | 24.3           | 24.0           | 39.1                 | 17.6   | 25.0         |
| Chronic problem, flare up                                   | 8.5          | 10.3              | 8.5            | 8.5            | 9.0            | 6.4                  | 10.0   | 85           |
| Postsurgery or postiniury                                   | 3.7          | 3.1               | 4.0            | 34             | 4 1            | 3.4                  | *3 1   | 37           |
| Nonillness care   | 14.9         | 19.9              | 18.2           | 14.8           | 14.7           | 8.4                  | 21.9   | 14.8         |
| Principal reason for visit module and RVC code <sup>2</sup> |              |                   |                |                |                |                      |        |              |
| Symptom module S001-S999                                    | 57.2         | 57.0              | EE O           | EC C           | 57.0           | <b>60 0</b>          | 50.0   |              |
| Disease module  | 57.5         | 57.2              | 0.CC<br>6.6    | 90.0<br>9 F    | 57.Z           | 60.9                 | 58.6   | 57.3         |
| Diagnostic, screening, and preventive                       | 0.5          | 7.5               | 0.0            | 0.5            | 0.0            | 11.0                 | 0.0    | 8.0          |
| module  | 17.6         | 20.6              | 20.5           | 173            | 17.0           | 136                  | 22.0   | 175          |
| Treatment module  | 7.1          | 6.3               | 7.0            | 8.6            | 6.8            | 54                   | £2.0   | 7.1          |
| Injuries and adverse effects module                         | 49           | 5.3               | 5.2            | 47             | 53             | 4.0                  | *2.0   | 5.0          |
| Test results module   | 0.6          | *1.0              | *0.8           | *0.5           | *0.4           | *0 5                 | *0.0   | 5.0          |
| Administrative module                                       | 2.8          | 1.0               | 3.6            | 2.5            | 3.0            | 27                   | *2.0   | 2.0          |
| Other <sup>3</sup>  | 1.2          | *0.2              | *0.5           | 1.3            | 1.5            | 1.9                  | 0.8    | 2.0          |
| Diagnostic service <sup>4</sup>                             |              |                   |                |                |                |                      |        |              |
| Nona  | 6 1          |                   | E 0            | 07             |                |                      |        |              |
| limited biotony and/or everyingtion                         | 0.1          | 4.5               | 5.8            | 6./            | 5.6            | 7.1                  | 7.6    | 6.0          |
| Concerning and/or examination                               | 00.7         | /0./              | 09.5           | 67.9           | 62.9           | 66.3                 | 66.8   | 66.7         |
| Deneral instory and/or examination                          | 14.5         | 15.2              | 12.8           | 11.3           | 18.9           | 13.4                 | 18.6   | 14.4         |
| Clinical laboratory toot                                    | 3.5          | 4./               | 3.3            | 4.0            | 3./            | 1.5                  | 10.9   | 3.3          |
|   | 21.9         | 28.2              | 21.9           | 22.0           | 23.1           | 15.4                 | 27.8   | 21.8         |
|   | 6.5          | /.8               | /.2            | 6.2            | 7.8            | 3.1                  | 8.3    | 6.5          |
| Blood pressure check  | 43.7         | 40.9              | 34.7           | 43.2           | 49.9           | 44.2                 | 43.7   | 43.7         |
| Electrocardiogram.  | 2.2          | -2.1              | 1.6            | 2.2            | 2.6            | 2.1                  | ₹2.0   | 2.2          |
| VISION TEST.  | 1.5          | <u>1.9</u>        | 1.4            | 1.0            | 2.0            | *1.2                 | *1.9   | 1.5          |
| Endoscopy   | 0.4          | <u>~</u> 0.3      | <u>*</u> 0.2   | *0.4           | *0.5           | *0.4                 | *0.7   | 0.4          |
| Mental status examination                                   | 0.6          | *0.8              | *0.8           | *0.5           | *0.5           | *0.5                 | *0.1   | 0.6          |
| Other   | 3.8          | 3.3               | 2.5            | 5.1            | 3.9            | 2.8                  | *2.0   | 3.8          |

See footnotes at end of table.

| Table 3. | Number of office visits to general and family practitioners and percent distribution by selected visit characteristics, a | according to age |
|----------|---|------------------|
| and sex  | of physician: United States, January 1980-December 1981—Con.  | 0.01             |

|  |             | Sex of physician  |                |                |                |                      |        |      |
|--|-------------|-------------------|----------------|----------------|----------------|----------------------|--------|------|
| Selected visit characteristic                      | All<br>ages | Under 35<br>years | 35–44<br>years | 45–54<br>years | 55–64<br>years | 65 years<br>and over | Female | Male |
| Principal diagnosis and ICD-9-CM code <sup>5</sup> |             |                   |                | Percent d      | istribution    |                      |        |      |
| Infectious and parasitic diseases 001-139          | 33          | 37                | 24             | 2.0            | 2.4            | 1.0                  | *4.0   |      |
| Neoplasms  | 1.3         | *0.9              | 3.4<br>1 2     | 3.9            | 3.4            | 1.9                  | *0.1   | 3.3  |
| Endocrine, nutritional and metabolic diseases      | 1.5         | 0.5               | 1.2            | 1.3            | 1.5            | 1.2                  | 0.1    | 1.3  |
| and immunity disorders                             | 54          | 35                | 11             | 5.2            | <b>5</b> 0     | 77                   | * 4 .4 | 5 4  |
| Mental disorders                                   | 27          | 2.5               | 22             | 0.2<br>2 7     | 0.0<br>20      | 7.7                  | *2.0   | 5.4  |
| Diseases of the nervous system and                 | 2.7         | 2.5               | 2.5            | 2.7            | 2.0            | 2.8                  | 2.0    | 2.7  |
| sense organs                                       | 53          | Q 1               | 6 7            | <b>F</b> 4     | 47             | 2.7                  | 0.5    | 5.0  |
| Diseases of the circulatory system 390–459         | 134         | 0.1<br>7 7        | 10.2           | 121            | 4.7            | 3.7                  | 0.5    | 5.3  |
| Diseases of the respiratory system                 | 17.4        | 14.9              | 18.0           | 17.1           | 14.2           | 19.9                 | 8.1    | 13.5 |
| Diseases of the digestive system                   | 55          | 55                | 4 7            | 5.8            | 5.6            | 17.5                 | 14.0   | 17.5 |
| Diseases of the genitourinary system               | 5.3         | 5.5               | 65             | 5.0            | 5.0            | 5.0<br>4.7           | 0.5    | 5.5  |
| Diseases of the skin and subcutaneous              | 0.0         | 0.0               | 0.0            | 5.2            | 5.0            | 4.7                  | 3.1    | 5.2  |
| tissue   | 4 2         | 5.6               | 45             | 12             | 30             | 27                   | *4 5   | 4.0  |
| Diseases of the musculoskeletal system             | 1.2         | 0.0               | 4.5            | 4.2            | 5.5            | 3.7                  | 4.5    | 4.2  |
| and connective tissue                              | 7.0         | 53                | 6.8            | 71             | 64             | 0 5                  | * = 0  | 7.0  |
| Symptoms, signs, and ill-defined                   | 1.0         | 0.0               | 0.0            | 7.4            | 0.4            | 0.5                  | 5.5    | 7.0  |
| conditions   | 3 9         | 43                | 4.0            | 13             | 27             | 20                   | *5.0   | 2.0  |
| Injury and poisoning                               | 94          | 10.8              | 9.7            | 8.9            | 9.5            | 3.0                  | 0.0    | 3.6  |
| Supplementary classification                       | 13.8        | 18.9              | 16.6           | 134            | 125            | 9.0                  | 20.0   | 9.4  |
| All other diagnoses                                | 1 1         | *1 7              | 1 2            | 10             | 13.5           | 0.0<br>*0.0          | 20.1   | 13.7 |
| Unknown diagnoses                                  | 1.1         | *1.1              | *0.8           | 1.0            | 1.1            | *1 1                 | 1.4    | 1.1  |
| •  |             |                   | 0.0            | •••            |                | 1.1                  | -      | 1.1  |
| Nonmedication therapy <sup>4</sup>                 |             |                   |                |                |                |                      |        |      |
| None   | EO 1        | 50 5              | 66 A           | 54.0           |                |                      |        |      |
| Physiotherapy                                      | 58.1        | 50.5              | 66.4           | 54.2           | 59.4           | 57.5                 | 48.4   | 58.3 |
| Office surgery                                     | 4.1         | 5.3               | 4.0            | 3.5            | 4.6            | 3.4                  | *3.3   | 4.1  |
| Family planning                                    | 5.5         | 5.7<br>*1 0       | 5.3            | 5.1            | 6.0            | 5.2                  | *4.0   | 5.5  |
| Psychotherapy or therapeutic listoping             | 1.4         | 1.3               | 2.1            | 1.3            | 1.4            | *0.4                 | *4.2   | 1.3  |
| Diet courseling                                    | 2.2         | 4.1               | 1.3            | 2.5            | 2.2            | 1.9                  | *3.6   | 2.2  |
| Family or social coupooling                        | 9.8         | 8.9               | 7.2            | 9.7            | 10.2           | 13.0                 | 11.5   | 9.7  |
| Medical counseling                                 | 1.9         | 3.0               | 1.8            | 1.9            | 1.7            | 1.5                  | *3.5   | 1.8  |
| Other  | 23.3        | 31.2              | 15.9           | 28.2           | 20.5           | 24.0                 | 31.6   | 23.1 |
| ouior  | 1.5         | 1.1               | 1.5            | 1.3            | 1.6            | *0.7                 | *1.2   | 1.3  |
| Number of medications                              |             |                   |                |                |                |                      |        |      |
| None   | 26.6        | 24 5              | 22.0           | 24.0           | 04.6           | 22.0                 | 05.7   |      |
| 1  | 20.0        | 34.5              | 32.0           | 24.8           | 24.6           | 22.6                 | 25.7   | 26.6 |
| 2  | 22.1        | 30.9              | 34.9           | 34.6           | 35.1           | 35.8                 | 31.8   | 35.1 |
| 3  | 22.4        | 20.0              | 20.8           | 24.5           | 20.8           | 24.4                 | 27.0   | 22.2 |
| 4 or more  | 9.1         | 0.3               | 7.2            | 9.2            | 10.6           | 10.5                 | 7.7    | 9.2  |
|  | 0.9         | 3.0               | 5.0            | 7.0            | 8.9            | 6.8                  | 7.8    | 6.9  |
| Duration of visit                                  |             |                   |                |                |                |                      |        |      |
| 0 minutes <sup>6</sup>                             | 3.2         | *1 9              | 22             | 4.4            | 2.0            |                      | *1 0   |      |
| 1–5 minutes  | 13.2        | 8.9               | 197            | 15.0           | 12.0           | 2.2                  | 7.0    | 3.2  |
| 6–10 minutes                                       | 36.1        | 25.0              | 40.7           | 10.9           | 12.0           | 0.2                  | 7.0    | 13.4 |
| 11–15 minutes                                      | 28.5        | 31.6              | 23.4           | 37.0           | 33.2           | 33.4                 | 32.2   | 36.2 |
| 16–30 minutes                                      | 17.2        | 19.2              | 126            | 20.0           | 31.7           | 31.0                 | 29.0   | 28.5 |
| 31 minutes or longer                               | 1 9         | 27                | 12.0           | 14.0           | 10.5           | 24.1                 | 24.7   | 17.0 |
|  | 1.5         | 2.7               | 1.3            | 1.4            | 1.8            | 3.1                  | 6.0    | 1.8  |
| Disposition of visit <sup>7</sup>                  |             |                   |                |                |                |                      |        |      |
| No followup planned                                | 15.3        | 8.6               | 19.7           | 15.9           | 15.2           | 13.3                 | *4.8   | 15.6 |
| Return at specified time                           | 49.9        | 48.4              | 45.2           | 50.8           | 49.4           | 55.8                 | 46.1   | 50.0 |
| Return if needed                                   | 30.6        | 39.4              | 29.4           | 28.1           | 32.4           | 28.0                 | 43.5   | 30.3 |
| Telephone followup planned                         | 3.2         | 4.6               | 2.8            | 3.4            | 3.3            | 2.4                  | 6.7    | 3.1  |
| Referred to other physician                        | 2.8         | 4.0               | 2.8            | 2.7            | 2.6            | 3.0                  | *2.0   | 20   |
| Returned to referring physician                    | 0.3         | *0.2              | *0.3           | *0.1           | *0.2           | *0.5                 | *0.5   | 0.3  |
| Admit to hospital                                  | 1.3         | *0.6              | 1.1            | 1.8            | 1.2            | *1.1                 | *0.7   | 1.3  |
| Other  | *0.2        | *0.2              | *0.1           | *0.2           | *0.2           | *0.2                 | *0.1   | 0.2  |
|  |             |                   |                |                |                |                      |        |      |

See footnotes at end of table.

| Table 3. | Number of office visits to general a | nd family practitioners and perce | nt distribution by selecter | d visit characteristics, | according to age |
|----------|--------------------------------------|-----------------------------------|-----------------------------|--------------------------|------------------|
| and sex  | of physician: United States, January | 1980-December 1981—Con.           |                             |                          |                  |

|   |                              | Sex of physician            |                             |                              |                              |                              |                              |                              |  |  |  |
|---|------------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--|--|--|
| Selected visit characteristic               | All<br>ages                  | Under 35<br>years           | 35–44<br>years              | 45–54<br>years               | 55–64<br>years               | 65 years<br>and over         | Female                       | Male                         |  |  |  |
| Type of practice                            | Percent distribution         |                             |                             |                              |                              |                              |                              |                              |  |  |  |
| Solo<br>Other <sup>8</sup>                  | 61 <i>.</i> 5<br>38.5        | 25.5<br>74.5                | 31.4<br>68.7                | 65.5<br>34.5                 | 72.7<br>27.3                 | 88.5<br>11.5                 | 45.0<br>55.0                 | 61.9<br>38.2                 |  |  |  |
| Geographic region                           |                              |                             |                             |                              |                              |                              |                              |                              |  |  |  |
| Northeast<br>North Central<br>South<br>West | 15.7<br>30.3<br>35.1<br>18.9 | 8.7<br>30.4<br>26.2<br>34.9 | 7.2<br>43.8<br>31.8<br>17.2 | 17.5<br>26.1<br>46.2<br>10.2 | 14.4<br>30.6<br>31.8<br>23.2 | 29.8<br>21.8<br>29.0<br>19.4 | 15.3<br>25.3<br>34.1<br>25.3 | 15.7<br>30.5<br>35.1<br>18.7 |  |  |  |
| Area  |                              |                             |                             |                              |                              |                              |                              |                              |  |  |  |
| Metropolitan                                | 56.9<br>43.1                 | 69.6<br>30.4                | 42.2<br>57.8                | 58.4<br>41.7                 | 56.1<br>43.9                 | 66.5<br>33.5                 | 73.1<br>26.9                 | 56.6<br>43.5                 |  |  |  |

<sup>1</sup>Does not include doctors of osteopathy.

<sup>2</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC).<sup>6</sup>

<sup>3</sup>Includes blank; problems, complaints not elsewhere classified; entries of "none"; and illegible entries.

<sup>4</sup>Percents will not total 1000 because more than one service may have been rendered during a visit. <sup>5</sup>Based on *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD–9–CM).<sup>7</sup>

<sup>6</sup>Represents visits in which there was no face-to-face encounter between patient and physician. <sup>7</sup>Percents will not total 100.0 because more than one disposition was possible.

<sup>8</sup>Includes partnership, group, and other types of practice.

Table 4. Number of drugs mentioned in office visits to general and family practitioners and percent distribution by therapeutic categories, according to age and sex of the physician: United States, January 1980-December 1981

|  |  | Sex of physician  |   |  |  |   |   |   |
|--|--|---|---|--|--|---|---|---|
| Therapeutic category <sup>2</sup>  | All<br>ages  | Under 35<br>years   | 35–44<br>years  | 45–54<br>years   | 55—64<br>years   | 65 years<br>and over  | Female  | Male  |
|  |  |   |   | Number in  | thousands  |   |   |   |
| All drugs  | 444,961  | 30,670  | 68,216  | 131,739  | 148,263  | 66,072  | 10,577  | 434,384   |
|  |  |   |   | Percent di   | stribution   |   |   |   |
| Total  | 100.0  | 100.0   | 100.0   | 100.0  | 100.0  | 100.0   | 100.0   | 100.0   |
| Anti-infective agents  | 17.4<br>4.4<br>1.3<br>10.5<br>17.5<br>9.1<br>3.4<br>1.6<br>4.7<br>7.7<br>2.9 | 17.6<br>5.5<br>*0.9<br>7.7<br>16.7<br>6.7<br>2.9<br>2.1<br>4.6<br>5.5<br>4.8<br>7.5 | 9.3<br>21.0<br>4.4<br>0.9<br>8.4<br>13.8<br>8.0<br>3.5<br>1.6<br>4.1<br>8.7<br>3.3<br>6.0 | 17.9<br>4.2<br>1.3<br>10.2<br>18.5<br>8.0<br>3.7<br>1.8<br>5.3<br>7.5<br>3.0 | 6.1<br>16.2<br>5.0<br>1.6<br>10.9<br>18.2<br>9.9<br>3.1<br>1.3<br>4.7<br>8.2<br>2.5<br>4.2 | 15.3<br>3.2<br>1.2<br>13.5<br>18.4<br>11.5<br>3.8<br>1.6<br>4.4<br>6.9<br>2.4 | 1.5<br>15.9<br>*2.9<br>*1.8<br>6.0<br>16.1<br>8.8<br>4.6<br>*1.6<br>5.4<br>6.2<br>9.8 | 0.9<br>17.4<br>4.5<br>1.3<br>10.6<br>17.6<br>9.1<br>3.4<br>1.6<br>4.7<br>7.7<br>2.7 |
| Skin and mucous membrane preparations<br>Spasmolytic agents<br>Vitamins<br>Other, unspecified, or undetermined | 4.9<br>1.7<br>3.5<br>2.4   | 7.5<br>2.4<br>2.6<br>1.8  | 6.0<br>1.1<br>3.1<br>2.8  | 4.6<br>1.8<br>3.3<br>2.5   | 4.2<br>1.8<br>4.0<br>2.3   | 4.7<br>1.2<br>3.9<br>2.2  | 9.1<br>*0.4<br>*2.6<br>*1.3   | 4.8<br>1.7<br>3.6<br>2.4  |

<sup>1</sup>Does not include doctors of osteopathy. <sup>2</sup>Based on the classification system of the American Hospital Formulary Service.<sup>9</sup>

Table 5. Number of office visits to general and family practitioners and percent distribution and average annual rate of office visits by age of patient, according to sex, race, and ethnicity: United States January 1980-December 1981

|   | Sex   |  |   | Race   | Ethnicity  |  |   |
|---|---|--|---|--|--|--|---|
| Both<br>sexes   | Female  | Male   | White   | Black  | All<br>other   | Hispanic   | Non-<br>Hispanic  |
|   |   | Num  | ber of visits   | in thousan   | ds   |  |   |
| 381,710   | 2 <b>29,</b> 445  | 152,265  | 338,479   | 39,897   | 3,334  | 17,703   | 364,007   |
|   |   |  | Percent dis   | tribution  |  |  |   |
| 100.0   | 100. <b>0</b>   | 100.0  | 100.0   | 100.0  | 100.0  | 100.0  | 100.0   |
| 4.8<br>2.4<br>3.0<br>14.7<br>27.1<br>25.0<br>19.4     | 3.9<br>2.0<br>2.4<br>3.0<br>15.7<br>27.9<br>25.0<br>20.1  | 6.1<br>3.1<br>4.0<br>4.5<br>13.3<br>25.8<br>25.0<br>18.2<br>Visi   | 4.8<br>2.5<br>3.1<br>3.6<br>14.7<br>27.0<br>24.8<br>19.5<br>t rate per 10   | 4.5<br>1.9<br>2.3<br>3.0<br>15.4<br>26.6<br>26.9<br>19.5   | *5.7<br>*4.0<br>*2.8<br>*9.2<br>*11.0<br>40.8<br>19.7<br>*6.8  | 3.8<br>3.4<br>4.9<br>3.0<br>15.9<br>32.7<br>22.8<br>13.6 | 4.9<br>2.4<br>2.9<br>3.6<br>14.7<br>26.8<br>25.1<br>19.6  |
| 85.7  | 99.5  | 70.9   | 88.6  | 76.4   | 30.2   |  |   |
| 90.2<br>48.8<br>34.3<br>47.8<br>69.1<br>82.4<br>108.6 | 91.1<br>48.0<br>33.1<br>49.2<br>87.1<br>99.6<br>124.1   | 89.3<br>49.5<br>35.4<br>46.4<br>50.5<br>64.3<br>91.3   | 98.9<br>54.3<br>38.0<br>51.5<br>72.6<br>84.6<br>107.8   | 57.1<br>25.8<br>18.1<br>28.4<br>56.7<br>77.1<br>129.4  | *28.3<br>*19.6<br>*10.2<br>*40.6<br>*17.4<br>\$37.5<br>\$39.8<br>*26.7   |  |   |
|   | Both<br>sexes<br>381,710<br>100.0<br>4.8<br>2.4<br>3.0<br>3.6<br>14.7<br>27.1<br>25.0<br>19.4<br>85.7<br>90.2<br>48.8<br>34.3<br>47.8<br>69.1<br>82.4<br>108.6<br>150.7 | Both<br>sexes         Female           381,710         229,445           100.0         100.0           4.8         3.9           2.4         2.0           3.0         2.4           3.0         2.4           3.0         2.4           3.6         3.0           14.7         15.7           27.1         27.9           25.0         25.0           19.4         20.1           85.7         99.5           90.2         91.1           48.8         48.0           34.3         33.1           47.8         49.2           69.1         87.1           82.4         99.6           108.6         124.1           150.7         159.6 | Both<br>sexes         Female         Male           Both<br>sexes         Female         Male           Num         381,710         229,445         152,265           100.0         100.0         100.0           4.8         3.9         6.1           2.4         2.0         3.1           3.0         2.4         4.0           3.6         3.0         4.5           14.7         15.7         13.3           27.1         27.9         25.8           25.0         25.0         25.0           19.4         20.1         18.2           Visi         85.7         99.5         70.9           90.2         91.1         89.3         48.8           48.8         48.0         49.5           34.3         33.1         35.4           47.8         49.2         46.4           69.1         87.1         50.5           82.4         99.6         64.3           108.6         124.1         91.3           150.7         159.6         137.8 | Both<br>sexes         Female         Male         White           Both<br>sexes         Female         Male         White           Number of visits         381,710         229,445         152,265         338,479           Percent dis         100.0         100.0         100.0         100.0           4.8         3.9         6.1         4.8           2.4         2.0         3.1         2.5           3.0         2.4         4.0         3.1           3.6         3.0         4.5         3.6           14.7         15.7         13.3         14.7           25.0         25.0         25.0         24.8           19.4         20.1         18.2         19.5           Visit rate per 10         85.7         99.5         70.9         88.6           90.2         91.1         89.3         98.9         48.8         48.0         49.5         54.3           34.3         33.1         35.4         38.0         47.8         49.2         46.4         51.5           69.1         87.1         50.5         72.6         82.4         99.6         64.3         84.6           108.6         124.1 | Both<br>sexes         Female         Male         White         Black           Number of visits in thousan         381,710         229,445         152,265         338,479         39,897           Percent distribution         100.0         100.0         100.0         100.0         100.0           100.0         100.0         100.0         100.0         100.0           4.8         3.9         6.1         4.8         4.5           2.4         2.0         3.1         2.5         1.9           3.0         2.4         4.0         3.1         2.3           3.6         3.0         4.5         3.6         3.0           14.7         15.7         13.3         14.7         15.4           27.1         27.9         25.8         27.0         26.6           25.0         25.0         25.0         24.8         26.9           19.4         20.1         18.2         19.5         19.5           Visit rate per 100 population         85.7         99.5         70.9         88.6         76.4           90.2         91.1         89.3         98.9         57.1         48.8         48.0         49.5         54.3         25.8 | $ \begin{array}{c c c c c c c c c c c c c c c c c c c $  | Both<br>sexesFemaleMaleWhiteBlack $AllotherHispanicNumber of visits in thousands381,710229,445152,265338,47939,8973,33417,703Percent distribution100.0100.0100.0100.0100.0100.0100.04.83.96.14.84.5*5.73.82.42.03.12.51.9*4.03.43.02.44.03.12.3*2.84.93.63.04.53.63.0*9.23.014.715.713.314.715.4*11.015.927.127.925.827.026.640.832.725.025.025.024.826.919.722.819.420.118.219.519.5*6.813.6Visit rate per 100 population85.799.570.988.676.430.290.291.189.398.957.1*28.390.291.189.398.957.1*28.348.848.049.554.325.8*10.690.291.189.398.957.1*28.390.439.6$ |

Table 6. Number of office visits to general and family practitioners and percent distribution by referral status, prior visit status, and return visit rate, according to selected patient characteristics: United States, January 1980-December 1981

|                                 | Number of                 |       | Referra                             | al status                               |                | Return                         |                                |                            |
|---------------------------------|---------------------------|-------|-------------------------------------|---|----------------|--------------------------------|--------------------------------|----------------------------|
| Selected patient characteristic | visits<br>in<br>thousands | Total | Referred by<br>another<br>physician | Not referred<br>by another<br>physician | New<br>patient | Old patient,<br>new<br>problem | Old patient,<br>old<br>problem | visit<br>rate <sup>1</sup> |
| Sex                             | Percent distribution      |       |                                     |   |                |                                |                                |                            |
| Both sexes                      | 381,710                   | 100.0 | 1.2                                 | 98.8                                    | 11.3           | 32.4                           | 56.3                           | 7.9                        |
| Female                          | 229,445                   | 100.0 | 1.1                                 | 98.9                                    | 10.1           | 31.4                           | 58.5                           | 8.9                        |
| Male                            | 152,265                   | 100.0 | 1.4                                 | 98.6                                    | 13.1           | 34.0                           | 52.9                           | 6.6                        |
| Age                             |                           |       |                                     |   |                |                                |                                |                            |
| Under 3 vears                   | 18.377                    | 100.0 | *1.1                                | 98.9                                    | 13.9           | 39.4                           | 46.7                           | 6.2                        |
| 3–5 vears                       | 9,297                     | 100.0 | *2.1                                | 97.9                                    | 15.4           | 48.6                           | 36.0                           | 5.5                        |
| 6–10 years                      | 11,492                    | 100.0 | *1.0                                | 99.0                                    | 13.0           | 49.4                           | 37.6                           | 6.7                        |
| 11–14 years                     | 13,715                    | 100.0 | *1.6                                | 98.5                                    | 17.7           | 48.0                           | 34.3                           | 4.7                        |
| 15–24 years                     | 56,230                    | 100.0 | 1.7                                 | 98.3                                    | 17.1           | 41.0                           | 42.0                           | 4.9                        |
| 25–44 years                     | 103,275                   | 100.0 | 1.4                                 | 98.6                                    | 14.5           | 34.8                           | 50.8                           | 5.9                        |
| 45–64 years                     | 95,458                    | 100.0 | 1.1                                 | 98.9                                    | 7.6            | 27.2                           | 65.3                           | 12.2                       |
| 65 years and over               | 73,867                    | 100.0 | *0.6                                | 99.4                                    | 4.6            | 20.1                           | 75.2                           | 20.6                       |
| Race                            |                           |       |                                     |   |                |                                |                                |                            |
| White                           | 338.479                   | 100.0 | 1.2                                 | 98.8                                    | 10.9           | 32.5                           | 56.6                           | 8.2                        |
| Black                           | 39,897                    | 100.0 | *1.0                                | 99.0                                    | 13.2           | 31.3                           | 55.5                           | 6.6                        |
| All other                       | 3,334                     | 100.0 | *3.0                                | 97.0                                    | 28.2           | 34.1                           | 37.7                           | 2.5                        |
| Ethnicity                       |                           |       |                                     |   |                |                                |                                |                            |
| Hispanic                        | 17.703                    | 100.0 | *1.9                                | 98.1                                    | 17.7           | 30.3                           | 52.0                           | 4.6                        |
| Non-Hispanic                    | 364,007                   | 100.0 | 1.2                                 | 98.8                                    | 11.0           | 32.5                           | 56.5                           | 8.1                        |

<sup>1</sup>All old patients divided by new patients.

|   | Sex                                |                                    |                                    | Age                               |                                   |                                   |                                   |                                   |                                    |                                    |                                    | Prior visit status                |                                   |                                     |
|---|------------------------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| Visit status  | Both<br>sexes                      | Female                             | Male                               | Under 3<br>years                  | 3—5<br>years                      | 6–10<br>years                     | 11—14<br>years                    | 15–24<br>years                    | 25–44<br>years                     | 45–64<br>years                     | 65 years<br>and over               | New<br>patient                    | Old<br>patient,<br>new<br>problem | Old<br>patient,<br>old<br>problem   |
|   |                                    |                                    |                                    |                                   |                                   |                                   | Number i                          | in thousand                       | ls                                 |                                    |                                    |                                   |                                   |                                     |
| All visits  | 381,710                            | 229,445                            | 152,265                            | 18,377                            | 9,297                             | 11,492                            | 13,715                            | 56,230                            | 103,275                            | 95,458                             | 73,867                             | 43,099                            | 123,752                           | 214,859                             |
|   |                                    |                                    |                                    |                                   |                                   |                                   | Percent                           | distributior                      | ı                                  |                                    |                                    |                                   |                                   |                                     |
| 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                             | 100.0                               |
| Major reason for visit  |                                    |                                    |                                    |                                   |                                   |                                   |                                   |                                   |                                    |                                    |                                    |                                   |                                   |                                     |
| Acute problem<br>Chronic problem, routine<br>Chronic problem, flareup<br>Postsurgery or postinjury<br>Nonillness care | 47.8<br>25.9<br>8.5<br>3.7<br>14.2 | 45.5<br>26.6<br>8.5<br>2.9<br>16.5 | 51.2<br>24.8<br>8.5<br>4.8<br>10.7 | 57.5<br>2.6<br>2.5<br>1.4<br>36.1 | 71.4<br>5.8<br>5.5<br>1.9<br>15.4 | 68.8<br>12.5<br>5.1<br>4.6<br>8.9 | 64.8<br>9.3<br>3.4<br>5.4<br>17.1 | 56.6<br>9.0<br>3.7<br>5.0<br>25.7 | 52.3<br>19.4<br>8.5<br>4.2<br>15.7 | 41.2<br>35.4<br>11.6<br>3.2<br>8.5 | 31.4<br>48.8<br>11.5<br>2.8<br>5.4 | 62.5<br>9.5<br>5.3<br>1.8<br>20.9 | 77.6<br>5.7<br>3.0<br>2.1<br>11.6 | 27.7<br>40.7<br>12.3<br>4.9<br>14.4 |
| Principal reason for visit module and RVC code <sup>1</sup>   |                                    |                                    |                                    |                                   |                                   |                                   |                                   |                                   |                                    |                                    |                                    |                                   |                                   |                                     |
| Symptom module S001–S999<br>Disease module D001–D999<br>Diagnostic, screening, and                                    | 58.0<br>8.4                        | 57.5<br>7.8                        | 58.6<br>9.3                        | 55.9<br>3.4                       | 69.0<br>*3.1                      | 69.6<br>5.5                       | 58.9<br>6.0                       | 56.6<br>4.9                       | 61.9<br>5.8                        | 56.3<br>11.3                       | 52.9<br>13.9                       | 61.8<br>4.8                       | 73.3<br>4.0                       | 48.4<br>11.7                        |
| preventive module X100–X599<br>Treatment module T100–T899<br>Injuries and adverse effects                             | 16.7<br>7.5                        | 19.9<br>7.5                        | 11.8<br>7.3                        | 33.0<br>*2.5                      | *6.2<br>*5.9                      | *3.9<br>7.6                       | 4.9<br>8.0                        | 18.6<br>5.7                       | 14.3<br>8.6                        | 16.4<br>8.6                        | 20.4<br>6.9                        | 10.6<br>5.0                       | 7.4<br>3.3                        | 23.2<br>10.3                        |
| module J001–J999<br>Test results module R100–R700<br>Administrative   | 4.8<br>0.6                         | 3.4<br>0.6                         | 6.9<br>0.6                         | *2.4<br>-                         | 7.3                               | 8.1<br>*0.7                       | 11.2<br>-                         | 6.7<br>*0.2                       | 4.9<br>0.8                         | 3.8<br>1.0                         | 3.0<br>*0.6                        | 7.2<br>*0.3                       | 7.6<br>*0.3                       | 2.7<br>0.9                          |
| module A100–A140<br>Other <sup>2</sup>  | 2.7<br>1.3                         | 2.0<br>1.3                         | 3.9<br>1.6                         | 0.7<br>*2.1                       | 7.5<br>*1.0                       | *3.8<br>*0.8                      | 10.0<br>*1.0                      | 6.3<br>*1.0                       | 2.6<br>1.1                         | 1.4<br>1.2                         | *0.3<br>*2.0                       | 9.2<br>1.1                        | 3.4<br>0.7                        | 1.1<br>1.7                          |

Table 7. Number of office visits to general and family practitioners and percent distribution by visit status, according to sex and age of patient and prior visit status: United States, January 1980-December 1981

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<sup>1</sup>Based on *A Reason for Visit Classification for Ambulatory Care* (RVC).<sup>6</sup> <sup>2</sup>Includes blanks; problems, complaints not elsewhere classified; entries of "none"; and illegible entries.

Table 8. Number and percent distribution of office visits to general and family practitioners, by age of patient and 20 most frequent principal reasons for visit: United States, January 1980-December 1981

| Age and principal reason for visit and RVC code <sup>1</sup>   | Number of<br>visits<br>in<br>thousands | Percent<br>distribution |
|--|--|-------------------------|
| Under 15 years   |  |                         |
| Total  | 52 880                                 | 100.0                   |
| Well beby evening the  | 52,000                                 | 100.0                   |
| Sumptome referable to the of   | 4,228                                  | 8.0                     |
|  | 3,744                                  | 7.1                     |
| S440   | 3,506                                  | 6.6                     |
| Hord cold upper reprinted in feeting (convert)   | 3,189                                  | 6.0                     |
| S445   | 2,969                                  | 5.6                     |
|  | 2,578                                  | 4.9                     |
| Skill restriction State Stat | 1,722                                  | 3.3                     |
| Physical examination required for school   | 1,710                                  | 3.2                     |
| Prophylactic innegulations   | 1,352                                  | 2.0                     |
| Physical examination required for extracurricular activities   | 1,080                                  | 2.0                     |
| Alleray medication   | 1,077                                  | 2.0                     |
| Nasal congestion   | 971                                    | 2.0                     |
| Other symptoms referable to the ears, not elsewhere classified   | 875                                    | 1.0                     |
| Vomiting   | 747                                    | 1.7                     |
| Diarrhea   | 669                                    | 1.4                     |
| Stomach pain, cramps and spasms  | 567                                    | 1.0                     |
| Abdominal pain, cramps, spasms   | 517                                    | 1.1                     |
| Suture-insertion, removal  | 514                                    | 1.0                     |
| Progress visit, not otherwise specified  | 507                                    | 1.0                     |
| Residual   | 19.306                                 | 36.5                    |
|  |  | 0010                    |
| 15-24 years  |  |                         |
| 10181  | 56,230                                 | 100.0                   |
| Prenatal examination, routine  | 5,244                                  | 9.3                     |
| Symptoms referable to throat   | 4,797                                  | 8.5                     |
| Head cold, upper respiratory infection (coryza)  | 1,423                                  | 2.5                     |
| Skin rash  | 1,377                                  | 2.4                     |
| Cough  | 1,360                                  | 2.4                     |
| General medical examination  | 1,293                                  | 2.3                     |
| Earache, or ear infection  | 1,200                                  | 2.1                     |
| Abdominal pain, cramps, spasms   | 1,187                                  | 2.1                     |
| Headache, pain in head   | 1,010                                  | 1.8                     |
| Physical examination required for school   | 985                                    | 1.8                     |
| Physical examination required for employment   | 946                                    | 1.7                     |
| Physical examination required for extracurricular activities   | 923                                    | 1.6                     |
| Back symptoms  | 815                                    | 1.4                     |
| Pregnancy, unconfirmed   | 728                                    | 1.3                     |
| S010   | 616                                    | 1.1                     |
| Mielgy medication  | 616                                    | 1.1                     |
| Vergin gan   | 593                                    | 1.1                     |
| Prograss visit not otherwise specified Too   | 548                                    | 1.0                     |
| Suture-insertion removal   | 520                                    | 0.9                     |
| Residual   | 20 521                                 | 0.9                     |
|  | 23,551                                 | 52.5                    |
| 25–44 years  |  |                         |
|  | 103,275                                | 100.0                   |
| Symptoms referable to throat   | 4,593                                  | 4.4                     |
| Prenatal examination, routine  | 4,223                                  | 4.1                     |
| General medical examination  | 3,878                                  | 3.8                     |
| Back symptoms  | 3,153                                  | 3.1                     |
| Kado cold upper repriratory infection (convra)   | 3,058                                  | 3.0                     |
| Headaction, upper respiratory infection (coryza)   | 2,/4/                                  | 2./                     |
| Weinht read  | 2,/15                                  | 2.6                     |
| Not and nutritional courseling Too   | 2,687                                  | 2.6                     |
| Chest nain and related symptoms (not referable to body system) COEO  | 2,522                                  | 2.4                     |
| Abdomial nain creates as nases   | 2,518                                  | 2.4                     |
| Nack symptoms  | 1,825                                  | 1.8                     |
| Low back symptoms  | 1,/34                                  | 1./                     |
| Pan smear v2cc   | 1,030                                  | 1.0                     |
|  | 1,007                                  | 1.0                     |

<sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC).<sup>6</sup>

Table 8. Number and percent distribution of office visits to general and family practitioners, by age of patient and 20 most frequent principal reasons for visit: United States, January 1980-December 1981—Con.

| Age and principal reason for visit and RVC code <sup>1</sup>   | Number of<br>visits<br>in | Percent<br>distribution |
|--|---------------------------|-------------------------|
|  | thousands                 |                         |
| 25–44 years—Con.   |                           |                         |
| Skin rash  | 1,582                     | 1.5                     |
| Blood pressure test  | 1,555                     | 1.5                     |
| Progress visit, not otherwise specified                        | 1,543                     | 1.5                     |
| Earache or ear infection                                       | 1,483                     | 1.4                     |
| Physical examination required for employment                   | 1,451                     | 1.4                     |
| Stomach pain, cramps and spasms                                | 1,310                     | 1.3                     |
| Residual   | 55,455                    | 53.6                    |
| 45–64 years  |                           |                         |
| Total  | 95,458                    | 100.0                   |
| General medical examination                                    | 6,508                     | 6.8                     |
| Blood pressure test  | 5,600                     | 5.9                     |
| Hypertension   | 3,024                     | 3.2                     |
| Back symptoms  | 2,917                     | 3.1                     |
| Chest pain and related symptoms (not referable to body system) | 2,345                     | 2.5                     |
| Progress visit, not otherwise specified                        | 2,299                     | 2.4                     |
| Vertigo-dizziness  | 2,068                     | 2.2                     |
| Symptoms referable to throat                                   | 1,986                     | 2.1                     |
| Head cold, upper respiratory infection (coryza)                | 1,986                     | 2.1                     |
| Cough  | 1,940                     | 2.0                     |
| Diabetes mellitus  | 1,828                     | 1.9                     |
| Abdominal pain, cramps, spasms                                 | 1,775                     | 1.9                     |
| Headache, pain in head   | 1,703                     | 1.8                     |
| Low back symptoms  | 1,517                     | 1.6                     |
| Injections   | 1,323                     | 1.4                     |
| Leg symptoms   | 1,315                     | 1.4                     |
| Anxiety and nervousness  | 1,115                     | 1.2                     |
| Skin rash  | 1,085                     | 1.1                     |
| Shoulder symptoms  | 1,079                     | 1.1                     |
| Diet and nutritional counseling                                | 1,067                     | 1.1                     |
| Residual   | 50,978                    | 53.4                    |
| 65 years and over  |                           |                         |
| Total  | 73,867                    | 100.0                   |
| General medical examination                                    | 7,292                     | 9.9                     |
| Blood pressure test  | 5,090                     | 6.9                     |
| Hypertension   | 2,875                     | 3.9                     |
| Progress visit, not otherwise specified                        | 2,478                     | 3.4                     |
| Vertigo-dizziness  | 2,248                     | 3.0                     |
| Chest pain and related symptoms (not referable to body system) | 2,025                     | 2.7                     |
| Back symptoms  | 1,943                     | 2.6                     |
| Cough  | 1,651                     | 2.2                     |
| Diabetes mellitus  | 1,649                     | 2.2                     |
| Head cold, upper respiratory infection (coryza)                | 1,639                     | 2.2                     |
| Leg symptoms   | 1,411                     | 1.9                     |
| Gout, nyperuncemia   | 1,327                     | 1.8                     |
| Shortness of bream   | 1,258                     | 1.7                     |
| Aldominal pair armps coords                                    | 1,161                     | 1.6                     |
| Abuoninia pani, ciamps, spasins                                | 1,113                     | 1.5                     |
| General to expertance  | 1,002                     | 1.4                     |
| System Symptoms  | 913                       | 1.2                     |
| Shoulder symptome  | 890                       | 1.2                     |
| Nited symptoms   | 845                       | 1.1                     |
| Recidual   | 765                       | 1.0                     |
| 116314481  | 34,232                    | 46.3                    |

<sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC).<sup>6</sup>

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

|   |               | Sex     |         | Age              |              |               |                |                |                |                |                      |                | Prior visit status                |                                   |  |  |
|---|---------------|---------|---------|------------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------------|----------------|-----------------------------------|-----------------------------------|--|--|
| Principal diagnosis category and<br>ICD—9—CM code <sup>1</sup>                          | Both<br>sexes | Female  | Male    | Under 3<br>years | 3–5<br>years | 6–10<br>years | 11–14<br>years | 15–24<br>years | 25–44<br>years | 45–64<br>years | 65 years<br>and over | New<br>patient | Old<br>patient,<br>new<br>problem | Old<br>patient,<br>old<br>problem |  |  |
|   |               |         |         |                  |              |               | Number i       | n thousand     | s              |                |                      |                |                                   |                                   |  |  |
| All visits  | 381,710       | 229,445 | 152,265 | 18,377           | 9,297        | 11,492        | 13,715         | 56,230         | 103,275        | 95,458         | 73,867               | 43,099         | 123,752                           | 214,859                           |  |  |
|   |               |         |         |                  |              |               | Percent        | distributior   | ı              |                |                      |                |                                   |                                   |  |  |
| 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                             | 100.0                             |  |  |
| Infectious and parasitic  |               |         |         |                  |              |               |                |                |                |                |                      |                |                                   |                                   |  |  |
| diseases  | 3.3           | 3.1     | 3.6     | 5.2              | *5.8         | 8.0           | 7.3            | 6.1            | 3.4            | 1.3            | 1.2                  | 4.9            | 5.1                               | 1.9                               |  |  |
| Neoplasms   | 1.2           | 1.2     | 1.3     | *0.3             | *0.1         | *1.5          | *0.7           | *0.2           | 1.2            | 1.6            | 2.0                  | *0.4           | 1.1                               | 1.5                               |  |  |
| disorders   | 6.2           | 7.3     | 4.6     | *0.2             | *0.2         | *0.8          | *0.2           | 2.6            | 8.0            | 8.4            | 8.0                  | 5.6            | 1.6                               | 9.0                               |  |  |
| Mental disorders  | 2.6           | 2.8     | 2.3     | *0.2             | *0.5         | *0.4          | *0.4           | 1.5            | 3.9            | 3.4            | 2.3                  | 2.4            | 2.2                               | 2.9                               |  |  |
| and sense organs  | 5.1           | 4.8     | 5.5     | 11.8             | 17.0         | 9.8           | 9.1            | 4.4            | 4.7            | 3.6            | 3.4                  | 6.1            | 6.9                               | 3.8                               |  |  |
| system  | 13.1          | 12.7    | 13.6    | *0.5             | *0.4         | *0.5          | *0.7           | 1.9            | 5.2            | 19.8           | 33.0                 | 5.0            | 3.8                               | 20.0                              |  |  |
| Diseases of the respiratory   |               |         |         |                  |              |               |                |                |                |                |                      |                |                                   |                                   |  |  |
| system  | 17.3          | 16.2    | 19.0    | 28.8             | 34.6         | 33.5          | 20.9           | 17.9           | 17.2           | 14.9           | 11.8                 | 18.3           | 22.9                              | 13.9                              |  |  |
| system  | 5.6           | 5.0     | 6.4     | 3.6              | *4.1         | *4.9          | *4.3           | 4.8            | 6.3            | 6.0            | 5.6                  | 5.0            | 7.2                               | 4.7                               |  |  |
| system  | 5.3           | 6.9     | 2.7     | *1.6             | *1.7         | *1.7          | *3.7           | 7.1            | 6.9            | 5.6            | 3.4                  | 4.5            | 6.6                               | 4.6                               |  |  |
| subcutaneous tissue 680–709<br>Diseases of the musculoskeletal<br>system and connective | 4.0           | 3.5     | 4.7     | *3.3             | *3.2         | 7.0           | 5.0            | 5.5            | 4.0            | 3.5            | 3.0                  | 5.3            | 5.7                               | 2.7                               |  |  |
| tissue  | 7.6           | 7.8     | 7.2     | *0.6             | *0.3         | *1.0          | *4.2           | 3.6            | 7.1            | 11.2           | 10.9                 | 5.6            | 7.1                               | 8.2                               |  |  |
| conditions 780–799  | 3.8           | 3.8     | 37      | *3.1             | *4 5         | *4 1          | *3.1           | 3.6            | 37             | 4 0            | 3.8                  | 11             | 45                                | 3 2                               |  |  |
| Injury and poisoning 800–999<br>Supplementary classifi-                                 | 9.8           | 7.6     | 13.1    | 3.9              | 10.6         | 15.8          | 19.7           | 12.5           | 12.1           | 8.1            | 5.6                  | 11.9           | 12.6                              | 7.8                               |  |  |
| cation  | 13.0          | 14.9    | 10.2    | 34.7             | 15.5         | 9,3           | 18.4           | 25.8           | 14.1           | 6.5            | 4,0                  | 18.2           | 10.9                              | 13.2                              |  |  |
| All other diagnoses   | 1.1           | 1.3     | 0.8     | *1.2             | *1.4         | *1.0          | *0.7           | 1.7            | 0.8            | 1.0            | 1.3                  | *0.9           | 0.7                               | 1.4                               |  |  |
| Unknown diagnoses   | 1.2           | 1.1     | 1.4     | *1.1             | *0.1         | *0.9          | *1.8           | 1.1            | 1.5            | 1.3            | 0.9                  | 1.7            | 1.0                               | 1.2                               |  |  |

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification (ICD–9–CM).<sup>7</sup>

| Age, principal diagnosis, and ICD-9CM code <sup>1</sup>                             | Number of<br>visits<br>in<br>thousands | Percent<br>distribution |
|---|--|-------------------------|
| Under 15 years  |  |                         |
| Total   | 52,880                                 | 100.0                   |
| Health supervision of infant or child   | 5,811                                  | 11.0                    |
| Acute upper respiratory infection of multiple or unspecified sites                  | 4,599                                  | 8.7                     |
| Suppurative and unspecified otitis media  | 4,006                                  | 7.6                     |
| General medical examination   | 2,512                                  | 4.8                     |
| Acute pharyngitis   | 2,227                                  | 4.2                     |
| Bronchitis not specified as acute or chronic.                                       | 1 613                                  | 3.0                     |
| Other noninfectious gastroenteritis and colitis                                     | 1,061                                  | 2.0                     |
| Need for prophylactic vaccination and innoculation against combinations of diseases | 792                                    | 1.5                     |
| Other diseases due to viruses and Chlamydiae  | 698                                    | 1.3                     |
| Asthma  | 679                                    | 1.3                     |
| Uther open wound of head  | 6/5                                    | 1.3                     |
| Disorders of conjunctiva  | 588                                    | 1.2                     |
| Allergic rhinitis (hay fever)   | 574                                    | 1.1                     |
| Nonsuppurative otitis media and Eustachian tube disorders                           | 569                                    | 1.1                     |
| Acute nasopharyngitis (common cold)   | 549                                    | 1.0                     |
| Acute bronchitis and bronchiolitis  | 515                                    | 1.0                     |
| Streptococcal sore throat and scarlet fever   | 502                                    | 0.9                     |
| Other disorders of urethra and urinary tract  | 498<br>21 640                          | 40.9                    |
|   | 21,040                                 | 40.5                    |
| 15–24 years   |  |                         |
| Total   | 56,230                                 | 100.0                   |
| Normal pregnancy  | 6,059                                  | 10.8                    |
| General medical examination   | 4,260                                  | 7.6                     |
| Acute upper respiratory intection of multiple of unspecified sites                  | 2,764                                  | 4.9                     |
| Acute phalyinghis   | 2,303                                  | 4.1                     |
| Obesity and other hyperalimentation   | 894                                    | 1.6                     |
| Contact dermatitis and other eczema   | 886                                    | 1.6                     |
| Other noninfectious gastroenteritis and colitis                                     | 761                                    | 1.4                     |
| Special examinations and investigations   | 732                                    | 1.3                     |
| Suppurative and unspecified offitis media   | 721                                    | 1.3                     |
| Ground structures and the specified as acute or chronic 490                         | 620                                    | 1.2                     |
| Inflammatory disease of cervix, vagina, and vulva.                                  | 616                                    | 1.1                     |
| Infectious mononucleosis  | 615                                    | 1.1                     |
| Other diseases due to viruses and Chlamydiae  | 606                                    | 1.1                     |
| Disorders of external ear   | 582                                    | 1.0                     |
| Sprains and strains of other and unspecified parts of back                          | 577                                    | 1.0                     |
| Allergic minitis (nay rever)  | 566                                    | 1.0                     |
| Postparters of mensuration and examination  | 547                                    | 1.0                     |
| Residual  | 29,660                                 | 52.7                    |
| 25–44 years   |  |                         |
| Total   | 103,275                                | 100.0                   |
| Obesity and other hyperalimentation   | 5,555                                  | 5.4                     |
| Normal pregnancy  | 4,373                                  | 4.2                     |
| General medical examination   | 4,194                                  | 4.1                     |
| Acute upper respiratory intection of multiple or unspecified sites                  | 3,870                                  | 3.7                     |
| Acute pharvnoitis   | 3,283<br>2 628                         | 3.∠<br>25               |
| Sprains and strains of other and unspecified parts of back                          | 2.238                                  | 2.2                     |
| Neurotic disorders  | 2,201                                  | 2.1                     |
| Chronic sinusitis   | 1,788                                  | 1.7                     |
| Bronchitis, not specified as acute or chronic                                       | 1,678                                  | 1.6                     |
| Allergic rhinitis (hay fever)   | 1,504                                  | 1.5                     |
| Uther nonintectious gastroenteritis and colitis                                     | 1,444                                  | 1.4                     |
| Other disorders of soft tissue  | 1,402                                  | 1.4                     |
|   |  |                         |

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>7</sup>

Table 10. Number and percent distribution of office visits to general and family practitioners, by age of patient and 20 most frequent principal diagnoses: United States, January 1980-December 1981—Con.

| Age, principal diagnosis, and ICD-9CM code1   | Number of<br>visits<br>in<br>thousands                       | Percent<br>distribution                |
|---|--|--|
| 25–44 years—Con.  |  |  |
| Special examinations and investigationsV72Contact dermatitis and other eczema.692Other and unspecified disorders of back724Influenza.487Suppurative and unspecified otitis media382Diabetes mellitus.250  | 1,291<br>1,255<br>1,246<br>1,153<br>1,095<br>1,058<br>58,589 | 1.3<br>1.2<br>1.1<br>1.1<br>1.1<br>1.0 |
| 45-64 years   | 00,000   | 50.7                                   |
| Total   | 05 450   | 100.0                                  |
| Essential hypertension  | 95,458   | 100.0                                  |
| Diabetes mellitus   | 12,945   | 13.6                                   |
| Acute upper respiratory infection of multiple or unspecified sites  | 4,352  | 4.0                                    |
| General medical examination   | 2,275  | 2.4                                    |
| Obesity and other hyperalimentation   | 2,076  | 2.5                                    |
| Other and unspecified arthropathies   | 1,871  | 2.0                                    |
| Bronchitis, not specified as acute or chronic   | 1,662  | 1.7                                    |
| Chronic sinusitis   | 1,550  | 1.6                                    |
| Other disorders of soft tissue  | 1,501  | 1.6                                    |
| Usteoarthritis and allied disorders   | 1,490  | 1.6                                    |
| Nenopausai and postmenopausai disorders   | 1,388  | 1.5                                    |
| Sorving and strains of other and upper sified and of hereit   | 1,325  | 1.4                                    |
| Splans and strains of other and unspecified parts of back   | 1,217  | 1.3                                    |
| Actue pharyinghts   | 1,167  | 1.2                                    |
| Influenza   | 1,045  | 1.1                                    |
| Perindenzal entheonyative and allied syndromes  | 1,043  | 1.1                                    |
| Chronic aiway obstruction not alegument classified  | 1,003  | 1.1                                    |
| Acute branchilis and branchiolitie  | 995  | 1.0                                    |
| Sprains and strains of sacroiliac region  | 984  | 1.0                                    |
| Residual  | 903<br>52 378  | 1.0                                    |
| <b>65</b>   | 52,576   | 54.0                                   |
| bb years and over   |  |  |
|   | 73,867   | 100.0                                  |
| Essential hypercension  | 12,005   | 16.3                                   |
| Other forms of chronic ischemic heart disease   | 4,436  | 6.0                                    |
| Other and unspecified arthropathies   | 3,350  | 4.5                                    |
| Osteo arthritis and allied disorders 716  | 2,191  | 3.0                                    |
| Available the second discrete second  | 2,125  | 2.9                                    |
| Acute upper respiratory infection of multiple or uspecified sites   | 1,582  | 2.1                                    |
| Heart failure   | 1,500  | 2.0                                    |
| Bronchitis, not specified as acute or chronic   | 1 1 4 5  | 1.0                                    |
| Chronic airway obstruction, not elsewhere classified  | 1,121  | 1.5                                    |
| General medical examination   | 871  | 1.2                                    |
| Other disorders of soft tissue  | 756  | 1.0                                    |
| Neurotic disorders  | 745  | 1.0                                    |
| Cardiac dysrhythmias  | 714  | 1.0                                    |
| Acute bronchitis and bronchiolitis  | 694  | 0.9                                    |
| III-defined descriptions and complications of heart disease   | 638  | 0.9                                    |
| Peripheral enthesopathies and allied syndromes  | 631  | 0.9                                    |
| Gastritis and duodentis   | 620  | 0.8                                    |
| Constitution of the second of | 591  | 0.8                                    |
| Gystitus  | 577  | 0.8                                    |
| ntosuudi  | 36,398   | 49.3                                   |

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>7</sup>

|                                    |               | Sex          |             |                  |              | Prior visit status |                |                |                |                |                      |                |                                   |                                   |
|------------------------------------|---------------|--------------|-------------|------------------|--------------|--------------------|----------------|----------------|----------------|----------------|----------------------|----------------|-----------------------------------|-----------------------------------|
| Service or therapy                 | Both<br>sexes | Female       | Male        | Under 3<br>years | 3–5<br>years | 6–10<br>years      | 11–14<br>years | 15–24<br>years | 25–44<br>years | 45–64<br>years | 65 years<br>and over | New<br>patient | Old<br>patient,<br>new<br>problem | Old<br>patient,<br>old<br>problem |
|                                    |               |              |             |                  |              |                    | Number in      | thousands      | ;              |                |                      |                |                                   |                                   |
| All visits                         | 381,710       | 229,445      | 152,265     | 18,377           | 9,297        | 11,492             | 13,715         | 56,230         | 103,275        | 95,458         | 73,867               | 43,099         | 123,752                           | 214,859                           |
| Diagnostic service <sup>1</sup>    |               |              |             |                  |              |                    | Percer         | nt of visits   |                |                |                      |                |                                   |                                   |
| None                               | 6.4           | 6.0          | 7.1         | 4.8              | 8.0          | 9.5                | 10.0           | 5.3            | 7.3            | 71             | 4 2                  | *3.0           | 35                                | 9.0                               |
| Limited history and/or examination | 65.0          | 64.6         | 65.7        | 71.3             | 72.7         | 69.9               | 63.5           | 66.9           | 64.4           | 62.3           | 65.0                 | 565            | 72.0                              | 62.2                              |
| General history and/or examination | 14.6          | 14.7         | 14.6        | 19.9             | 13.4         | 14.1               | 177            | 15.5           | 14.9           | 14.2           | 12.6                 | 20.3           | 14.6                              | 11 7                              |
| Pan test                           | 32            | 5.3          |             | -                | -            | • • • •            | *0.4           | 4 5            | 5.2            | 3.5            | 1.0                  | 23.5           | 2 1                               | 2.1                               |
| Clinical Jaboratory test           | 21.6          | 23.2         | 19.2        | 10.6             | 16.8         | 179                | 20.3           | 27.3           | 20.5           | 21.2           |                      | 975            | 3.1                               | 3.1                               |
|                                    | 67            | 5.8          | 9.1         | *1 9             | */ 1         | *2 7               | 20.5           | 6.4            | 20.5           | 21.3           | 23.5                 | 27.5           | 21.1                              | 20.8                              |
| Pland prospure abook               | 44.7          | 46.7         | 41.7        | 4.6              | *0.1         | 2.7                | 24.5           | 27.0           | /.4            | 7.4            | 0.0                  | 10.2           | 9.3                               | 4.5                               |
|                                    | 44.7          | 40.7         | 41.7        | 4.0              | *0.1         | *0.7               | *0.2           | 37.0           | 43.1           | 54.9           | 62.9                 | 38.2           | 37.2                              | 50.3                              |
| Vision test                        | 2.0           | 1.0          | 2.7         | *0.2             | *1 7         | *1.0               | *2.0           | 0.9            | 1.0            | 3.2            | 3.5                  | 2.5            | 1.9                               | 2.0                               |
|                                    | 1.3           | 0.9          | *0.4        | 0.2              | 1.7          | 1.0                | 3.9            | 2.0            | 1.4            | 1.2            | ·0.6                 | 3.5            | 1.4                               | 0.8                               |
|                                    | 0.3           | 0.3          | 0.4         | -                | -            | -                  | 0.Z            | *0.2           | -0.3           | -0.5           | *0.5                 | *0.2           | <sup>*</sup> 0.4                  | 0.3                               |
| Wental status examination          | 0.6           | 0.6          | 0.7         | -                | *0.4         | *0 5               | *0.5           | *0.6           | 0.8            | 0.7            | *0.6                 | *0.9           | *0.4                              | 0.7                               |
| Other                              | 4.4           | 4.9          | 3.7         | 3.8              | 3.4          | 3.5                | -2.7           | *3.7           | 5.2            | 4.3            | 4.8                  | 4.6            | 3.8                               | 4.7                               |
| Nonmedication therapy <sup>1</sup> |               |              |             |                  |              |                    |                |                |                |                |                      |                |                                   |                                   |
| None                               | 56.8          | 56.8         | 56.8        | 65.1             | 68.2         | 67.0               | 63.5           | 57.0           | 54.1           | 54.5           | 57.2                 | 55.0           | 59.0                              | 56.0                              |
| Physiotherapy                      | 5.5           | 5.1          | 6.3         | *1.0             | *1.4         | *2.4               | 5.4            | 5.1            | 6.9            | 6.8            | 4.7                  | 5.1            | 5.7                               | 5.6                               |
| Office surgery.                    | 5.5           | 4.4          | 7.2         | 3.8              | 8.1          | 8.3                | 10.3           | 7.0            | 5.7            | 4.8            | 3.7                  | 6.5            | 6.9                               | 4.5                               |
| Family planning                    | 1.3           | 2.1          | *0.2        | -                | -            | -                  | *0.4           | 4.1            | 2.4            | *0.2           | *0.1                 | 2.1            | 1.3                               | 1.2                               |
| Psychotherapy or therapeutic       |               |              |             |                  |              |                    |                |                |                |                | ••••                 |                |                                   |                                   |
| listening                          | 2.5           | 2.8          | 2.1         | *0.4             | -            | *1.7               | *0.4           | 1.9            | 3.0            | 3.1            | 2.9                  | 19             | 18                                | 3.0                               |
| Diet counseling                    | 10.3          | 11.5         | 8.5         | 10.5             | *1.5         | *2.3               | *3.2           | 6.1            | 11.4           | 13.3           | 11 7                 | 103            | 5.7                               | 12 9                              |
| Family or social counseling        | 1.9           | 2.2          | 1.5         | *2.7             | *0.3         | *0.9               | *1.0           | 2.3            | 2.5            | 1.8            | 1.3                  | 13             | 1.6                               | 2.0                               |
| Medical counseling                 | 22.5          | 22.6         | 22.3        | 20.9             | 21.8         | 18.8               | 17.9           | 22.1           | 21.0           | 23.6           | 25.2                 | 23.7           | 22.1                              | 2.2                               |
| Other                              | 1.4           | 1.2          | 1.7         | *0.5             | *0.3         | *0.3               | *2.4           | 1.7            | 1.6            | 1.6            | 1.0                  | 2.2            | 1.8                               | 0.9                               |
| Number of medications              |               |              |             |                  |              |                    | Percent o      | fistribution   |                |                |                      |                |                                   |                                   |
| 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                             | 100.0                             |
| None                               | 26.4          | 25 5         | 27 G        | 27 5             | 20.0         | 267                | 207            | 25.1           | 20.0           |                | 17.0                 |                |                                   |                                   |
| 1                                  | 20.4          | 20.0         | 25.0        | 27.0             | A1 0         | 20.7<br>13 C       | 30./           | 30.1           | 30.3           | 22.2           | 17.8                 | 32.3           | 25.7                              | 25.5                              |
| ן                                  | 34.7<br>22 F  | 04.4<br>00 0 | 22.1        | 33.3             | 700          | 40.0               | 37.3           | 37.1           | 30.0           | 33.4           | 29.8                 | 31.5           | 37.1                              | 34.0                              |
| 2                                  | 22.0          | 10 1         | 22.J<br>Q 5 | 27.0             | 20.0         | 24.1               | 17.3           | 19.3           | 21.5           | 24.0           | 23.2                 | 21.1           | 23.9                              | 22.0                              |
| 4 or moro                          | 9.0<br>6.0    | 76           | 0.0<br>E 0  | 7.U<br>*1 0      | 7.Z<br>*1 /  | 5.Z<br>*0.0        | 5./<br>*A C    | 0.2            | 8.5            | 11.3           | 13.3                 | 9.8            | 8.9                               | 9.8                               |
| 4 01 11018                         | 0.9           | 7.0          | 5.9         | 1.8              | 1.4          | 0.3                | 0.9            | 2.3            | 3.8            | 9.2            | 16.0                 | 5.3            | 4.4                               | 8.7                               |

Table 11. Number of office visits to general and family practitioners, percent of visits by diagnostic services and nonmedication therapy, and percent distribution by number of medications, according to sex and age of patient and prior visit status: United States, January 1980-December 1981

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<sup>1</sup>Percents will not total 100.0 because more than one service may have been rendered during a visit.

|                                   |               |         |         |                  | Prior visit status |               |                |                |                |                |                      |                |                                   |                                   |
|-----------------------------------|---------------|---------|---------|------------------|--------------------|---------------|----------------|----------------|----------------|----------------|----------------------|----------------|-----------------------------------|-----------------------------------|
| Therapeutic category <sup>1</sup> | Both<br>sexes | Female  | Male    | Under 3<br>years | 3–5<br>years       | 6–10<br>years | 11–14<br>years | 15–24<br>years | 25–44<br>years | 45–64<br>years | 65 years<br>and over | New<br>patient | Old<br>patient,<br>new<br>problem | Old<br>patient,<br>old<br>problem |
|                                   |               |         |         |                  |                    |               | Number i       | n thousand:    | 6              |                |                      |                |                                   |                                   |
| All drugs                         | 532,065       | 330,172 | 201,893 | 22,038           | 11,764             | 12,504        | 12,719         | 58,485         | 124,633        | 149,707        | 140,215              | 53,957         | 161,523                           | 316,586                           |
|                                   |               |         |         |                  |                    |               | Percent o      | 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                             | 100.0                             |
| Antihistamine drugs               | 6.8           | 6.5     | 7.4     | 11.4             | 14.7               | 18.6          | 15.3           | 10.0           | 8.5            | 5.1            | 2.5                  | 8.1            | 8.8                               | 5.6                               |
|                                   | 17.3          | 15.8    | 19.7    | 31.7             | 43.0<br>*2 1       | 40.2<br>*2.4  | 32.4           | 29.2           | 20.1           | 12.1           | 7.4                  | 25.1           | 25.9                              | 11.5                              |
| Blood formation and               | 4.4           | 4.4     | 4.4     | 0.9              | 2.1                | 3.4           | 3.7            | 4.3            | 5.8            | 4.7            | 3.7                  | 4.7            | 4.8                               | 4.1                               |
| coagulation                       | 1.3           | 1.4     | 1.1     | *0.9             | *0.4               | *0.3          | *0.7           | 15             | 0.9            | 11             | 20                   | *0.4           | 0.6                               | 4 7                               |
| Cardiovascular drugs              | 10.0          | 9.5     | 10.9    | *0.2             | -                  | *0.4          | *1.1           | *0.9           | 3.4            | 12.6           | 2.0                  | 3.5            | 0.6                               | 1.7                               |
| Central nervous system drugs      | 17.9          | 19.0    | 16.0    | 4.9              | 6.2                | 6.0           | 8.8            | 14.4           | 21.9           | 20.7           | 17.6                 | 16.7           | 169                               | 14.1                              |
| Electrolytic, caloric, and water  |               |         |         |                  |                    |               |                |                |                |                |                      | 10.7           | 10.0                              | 10.0                              |
| balance                           | 9.2           | 9.8     | 8.4     | *1.2             | *0.0               | *0.2          | *1.0           | 1.8            | 5.9            | 12.2           | 15.8                 | 6.2            | 3.7                               | 12.6                              |
| Expectorants and cough            |               |         |         |                  |                    |               |                |                |                |                |                      |                |                                   | . 2.0                             |
| preparations                      | 3.4           | 3.1     | 3.8     | 5.8              | 7.7                | 6.7           | 7.5            | 5.0            | 4.2            | 2.4            | 1.7                  | 5.0            | 5.2                               | 2.2                               |
| Eye, ear, nose, and throat        |               |         |         |                  |                    |               |                |                |                |                |                      |                |                                   |                                   |
|                                   | 1.5           | 1.3     | 1.9     | 2.9              | 3.6                | *3.5          | *3.9           | 2.2            | 1.7            | 1.1            | 0.8                  | 2.0            | 2.4                               | 1.9                               |
| Gastrointestinal drugs            | 4.0           | 4.6     | 4.6     | 3.4              | 3.2                | *1.8          | *3.0           | 3.7            | 4.9            | 4.6            | 5.3                  | 3.4            | 5.7                               | 4.2                               |
| substitutes                       | 8.2           | 9.5     | 6.0     | *1.0             | *17                | *0.0          | *0 7           | 0.1            | 0.7            | 10.0           | ~ ~ ~                |                |                                   |                                   |
| Serums toxoids and vaccines       | 27            | 2.5     | 0.0     | 24.5             | 10.1               | 2.3<br>*4 7   | 3.7            | 8.1            | 8./            | 10.2           | 8.2                  | 8.1            | 5.8                               | 9.4                               |
| Skin and mucous membrane          | 2.7           | 2.0     | 0.4     | 24.5             | 10.1               | 4.7           | 4.4            | 2.5            | 1.1            | 1.2            | 1.5                  | 2.6            | 3.1                               | 2.5                               |
| preparations                      | 4.8           | 4.4     | 5.3     | 4.6              | *4.9               | 86            | 83             | 79             | 5.8            | 37             | 20                   | 6 6            | 7 0                               |                                   |
| Spasmolytic agents                | 1.6           | 1.4     | 2.0     | *0.9             | *1.3               | *0.7          | *1 7           | 0.4            | 0.8            | 3.7            | 2.9                  | 0.0            | 1.2                               | 3.2                               |
| Vitamins                          | 3.7           | 4.5     | 2.4     | *2.6             | *0.1               | *0.2          | *0.9           | 5.8            | 3.6            | 3.2            | 2.9<br>4.6           | 1./<br>2 E     | 1.0                               | 2.0                               |
| Other, unclassified, or           |               |         |         |                  |                    | 5.2           | 0.0            | 0.0            | 5.0            | 0.2            | 4.0                  | 2.0            | 2.1                               | 4.8                               |
| undertermined                     | 2.6           | 2.5     | 2.7     | 3.1              | *1.0               | 2.4           | 3.6            | 2.3            | 2.7            | 3.3            | 2.1                  | 3.4            | 2.5                               | 25                                |

Table 12. Number of drugs mentioned in office visits to general and family practitioners and percent distribution by therapeutic categories, according to sex and age of patient and prior visit status: United States, January 1980-December 1981

<sup>1</sup>Based on the classification system of the American Hospital Formulary Service.<sup>9</sup>

| Table 13.  | Number and percent distribution of drugs mentioned in office visits to general and family practitioners, by age of patient and most |
|------------|---|
| frequently | y named drugs: United States, January 1980-December 1981  |

| Are of nations and name of drugs           | Number of<br>drug           | Percent      | Age of patient and name of drug     | Number of<br>drug<br>mentions | Percent      |
|--|-----------------------------|--------------|-------------------------------------|-------------------------------|--------------|
| Age of patient and name of drug.           | mentions<br>in<br>thousands | distribution | Age of patient and name of ordy     | in<br>in<br>thousands         | distribution |
| Under 15 years                             |                             |              | 25–44 years                         |                               |              |
| Total                                      | . 59,026                    | 100.0        | Total                               | 124,633                       | 100.0        |
| Ampicillin                                 | . 3,047                     | 5.2          | Penicillin                          | 2,987                         | 2.4          |
| Diphtheria, tetanus toxoids, and pertussis |                             |              | Ampicillin                          | 2,533                         | 2.0          |
|  | . 2,815                     | 4.8          | Tetracycline                        | 2,208                         | 1.8          |
| Poliomyelitis vaccine                      | . 2,779                     | 4.7          | Allergy relief or shots             | 2,090                         | 1.7          |
|  | 2,230                       | 3.0          |                                     | 1,636                         | 1.3          |
| Dimetann                                   | 2,030                       | 3.5          | Aspinin                             | 1,591                         | 1.5          |
| Aspirin                                    | . 1.598                     | 2.7          | Frythromycin                        | 1 273                         | 1.1          |
| Allergy relief or shots                    | 1,454                       | 2.5          | Motrin                              | 1,267                         | 1.0          |
| E.E.S. (erythromycin)                      | . 1,289                     | 2.2          | Actifed                             | 1,217                         | 1.0          |
| Actifed                                    | . 1,208                     | 2.0          | Vitamin B-12                        | 1,201                         | 1.0          |
| Keflex                                     | . 1,061                     | 1.8          | Valium                              | 1,175                         | 0.9          |
| Erythromycin                               | . 959                       | 1.6          | E.E.S. (erythromycin)               | 1,138                         | 0.9          |
| Amoxil (amoxicillin).                      | . 927                       | 1.6          | Phenergan with codeine              | 1,138                         | 0.9          |
| Septra                                     | . 876                       | 1.5          | Chorionic gonadotropin <sup>2</sup> | 1,095                         | 0.9          |
| Phenergan                                  | . 838                       | 1.4          |                                     | 1,081                         | 0.9          |
| Dimetane                                   | . 790                       | 1.3          | Ketlex                              | 1,069                         | 0.9          |
| llosone                                    | . 750<br>719                | 1.3          | lonamin (nhostermine)               | 1,017                         | 0.8          |
| V-Cillin (nenicillin).                     | 705                         | 1.2          | Decadron                            | 997                           | 0.8          |
| Ceclor                                     | . 679                       | 1.2          | E-Mycin (erythromycin)              | 937                           | 0.0          |
| Donnagel                                   | . 643                       | 1.1          | Phenergan                           | 891                           | 0.7          |
| M-M-R (measles, mumps, rubella virus       |                             |              | Hydrochlorothiazide                 | 853                           | 0.7          |
| vaccine)                                   | 638                         | 1.1          | Pen-Vee K                           | 839                           | 0.7          |
| Tylenol                                    | 561                         | 1.0          | Drixoral                            | 795                           | 0.6          |
| Pen-Vee K                                  | 555                         | 0.9          | Ornade                              | 792                           | 0.6          |
| Donnatal                                   | 547                         | 0.9          | Terramycin                          | 789                           | 0.6          |
| E-Mycin (erythromycin)                     | 544                         | 0.9          | Dyazide                             | 769                           | 0.6          |
|  | 543                         | 0.9          | Tetanus toxoid                      | 761                           | 0.6          |
| Larotid (amoxiciliin)                      | 533                         | 0.9          | Darvocet-N.                         | 750                           | 0.6          |
| Tuberculin tine test                       | 467                         | 0.8          |                                     | 740                           | 0.6          |
| Residual                                   | 24 650                      | 41.7         | Librax                              | 737                           | 0.6          |
|  | 24,000                      | 41.7         | Amovil (amovicillin)                | 706                           | 0.0          |
|  |                             |              | Fastin (nhentermine)                | 675                           | 0.5          |
| 15-24 years                                |                             |              | Norgesic                            | 658                           | 0.5          |
| Tetel                                      | E0 40E                      | 100.0        | Butazolidin.                        | 656                           | 0.5          |
| l otal                                     | . 56,465                    | 100.0        | Prednisone                          | 655                           | 0.5          |
| Penicillin                                 | . 2,806                     | 4.8          | Thyroid                             | 653                           | 0.5          |
| Ampicillin                                 | . 2,297                     | 3.9          | Insulin                             | 626                           | 0.5          |
| Aspirin                                    | . 1,208                     | 2.1          | Parafon Forte                       | 619                           | 0.5          |
|  | . 1,197                     | 2.0          | Clinoril                            | 609                           | 0.5          |
| Allergy reliet or shots                    | . 912                       | 1.0          | Benadryl                            | 609                           | 0.5          |
| Enthromycin                                | . 002<br>747                | 1.5          | Empirin with codeine                | 602                           | 0.5          |
| Phenergan                                  | . 596                       | 1.0          | Residual                            | 77 456                        | 62.2         |
| Keflex                                     | . 574                       | 1.0          | nesiuua                             | 77,430                        | 02.2         |
| Tetanus toxoid                             | . 555                       | 0.9          | 45-64 vears                         |                               |              |
| Benadryl                                   | . 543                       | 0.9          |                                     |                               |              |
| V-Cillin (penicillin)                      | . 538                       | 0.9          | Total                               | 149,707                       | 100.0        |
| E.E.S. (erythromycin)                      | . 526                       | 0.9          | Dyazide                             | 3,082                         | 2.1          |
| Ortho-novum                                | . 513                       | 0.9          | Inderal                             | 2,944                         | 2.0          |
| Prenatal vitamins.                         | . 500                       | 0.9          | Lasix                               | 2,489                         | 1.7          |
| Phenergan with codeine                     | . 487                       | 0.8          | Penicillin                          | 2,311                         | 1.5          |
| Septra                                     | . 473                       | 0.8          | Hydrodiuril (hydrochlorothiazide)   | 2,148                         | 1.4          |
| Pen-Vee K                                  | . 467                       | 0.8          | Vitamin B-12                        | 2,072                         | 1.4          |
| E Myoin (onthromyoin)                      | . 461                       | 0.8          | Ampicillin                          | 2,000                         | 1.3          |
| E-wygin (erythromycin)                     | . 44/<br>//e                | 0.8          | Wotrin                              | 1,333                         | 1.3          |
| Prednisone                                 | . 440<br>AAA                | 0.0          | Natium                              | 1 900                         | 1.3          |
| Tylenol with codeine                       | . <del></del>               | 0.0<br>0.2   | Tanamat                             | 1 895                         | 1.3          |
| Dimetapp                                   | . 434                       | 0.7          | Hydroton                            | 1,743                         | 1.2          |
| Besidual                                   | 40.008                      | 68.4         | Insulin                             | 1,675                         | 1.1          |
|  |                             | ~~           |                                     | .,                            |              |

See footnotes at end of table.

| Age of patient and name of drug <sup>1</sup> | Number of<br>drug<br>mentions<br>in<br>thousands | Percent<br>distribution | Age of patient and name of drug <sup>1</sup> | Number of<br>drug<br>mentions<br>in<br>thousands | Percent<br>distribution |
|--|--|-------------------------|--|--|-------------------------|
| 45-64 years-Con.                             |  |                         | 65 years and over—Con.                       |  |                         |
| Aldomet                                      | 1,525  | 1.0                     | Dyazide                                      | 3,604  | 2.6                     |
| Tetracycline                                 | 1,434  | 1.0                     | Inderal                                      | 3,141  | 2.2                     |
| Lanoxin (digoxin)                            | 1,432  | 1.0                     | Vitamin B-12                                 | 2,984  | 2.1                     |
| Lopressor                                    | 1,398  | 0.9                     | Hydrodiuril (hydrochlorothiazide)            | 2,295  | 1.6                     |
| Indocin                                      | 1,272  | 0.8                     | Aldomet                                      | 2,222  | 1.6                     |
| Allergy relief or shots                      | 1,183  | 0.8                     | Motrin                                       | 2,220  | 1.6                     |
| Prednisone                                   | 1,135  | 0.8                     | Digoxin                                      | 2,112  | 1.5                     |
| Diabinese                                    | 1,112  | 0.7                     | Hygroton                                     | 1,772  | 1.3                     |
| E.E.S. (erythromycin)                        | 1,027  | 0.7                     | Diabinese                                    | 1,758  | 1.3                     |
| Clinoril                                     | 1,008  | 0.7                     | Insulin                                      | 1,740  | 1.2                     |
| Depo-Medrol                                  | 944  | 0.6                     | Tagamet                                      | 1.570  | 1 1                     |
| Thyroid                                      | 932  | 0.6                     | Valium                                       | 1.535  | 1.1                     |
| Estrogen                                     | 891  | 0.6                     | Slow-K                                       | 1,480  | 1.1                     |
| Diuril                                       | 889  | 0.6                     | Influenza virus vaccine, type A, B           | 1,474  | 1.1                     |
| Erythromycin                                 | 876  | 0.6                     | Aspirin                                      | 1.469  | 1.0                     |
| Aspirin                                      | 870  | 0.6                     | Aldoril                                      | 1,430  | 1.0                     |
| Aldoril                                      | 870  | 0.6                     | Hydrochlorothiazide                          | 1 341  | 1.0                     |
| Premarin                                     | 857  | 0.6                     | Antivert                                     | 1 257  | 0.9                     |
| Naprosvn                                     | 833  | 0.6                     | Clinoril                                     | 1 1 2 9  | 0.9                     |
| Influenza virus vaccine. Type A. B           | 823  | 0.5                     | Isordil                                      | 1,120  | 0.0                     |
| Butazolidin.                                 | 794  | 0.5                     | Penicillin                                   | 1,039  | 0.8                     |
| Empirin with codeine                         | 793  | 0.5                     | Naprosyn                                     | 1,075  | 0.8                     |
| Tranxene                                     | 781  | 0.5                     | lopressor                                    | 1,040  | 0.7                     |
| Darvocet-N.                                  | 781  | 0.5                     | Tetracycline                                 | 1,040  | 0.7                     |
| Keflex                                       | 763  | 0.5                     | Nitroglycerin                                | 1,021  | 0.7                     |
| Minipress                                    | 743  | 0.5                     |  | 900  | 0.7                     |
| Ser-an-ac                                    | 743  | 0.5                     |  | 927  | 0.7                     |
| Benadnil                                     | 730  | 0.5                     | Doppotal                                     | 848  | 0.6                     |
| Phenergan                                    | 729  | 0.5                     | Couradin                                     | 793  | 0.6                     |
| Tylenol with codeine                         | 723  | 0.5                     | Coumaum                                      | /6/  | 0.5                     |
| Bactrim                                      | 724  | 0.5                     | Delmana                                      | /64  | 0.5                     |
| Ativan                                       | 643  | 0.0                     |  | /5/  | 0.5                     |
| Librium                                      | 629  | 0.4                     |  | 734  | 0.5                     |
| lordil                                       | 637  | 0.4                     |  | 707  | 0.5                     |
| librov                                       | 627  | 0.4                     |  | 705  | 0.5                     |
| Slow-K                                       | 622  | 0.4                     |  | 704  | 0.5                     |
| Blow-N                                       | 614  | 0.4                     |  | 703  | 0.5                     |
| Phonormon with and inc                       | 614  | 0.4                     |  | 697  | 0.5                     |
|  | 600  | 0.4                     |  | 689  | 0.5                     |
|  | 002  | 0.4                     | Preanisone                                   | 687  | 0.5                     |
| nesiaual                                     | 80,871   | 58.0                    | Urinase                                      | 681  | 0.5                     |
| 65 years and over                            |  |                         | Pavabid                                      | 679  | 0.5                     |
| oo years and over                            |  |                         | Potassium                                    | 631  | 0.5                     |
| Total  | 140,215  | 100.0                   | Residual                                     | 75,112   | 53.6                    |
| Lasix  | 5,169  | 3.7                     |  |  |                         |
| Lanoxin (digoxin)                            | 4,677  | 3.3                     |  |  |                         |

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Table 13. Number and percent distribution of drugs mentioned in office visits to general and family practitioners, by age of patient and most frequently named drugs: United States, January 1980-December 1981—Con.

<sup>1</sup>Based on the physician's entry on the Patient Record form. <sup>2</sup>Constitutes 1.6 percent of mentions for this age group in 1980. There were no mentions of chorionic gonadotropin in 1981.

|   | Number of                                       | Diagnostic service <sup>2</sup>   |   |   |                                   |                                     |                                  |                                      |                                  |                                    |                                     |                                    |                                  |  |
|---|---|-----------------------------------|---|---|-----------------------------------|-------------------------------------|----------------------------------|--------------------------------------|----------------------------------|------------------------------------|-------------------------------------|------------------------------------|----------------------------------|--|
| Major reason for visit and<br>principal reason for visit module <sup>1</sup>  | visits<br>in<br>thousands                       | None                              | Limited<br>history<br>and/or<br>examination | General<br>history<br>and/or<br>examination | Pap<br>test                       | Clinical<br>laboratory<br>test      | X-ray                            | Blood<br>pressure<br>check           | Electro-<br>cardiogram           | Vision<br>test                     | Endoscopy                           | Mental<br>status<br>examination    | Other                            |  |
| Major reason for visit  |   |                                   |   |   |                                   |                                     | Perce                            | nt of visits                         |                                  |                                    |                                     |                                    |                                  |  |
| Acute problem<br>Chronic problem, routine<br>Chronic problem, flareup<br>Postsurgery or postinjury<br>Nonillness care | 182,430<br>98,734<br>32,405<br>13,966<br>54,175 | 3.5<br>10.1<br>5.5<br>12.8<br>8.4 | 73.3<br>58.2<br>69.8<br>69.4<br>45.6        | 13.1<br>10.9<br>12.0<br>4.9<br>30.6         | 1.4<br>1.4<br>1.9<br>*0.5<br>13.9 | 19.5<br>19.8<br>21.6<br>6.3<br>35.9 | 8.8<br>2.8<br>8.3<br>11.0<br>4.5 | 35.1<br>61.5<br>50.6<br>26.4<br>47.6 | 1.5<br>2.1<br>3.7<br>*0.8<br>3.2 | 0.6<br>*0.5<br>*0.2<br>*0.4<br>6.3 | 0.4<br>*0.2<br>*0.6<br>*0.5<br>*0.4 | 0.6<br>0.6<br>*0.9<br>*0.7<br>*0.7 | 4.1<br>5.4<br>3.8<br>*0.7<br>5.0 |  |
| Principal reason for visit<br>module and RVC code   |   |                                   |   |   |                                   |                                     |                                  |                                      |                                  |                                    |                                     |                                    |                                  |  |
| Symptom module S001–S999<br>Disease module D001–D999  | 221,209<br>32,078                               | 4.5<br>5.1                        | 71.6<br>67.5                                | 13.0<br>11.0                                | 1.6<br>*0.7                       | 19.5<br>25.9                        | 7.5<br>3.3                       | 40.6<br>55.5                         | 1.9<br>1.8                       | 0.5<br>*0.5                        | 0.3<br>*0.6                         | 0.6<br>*0.5                        | 4.2<br>3.6                       |  |
| preventive module X100–X599<br>Treatment module T100–T899   | 63,602<br>28,421                                | 3.8<br>30.3                       | 51.3<br>47.8                                | 20.9<br>8.6                                 | 12.1<br>*0.1                      | 32.8<br>8.6                         | 3.7<br>*2.1                      | 61.0<br>39.2                         | 3.4<br>*0.8                      | 1.8<br>*0.3                        | *0.4<br>*0.2                        | *0.3<br>*0.8                       | 4.7<br>8.3                       |  |
| module  | 18,292<br>2,334                                 | 6.3<br>15.2                       | 76.8<br>48.4                                | 6.7<br>*5.0                                 | *0.0<br>*5.3                      | *2.7<br>33.5                        | 21.7<br>*5.3                     | 24.5<br>35.9                         | *0.3<br>*2.8                     | *1.7<br>*0.2                       | *1.0                                | *0.6<br>*0.6                       | *2.4<br>*8.0                     |  |
| module A100–A140<br>Other <sup>3</sup>  | 10,390<br>5,384                                 | 0.5<br>*6.9                       | 38.1<br>56.2                                | 51.4<br>15.5                                | *2.2<br>*6.3                      | 50.8<br>23.0                        | 7.0<br>*4.6                      | 50.9<br>48.4                         | *3.0<br>*4.6                     | 19.5<br>*4.3                       | *0.4                                | *2.1<br>*1.7                       | *3.3<br>*3.8                     |  |

#### Table 14. Number of office visits to general and family practitioners and percent of visits, by diagnostic service, major reason for visit, and principal reason for visit module: United States, January 1980-December 1981

<sup>1</sup>Based on A Reason for Visit Classification for Ambulatory Care (RVC).<sup>6</sup>

<sup>2</sup>Percents will not total 100.0 because more than one service may have been rendered during a visit.

<sup>3</sup>Includes blanks; problems not elsewhere classified; entries of "none"; and illegible entries.

|   | Number of                 | Nonmedication therapy <sup>2</sup> |                    |                   |                    |   |                    |                                   |                       |       |                        | Number of medications |           |        |                 |  |  |
|---|---------------------------|------------------------------------|--------------------|-------------------|--------------------|---|--------------------|-----------------------------------|-----------------------|-------|------------------------|-----------------------|-----------|--------|-----------------|--|--|
| Principal diagnosis category<br>and ICD–9–CM code <sup>1</sup>          | visits<br>in<br>thousands | None                               | Physio-<br>therapy | Office<br>surgery | Family<br>planning | Psycho-<br>therapy or<br>therapeutic<br>listening | Diet<br>counseling | Family<br>or social<br>counseling | Medical<br>counseling | Other | None                   | 1                     | 2         | 3      | 4<br>or<br>more |  |  |
|   | -                         |                                    |                    |                   |                    | Percent of  | visits             |                                   |                       |       | Se <sup>ri</sup> Annea | Perce                 | nt distri | bution |                 |  |  |
| Infectious and parasitic  |                           |                                    |                    |                   |                    |   |                    |                                   |                       |       |                        |                       |           |        |                 |  |  |
| diseases 001–139  | 12,503                    | 56.3                               | *2.0               | 10.4              | *0.9               | *0.8  | 5.4                | *1.8                              | 26.3                  | *0.7  | 22.1                   | 41.0                  | 25.5      | 7.5    | 4.0             |  |  |
| Neoplasms   | 4,660                     | 43.0                               | *1.7               | 27.5              | -                  | *2.1  | *3.9               | *0.9                              | 25.5                  | *1.9  | 56.4                   | 23.3                  | 10.0      | *5.9   | *4.4            |  |  |
| disorders   | 23,797                    | 37.2                               | *0.5               | *0.9              | *0.6               | *1.8  | 52.1               | *0.7                              | 19.9                  | *0.7  | 19.3                   | 33.1                  | 21.6      | 13.1   | 12.9            |  |  |
| Mental disorders 290–319<br>Diseases of the nervous<br>system and sense | 9,909                     | 37.1                               | *2.5               | *0.8              | *1.1               | 26.0  | 7.7                | 12.3                              | 27.8                  | *0.1  | 19.3                   | 40.2                  | 26.6      | 8.8    | 5.1             |  |  |
| organs  | 19,334                    | 63.7                               | 3.4                | 7.1               | *0.1               | *1.8  | *2.1               | *1.1                              | 22.8                  | *1.5  | 19.3                   | 34.7                  | 31.3      | 10.4   | 4.3             |  |  |
| system  | 49,943                    | 55.2                               | 2.5                | *1.9              | *0.2               | 2.8   | 17.6               | 1.6                               | 28.2                  | *0.7  | 13.4                   | 32.6                  | 25.1      | 13.7   | 15.2            |  |  |
| system  | 66,022                    | 73.2                               | 1.2                | *0.7              | *0.2               | 1.3   | 2.8                | *0.7                              | 21.8                  | *0.5  | 7.5                    | 34.2                  | 34.0      | 15.6   | 8.8             |  |  |
| system  | 21,192                    | 49.8                               | *1.2               | *1.7              | *0.2               | *2.3  | 23.6               | *2.4                              | 28.9                  | *0.5  | 24.1                   | 30.8                  | 27.5      | 9.9    | 7.7             |  |  |
| system  | 20,050                    | 60.7                               | *2.2               | *3.4              | *2.6               | *1.9  | 5.7                | 3.2                               | 27.1                  | *0.9  | 23.7                   | 46.2                  | 19.6      | 7.1    | *3.4            |  |  |
| tissue  | 15,074                    | 56.1                               | 6.2                | 15.3              | *0.3               | *1.9  | *3.5               | *2.0                              | 19.1                  | *1.2  | 19.8                   | 42.7                  | 23.3      | 9.7    | 4.5             |  |  |
| connective tissue 710–739<br>Symptoms, signs, and<br>ill-defined        | 28,920                    | 48.2                               | 24.5               | 4.0               | *0.1               | *1.4  | 3.9                | *1.0                              | 22.4                  | 3.6   | 25.4                   | 34.0                  | 23.4      | 9.1    | 8.2             |  |  |
| conditions780–799<br>Injury and   | 14,370                    | 60.0                               | *1.7               | *0.7              | *0.2               | 5.0   | 8.4                | *2.2                              | 27.1                  | *0.5  | 32.8                   | 34.0                  | 18.8      | 9.9    | 4.5             |  |  |
| poisoning   | 37,518                    | 43.5                               | 21.1               | 1 <b>7.4</b>      | *0 2               | *1.1  | *1.2               | *0.5                              | 17.8                  | 5.2   | 42.1                   | 39.2                  | 13.4      | 3.4    | 1.9             |  |  |
| cation V01–V82  | 49,576                    | 63.1                               | *1.0               | 7.4               | 6.8                | 1.7   | 8.5                | 3.3                               | 16.7                  | *0.4  | 60.3                   | 27.9                  | 8.6       | 1.9    | *1.2            |  |  |
| All other diagnoses   | 4,210                     | 68.4                               | 1.7                | *2.4              | *4.0               | *1.4  | 8.7                | *2.7                              | 16.1                  | 0.7   | 30.4                   | 38.1                  | 16.8      | *7.2   | *7.5            |  |  |
| Unknown diagnoses   | 4,633                     | 62.0                               | *6.2               | *10.5             | *4.5               | *4.5  | *4.3               | *3.7                              | *12.3                 | *4.4  | 33.0                   | 37.5                  | 18.4      | *5.2   | *5.8            |  |  |

Table 15. Number of office visits to general and family practitioners and percent of visits by nonmedication therapy and principal diagnosis categories, and percent distribution by number of medications, according to principal diagnosis categories: United States, January 1980-December 1981

<sup>1</sup>Based on International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>7</sup>

<sup>2</sup>Percents will not total 100.0 because more than one service may have been rendered during a visit.

|                                   |               | Age     |         |                  |              |               |                |                |                |                | Prior visit status   |                |                                   |                                   |
|-----------------------------------|---------------|---------|---------|------------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------------|----------------|-----------------------------------|-----------------------------------|
| Duration and disposition of visit | Both<br>sexes | Female  | Male    | Under 3<br>years | 3–5<br>years | 6–10<br>years | 11–14<br>years | 15–24<br>years | 25–44<br>years | 45–64<br>years | 65 years<br>and over | New<br>patient | Old<br>patient,<br>new<br>problem | Old<br>patient,<br>old<br>problem |
|                                   |               |         |         |                  |              |               | Number ir      | n thousands    | 3              |                |                      |                |                                   |                                   |
| All visits                        | 381,710       | 229,445 | 152,265 | 18,377           | 9,297        | 11,492        | 13,715         | 56,230         | 103,275        | 95,458         | 73,867               | 43,099         | 123,752                           | 214,859                           |
|                                   |               |         |         |                  |              |               | 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                             | 100.0                             |
| Duration of visit                 |               |         |         |                  |              |               |                |                |                |                |                      |                |                                   |                                   |
| 0 minutes <sup>1</sup>            | 3.1           | 3.1     | 3.2     | *2.6             | *3.9         | *4.3          | 4.7            | 1.9            | 3.3            | 3.6            | 2.9                  | *1.0           | 1.7                               | 4.4                               |
| 1–5 minutes                       | 13.3          | 13.5    | 13.0    | 19.4             | 16.0         | 19.4          | 18.1           | 17.3           | 13.5           | 11.5           | 8.7                  | 9.2            | 13,4                              | 14.1                              |
| 6–10 minutes                      | 35.7          | 35.2    | 36.3    | 43.5             | 45.0         | 43.9          | 34.2           | 35.3           | 36.2           | 33.7           | 33.7                 | 30.9           | 37.4                              | 35.6                              |
| 11-15 minutes                     | 28.8          | 29.1    | 28.3    | 25.5             | 25.3         | 22.8          | 26.3           | 27.0           | 26.5           | 30.2           | 34.1                 | 28.2           | 29.1                              | 28.7                              |
| 16–30 minutes                     | 17.3          | 17.2    | 17.3    | 8.6              | 9.4          | 8.1           | 15.8           | 16.8           | 18.4           | 18.9           | 18.9                 | 26.9           | 17.0                              | 15.5                              |
| 31 minutes or longer              | 1.9           | 1.8     | 2.0     | *0.4             | *0.4         | *1.4          | *1.0           | 1.8            | 2.3            | 2.2            | 1.8                  | 3.8            | 1.5                               | 1.7                               |
| Disposition of visit <sup>2</sup> |               |         |         |                  |              |               | Percent        | t of visits    |                |                |                      |                |                                   |                                   |
| No followup planned               | 14.8          | 13.4    | 16.8    | 19.1             | 26.1         | 23.1          | 28.3           | 22.1           | 15.6           | 10.8           | 6.8                  | 26.2           | 20.0                              | 9.5                               |
| Return at specified time          | 51.3          | 53.4    | 48.1    | 48.5             | 30.0         | 30.5          | 32.4           | 40.7           | 45.7           | 58.6           | 67.8                 | 37.8           | 35.4                              | 63.1                              |
| Return if needed                  | 29.7          | 29.2    | 30.5    | 31.4             | 40.4         | 39.6          | 35.5           | 31.7           | 32.7           | 26.9           | 23.1                 | 28.1           | 38.6                              | 24.9                              |
| Telephone followup planned        | 3.1           | 3.1     | 3.1     | *1.8             | *4.1         | *4.6          | *2.5           | 3.5            | 4.1            | 2.5            | 2.3                  | 3.8            | 4.2                               | 2.3                               |
| Referred to other physician       | 2.8           | 2.7     | 3.0     | *1.1             | *0.5         | *4.1          | *2.4           | 3.2            | 3.1            | 3.3            | 2.0                  | 3.4            | 3.5                               | 2.3                               |
| Returned to referring physician   | 0.2           | *0.2    | *0.3    | *0.4             | *0.2         | *0.2          | *0.5           | *0.1           | *0.4           | *0.2           | *0.2                 | 0.9            | *0.1                              | 0.2                               |
| Admit to hospital.                | 1.2           | 1.1     | 1.3     | *0.7             | *0.2         | *0.5          | *0.6           | *0.9           | 1.3            | 1.1            | 1.9                  | 1.8            | 1.4                               | 1.0                               |
| Other                             | 0.2           | *0.1    | *0.2    | *0.1             | *0.3         | *0.3          | *0.2           | *0.3           | *0.1           | *0.2           | *0.1                 | *0.2           | *0.2                              | *0.1                              |

Table 16. Number of office visits to general and family practitioners and percent distribution by duration and disposition of visit, according to sax and age of patient and prior visit status: United States, January 1980-December 1981

<sup>1</sup>Represents visits in which there was no face-to-face encounter between patient and physician. <sup>2</sup>Percents will not total 100.0 because more than one disposition was possible.

Table 17. Number of office visits to general and family practitioners, percent distribution by duration of visit, and percent of visits by disposition of visit, according to principal diagnosis categories: United States, January 1980-December 1981

|   | Number of<br>visits<br>in<br>thousands | Duration of visit |                           |                |                 |                  |                  |                         |  |  |
|---|--|-------------------|---------------------------|----------------|-----------------|------------------|------------------|-------------------------|--|--|
| Principal diagnosis category and ICD-9-CM code <sup>1</sup> |  | Total             | 0<br>minutes <sup>2</sup> | 1–5<br>minutes | 6–10<br>minutes | 11–15<br>minutes | 16–30<br>minutes | 31 minutes<br>or longer |  |  |
|   |  |                   |                           | P              | ercent distri   | bution           |                  |                         |  |  |
| Infectious and parasitic diseases001-139                    | 12,503                                 | 100.0             | *2.7                      | 14.6           | 39.0            | 27.9             | 14.7             | *1.2                    |  |  |
| Neoplasms   | 4,660                                  | 100.0             | *3.2                      | 8.9            | 30.5            | 26.7             | 27.6             | *3.2                    |  |  |
| Endocrine, nutritional and metabolic diseases,              |  |                   |                           |                |                 |                  |                  |                         |  |  |
| and immunity disorders                                      | 23,797                                 | 100.0             | 4.9                       | 11.5           | 37.5            | 29.2             | 15.1             | *1.8                    |  |  |
| Mental disorders  | 9,909                                  | 100.0             | *1.0                      | 7.7            | 33.3            | 30.0             | 23.9             | *4.1                    |  |  |
| Diseases of the nervous system and sense                    |  |                   |                           |                |                 |                  |                  |                         |  |  |
| organs  | 19,334                                 | 100.0             | *0.9                      | 15.3           | 42.0            | 28.2             | 11.8             | *1.8                    |  |  |
| Diseases of the circulatory system 390-459                  | 49,943                                 | 100.0             | 2.3                       | 10.6           | 35.2            | 32.8             | 17.4             | 1.8                     |  |  |
| Diseases of the respiratory system 460–519                  | 66,022                                 | 100.0             | 2.5                       | 14.7           | 43.4            | 27.1             | 11.7             | *0.6                    |  |  |
| Diseases of the digestive system 520-579                    | 21,192                                 | 100.0             | *0.8                      | 9.9            | 34.3            | 31.4             | 21.3             | *2.4                    |  |  |
| Diseases of the genitourinary system 580-629                | 20,050                                 | 100.0             | 3.2                       | 11.3           | 29.2            | 32.7             | 21.8             | *1.9                    |  |  |
| Diseases of the skin and subcutaneous                       |  |                   |                           |                |                 |                  |                  |                         |  |  |
| tissue  | 15,074                                 | 100.0             | 1.1                       | 16.6           | 43.2            | 24.4             | 13.3             | *1.3                    |  |  |
| Diseases of the musculoskeletal system and                  |  |                   |                           |                |                 |                  |                  |                         |  |  |
| connective tissue   | 28,920                                 | 100.0             | 2.7                       | 9.1            | 33.4            | 33.5             | 19.3             | *2.1                    |  |  |
| Symptoms, signs, and ill-defined                            |  |                   |                           |                |                 |                  |                  |                         |  |  |
| conditions  | 14,370                                 | 100.0             | *2.7                      | 8.9            | 33.2            | 31.0             | 22.1             | *2.1                    |  |  |
| Injury and poisoning  | 37,518                                 | 100.0             | 6.2                       | 16.7           | 29.9            | 27.5             | 18.1             | 1.6                     |  |  |
| Supplementary classification                                | 49,576                                 | 100.0             | 3.2                       | 17.5           | 31.4            | 24.2             | 20.4             | 3.2                     |  |  |
| All other diagnoses   | 4,210                                  | 100.0             | *7.5                      | 16.2           | 29.5            | 25.7             | 19.7             | *1.4                    |  |  |
| Unknown diagnoses   | 4,633                                  | 100.0             | 19.5                      | 15.3           | 24.1            | 22.0             | 16.8             | *2.2                    |  |  |

|  | Disposition of visit <sup>3</sup> |                                |                        |                                  |                                   |                                       |                         |       |  |
|--|-----------------------------------|--------------------------------|------------------------|----------------------------------|-----------------------------------|---------------------------------------|-------------------------|-------|--|
| Principal diagnosis category and<br>ICD—9—CM code <sup>1</sup> | No<br>followup<br>planned         | Return at<br>specified<br>time | Return<br>if<br>needed | Telephone<br>followup<br>planned | Referred<br>to other<br>physician | Returned to<br>referring<br>physician | Admit<br>to<br>hospital | Other |  |
|  |                                   |                                |                        | Percent                          | of visits                         |                                       |                         |       |  |
| Infectious and parasitic diseases 001-139                      | 17.1                              | 37.1                           | 39.0                   | 5.6                              | *2.5                              | *0.5                                  | *0.3                    | *0.1  |  |
| Neoplasms140-239   | *10.4                             | 58.5                           | 13.7                   | *4.7                             | 13.0                              | *0.4                                  | *3.3                    | *0.4  |  |
| Endocrine, nutritional and metabolic diseases,                 |                                   |                                |                        |                                  |                                   |                                       |                         |       |  |
| and immunity disorders   | 5.0                               | 79.7                           | 12.7                   | 2.9                              | *1.0                              | -                                     | *0.7                    | *0.1  |  |
| Mental disorders   | 8.7                               | 48.3                           | 39.1                   | *3,4                             | *3.4                              | *0.6                                  | *1.6                    | *0.9  |  |
| Diseases of the nervous system and sense                       |                                   |                                |                        |                                  |                                   |                                       |                         |       |  |
| organs   | 18.0                              | 39.4                           | 38.9                   | *1.5                             | 5.6                               | *0.4                                  | *0.3                    | *0.2  |  |
| Diseases of the circulatory system 390–459                     | 4.0                               | 80.0                           | 14.8                   | 2.1                              | 2.0                               | *0.1                                  | 1.5                     | *0.1  |  |
| Diseases of the respiratory system 460-519                     | 19.1                              | 31.2                           | 46.7                   | 3.7                              | 0.9                               | *0.3                                  | *0.7                    | *0.0  |  |
| Diseases of the digestive system 520-579                       | 11.2                              | 45.4                           | 31.8                   | 5.1                              | 4.1                               | *0.4                                  | 6.0                     | *0.5  |  |
| Diseases of the genitourinary system 580-629                   | 8.7                               | 54.6                           | 28.2                   | 5.1                              | 5.5                               | *0.3                                  | *1.5                    | *0.5  |  |
| Diseases of the skin and subcutaneous                          |                                   |                                |                        |                                  |                                   |                                       |                         |       |  |
| tissue   | 18.9                              | 39.2                           | 38.2                   | *2.5                             | *3.1                              | *0.2                                  | *0.3                    | -     |  |
| Diseases of the musculoskeletal system and                     |                                   |                                |                        |                                  |                                   |                                       |                         |       |  |
| connective tissue710–739                                       | 9.1                               | 52.0                           | 34.9                   | 2.6                              | 3.8                               | *0.2                                  | *0.5                    | *0.1  |  |
| Symptoms, signs, and ill-defined                               |                                   |                                |                        |                                  |                                   |                                       |                         |       |  |
| conditions   | 11.2                              | 45.6                           | 33.3                   | 6.5                              | 4.9                               | -                                     | *2.5                    | *0.5  |  |
| Injury and poisoning   | 15.6                              | 49.0                           | 31.9                   | 2.4                              | 2.8                               | *0.2                                  | *0.6                    | *0.0  |  |
| Supplementary classification                                   | 30.4                              | 51.2                           | 16.5                   | 1.6                              | 1.7                               | *0.3                                  | *0.2                    | *0.2  |  |
| All other diagnoses  | *6.9                              | 64.4                           | 22.3                   | *3.6                             | *2.4                              | *0.2                                  | *4.5                    | *0.2  |  |
| Unknown diagnoses  | 25.3                              | 41.7                           | 22.6                   | *3.1                             | *6.6                              | *0.3                                  | *4.2                    | -     |  |

<sup>1</sup>Based on Infernational Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM).<sup>7</sup>

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

<sup>3</sup>Percents will not total 100.0 because more than one disposition was possible.

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### Appendix I Technical notes<sup>d</sup>

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

<sup>&</sup>lt;sup>d</sup>Prepared by Thomas McLemore, Division of Health Care Statistics.

Table I. 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<br>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             |  |
| Pevehiatry                  | 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 nonresponse 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).<sup>6</sup> 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).<sup>7</sup> 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.<sup>8</sup> 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 inscope, 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. 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 21/2 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.<sup>16,17</sup> Approximate relative standard errors for aggregate estimates are presented in figures I and II.

NOTE: A list of references follows the text.



Figure I. 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

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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 report, by sex, race, and age: United States, 1980-81

|                       |                    | Sex     |                | Race         |        |              |  |
|-----------------------|--------------------|---------|----------------|--------------|--------|--------------|--|
| Age of patient        | Both<br>sexes      | Male    | Female         | White        | Black  | All<br>other |  |
|                       |                    | Num     | ber of persons | in thousands |        |              |  |
| All ages <sup>1</sup> | 222,674            | 107,429 | 115,244        | 191,052      | 26,107 | 5,515        |  |
| Under 3 years         | 10,191             | 5,231   | 4,961          | 8,284        | 1,572  | 335          |  |
| 3-5 years             | 9,529              | 4,826   | 4,703          | 7,764        | 1,427  | 339          |  |
| 6-10 years            | 16,75 <del>9</del> | 8,568   | 8,190          | 13,785       | 2,511  | 463          |  |
| 11–14 years           | 14,354             | 7,351   | 7,002          | 11,860       | 2,117  | 377          |  |
| 15–24 years           | 40,710             | 20,076  | 20,634         | 34,229       | 5,430  | 1,052        |  |
| 25–44 years           | 62,658             | 30,487  | 32,171         | 53,973       | 6,870  | 1,816        |  |
| 45-64 years           | 43,963             | 20,849  | 23,114         | 38,993       | 4,143  | 828          |  |
| 65 years and over     | 24,512             | 10,042  | 14,470         | 22,165       | 2,039  | 308          |  |

<sup>1</sup>Figure may not add to total 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 figure 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 (inscope) 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 location 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 patient, 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<br>Hampshire, New Jersey, New York,<br>Pennsylvania, Rhode Island, and<br>Vermont   |
| North Central | Illinois, Indiana, Iowa, Kansas, Michi-<br>gan, Minnesota, Missouri, Nebraska,<br>North Dakota, Ohio, South Dakota, and<br>Wisconsin   |
| South         | Alabama, Arkansas, Delaware, District<br>of Columbia, Florida, Georgia, Ken-<br>tucky, Louisiana, Maryland, Mississippi,<br>North Carolina, Oklahoma, South Caro-<br>lina, Tennessee, Texas, Virginia, and<br>West Virgina |
| West          | Arizona, California, Colorado, Idaho,<br>Montana, Nevada, New Mexico, Ore-<br>gon, Utah, Washington, and Wyoming   |

Metropolitan status of practice location—A physician's practice is classified by its location in a metropolitan or nonmetropolitan 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, wellbaby)—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

Enclosure

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

50



|                            |  | DEGIN DECK 3           |
|----------------------------|--|------------------------|
| CONFIDENTIAL*<br>NORC-4284 | Form .<br>OMB No.  | Approved<br>o. 68R1498 |
| FOR OFFICE USE             | NATIONAL AMBULATORY MEDICAL CARE SURVEY<br>INDUCTION INTERVIEW |                        |
| (BATCH NO )                |  | (Phys. ID Number)      |
|                            | BEFORE STARTING INTERVIEW                                      |                        |
| 5-6/                       | 1. ENTER PHYSICIAN I.D. NUMPER IN BOX TO<br>RIGHT.             | 1-4/                   |
| (LOG NO.)                  | 2. ENTER DATES OF ASSIGNED REPORTING WEEK IN<br>Q. 2, P. 2.    | TIME AM                |
| 7-10/                      |  | 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.

(Name of Specialty)

11-13/

BROTH DROV 3

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 <u>ambulatory</u> patients you will see in your office during the week of (READ REPORTING DATES ENTERED BELOW).

|       |      | (that's a |         |       |      | (that's a |   |
|-------|------|-----------|---------|-------|------|-----------|---|
| /     | ·    | Monday)   | through | /     | /    | Sunday)   |   |
| month | date |           |         | month | date |           | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |

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 <u>do</u> 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." OUT OF SCOPE (No) IN SCOPE (Yes) Private offices Hospital emergency rooms Free-standing clinics Hospital outpatient departments (non-hospital based) College or university infirmaries Industrial outpatient facilities Groups, partnerships Kaiser, HIP, Mayo Clinic Family planning clinics Neighborhood Health Centers Government-operated clinics Privately operated clinics (VD, maternal & child health, etc.) (except family planning) IN CASE OF DOUBT, ASK: Is that (clinic/facility/institution) hospital based?
    - Is that (clinic/facility/institution) government operated?
  - C. Is that <u>all</u> 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.              |                    | В.       | ٦ |  |
|-----------------|--------------------|----------|---|--|
| Office Location | Ŀ                  | a Scope? |   |  |
|                 | Y                  | es No    |   |  |
| (1)             |                    | 1 0      |   |  |
| (2)             |                    | 10       |   |  |
| (3)             |                    | 10       |   |  |
| (4)             |                    | 10       | - |  |
| TOTAL I         | N-SCOPE LOCATIONS: |          |   |  |

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 <u>days</u> 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<br>Expecte<br><u>patient</u><br>survey | d total<br><u>s</u> during<br>week. | T<br>d | otal<br>urin | day<br>Ig we | B.<br><u>rs</u> in<br>ek. | pra | ctic | e |
|---|-------|--|-------------------------------------|--------|--------------|--------------|---------------------------|-----|------|---|
| APatient Record is to be<br>completed for ALL | ,     | ENTER TO                                 | TAL FROM<br>4-A.                    |        |              |              | 18/                       |     |      |   |
| patients listed on Log. 15                    | 5-17/ |  |                                     | 1      | 2            | 3            | 4                         | 5   | 6    | 7 |
|   |       | 1- 12                                    | PATIENTS                            | A      | A            | A            | A                         | Α   | A    | Α |
| P Detiont Decord is to be                     |       | 13- 25                                   | 19                                  | В      | Ä            | A            | A                         | A   | A    | A |
| completed for every                           |       | 26- 39                                   | 18                                  | С      | В            | Α            | A                         | А   | A    | Α |
| <u>SECOND</u> patient listed                  |       | 40- 52                                   | **                                  | С      | В            | В            | A                         | A   | A    | A |
| on Log.                                       |       | 53- 65                                   | 11                                  | D      | С            | В            | В                         | A   | А    | A |
|   |       | 66- 79                                   | 11                                  | D      | С            | В            | В                         | В   | A    | A |
| CPatient Record is to be                      |       | 80- 92                                   | 11                                  | D      | D            | С            | В                         | В   | В    | В |
| completed for every                           |       | 93-105                                   | "                                   | D      | D            | С            | В                         | В   | В    | В |
| THIRD patient listed                          |       | 106-118                                  | 11                                  | D      | D            | С            | С                         | В   | В    | В |
| on Log.                                       | į     | 119-131                                  | TT .                                | D      | D            | С            | С                         | В   | В    | В |
|   | [     | 132-145                                  | 11                                  | D      | D            | D            | С                         | С   | В    | В |
| *DPatient Record is to be                     |       | 146-158                                  | 11                                  | D      | D            | D            | С                         | С   | В    | В |
| completed for every                           | ľ     | 1 <b>59-1</b> 71                         | 11                                  | D      | D            | D            | С                         | С   | С    | С |
| on Log.                                       | ĺ     | 172-184                                  | TT                                  | D      | D            | D            | С                         | С   | С    | С |
|   |       | 185-197                                  | t1                                  | D      | D            | D            | D                         | D   | D    | D |
|   |       | 198-210                                  | 11                                  | D      | D            | D            | D                         | D   | D    | D |
|   |       | 211+                                     | 17                                  | 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 <u>tenth</u> 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 <u>every</u> page, but completes the Patient Record on every <u>second</u> 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 "O") BELOW.

| FOLIO  |      | No. Lines FOR OFFICE USE ONL<br>Stamped "BEGIN Number patient recon |               |                  |        |
|--------|------|---|---------------|------------------|--------|
| Letter | Numb | er  | ON NEXT LINE" | forms completed. | 10 22/ |
| A      |      |   | $\searrow$    |                  | 24-26/ |
| В      |      |   |               |                  |        |
| с      |      |   |               |                  |        |
| D      |      |   |               |                  |        |

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 | Letter | FOLIO<br>Numb | er | No. Lines<br>Stamped "BEGIN<br>ON NEXT LINE" | FOR OFFICE USE ONLY:<br>Number patient record<br>forms completed |                           |
|----------|--------|---------------|----|--|--|---------------------------|
|          |        |               |    |  |  | 27-31/<br>32-34/          |
|          |        |               |    |  |  | 35 <b>-</b> 39/<br>40-42/ |
|          |        |               |    |  |  | 43-47/<br>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  |
|------|----------|-----------|
|      |          |           |
|      |          |           |
|      |          |           |
|      |          |           |
|      |          |           |
|      |          | - <u></u> |

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                  | 52/    |
|----|--|-----------------------|--------|
| IF | PARTNERSHIP, GROUP, OR OTHER:                      |                       |        |
| A. | Is this a prepaid group practice                   | Yes (ASK [1]) 1<br>No | 53/    |
|    | [1] <u>IF YES TO A</u> : What per cent             |                       |        |
|    | prepaid?   | per cent              | 54-56/ |
| Β. | 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:<br>All physicians in this partnership/group prac | tice                 |
|    | More than one specialty in this partnership/g                | roup 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.<br><u>Full-time</u><br>(35 or more hours/week) | B.<br><u>Part-time</u><br>(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.

COMENTS:



# 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         |  |

| 04:00   | ANTIHISTAMINE DRUGS           |
|---------|-------------------------------|
| 08:00   | ANTI-INFECTIVE AGENTS         |
| 08:04   | Amebacides                    |
| 08:08   | Anthelmintics                 |
| 08:12   | Antibiotics                   |
| 08:12.0 | 2 Aminoglycosides             |
| 08:12.0 | 4 Antifungal Antibiotics      |
| 08:12.0 | 6 Cephalosporins              |
| 08:12.0 | 8 Chloramphenicol             |
| 08:12.1 | 2 Erythromycins               |
| 08:12.1 | 6 Penicillins                 |
| 08:12.2 | 4 Tetracyclines               |
| 08:12.2 | 4 Other Antibiotics           |
| 08:16   | Antituberculosis Agents       |
| 08:18   | Antivirals                    |
| 08:20   | Plasmodicides                 |
| 08:24   | Sulfonamides                  |
| 08:26   | Sulfones                      |
| 08:28   | Treponemicides                |
| 08:32   | Trichomonacides               |
| 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 COAGU-    |
| 20.04   | Antianemia Druge              |
| 20.04   | M Iron Prenarations           |
| 20.04.  | 08 Liver and Stomach          |
| 20.04.  | 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      |
|         | SUBURIERUS                    |

28:24 Sedatives and Hypnotics

| 36:00  | DIAGNOSTIC AGENTS             |
|--------|-------------------------------|
| 36:04  | Adrenocortical Insufficiency  |
| 36:08  | Amyloidosis                   |
| 36:12  | Blood Volume                  |
| 30:10  | Cardiac Eurotion              |
| 36:24  | Circulation Time              |
| 36:25  | (Cystic Fibrosis)             |
| 36:26  | Diabetes Mellitus             |
| 36:28  | Diphtheria                    |
| 36:30  | Drug Hypersensitivity         |
| 36:32  | Fungi                         |
| 36:34  | Galibladder Function          |
| 26:30  | Intesting Absorption          |
| 36.40  | Kidney Function               |
| 36:44  | Liver Function                |
| 36:48  | Lymphogranuloma Venereum      |
| 36:52  | Mumps                         |
| 36:56  | Myasthenia Gravis             |
| 36:60  | Myxedema                      |
| 36:61  | Pancreatic Function           |
| 36.64  | Pheochromocytoma              |
| 36:66  | Pituitary Function            |
| 36:68  | Roentgenography               |
| 36:72  | Scarlet Fèver                 |
| 36:76  | Sweating                      |
| 36:78  | (Thyroid Function)            |
| 36:80  | Trichinosis                   |
| 36:84  | Tuberculosis                  |
| 36:88  | Urine Contents                |
| 40.00  | ELECTROLYTIC, CALORIC, AND    |
| 40.00  | WATER BALANCE                 |
| 40:04  | Acidifying Agents             |
| 40:08  | Alkalinizing Agents           |
| 40:10  | Ammonia Detoxicants           |
| 40:12  | Replacement Solutions         |
| 40:16  | Sodium-Removing Resins        |
| 40:18  | Coloric Agents                |
| 40.20  | Salt and Sugar Substitutes    |
| 40:28  | Diuretics                     |
| 40:36  | Irrigating Solutions          |
| 40:40  | Uricosuric Agents             |
|        |                               |
| 44:00  | ENZYMES                       |
| 49.00  | EXPECTOR ANTS AND COUGH       |
| 40.00  | PREPARATIONS                  |
|        |                               |
| 52:00  | EYE, EAR, NOSE AND THROAT     |
|        | PREPARATIONS                  |
| 52:04  | Anti-Infectives               |
| 52:04. | .04 Antibiotics               |
| 52:04. | .06 Antivirals                |
| 52:04. | 08 Sulionamides               |
| 52:04  | Anti-Inflammatory Agents      |
| 52-10  | Carbonic Anhydrase Inhibitors |
| 52:12  | Contact Lens Solutions        |
| 52:16  | Local Anesthetics             |
| 52:20  | Miotics                       |
| 52:24  | Mydriatics                    |
| 52:28  | Mouth Washes and Gargles      |
| 52:32  | Vasoconstrictors              |
| 52:36  | Unclassified Agents           |
| \$6.00 | CASTROINTESTINAL DRUCS        |
| 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      |

60:00 GOLD COMPOUNDS 64:00 HEAVY METAL ANTAGONISTS 68:00 HORMONES AND SYNTHETIC SUBSTITUTES 68:04 Adrenals 68:08 Androgens 68:12 Contraceptives 68:16 Estrogens 68:18 Gonadotropins 68:20 Insulins and Anti-Diabetic Agents 68:20.08 Insulins 68:24 Parathyroid 68:28 Pituitary 68:32 Progestogens 68:34 Other Corpus Luteum Hormones 68:36 Thyroid and Antithyroid 72:00 LOCAL ANESTHETICS 76:00 OXYTOCICS 78:00 RADIOACTIVE AGENTS 80:00 SERUMS, TOXOIDS AND VACCINES 80:04 Serums 80:08 Toxoids 80:12 Vaccines 84:00 SKIN AND MUCOUS MEMBRANE PREPARATIONS PREPARATIONS 84:04 Anti-Infectives 84:04.04 Antibiotics 84:04.08 Fungicides 84:04.12 Scabicides and Pediculicides 84:04.16 Miss. Local Anti-Infectives 84:06 Anti-Inflammatory Agents 84:08 Antipruritics and Local Artistation and solution and so Protectants 84:24.04 Basic Lotions and Liniments 84:24.08 Basic Oils and Other Solvents 84:24.12 Basic Ointments and Protectants 84:24.16 Basic Powders and Demulcents 84:24.16 Basic Powders and Demulcents
84:28 Keratolytic Agents
84:32 Keratolytic Agents
84:36 Miscellaneous Agents
84:50.04 Depigmenting Agents
84:50.06 Pigmenting Agents
84:50.06 Pigmenting Agents
84:80 Sunscreen Agents 86:00 SPASMOLYTIC AGENTS 88:00 VITAMINS 88:00 VITAMINS 88:04 Vitamin A 88:08 Vitamin B Complex 88:12 Vitamin C 88:16 Vitamin D 88:20 Vitamin D 88:24 Vitamin K Activity 88:28 Multivitamin Preparations 92:00 UNCLASSIFIED THERAPEUTIC AGENTS 94:00 (DEVICES) 96:00 (PHARMACEUTIC AIDS)

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56:24 Lipotropic Agents 56:40 Misc. Gl Drugs

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