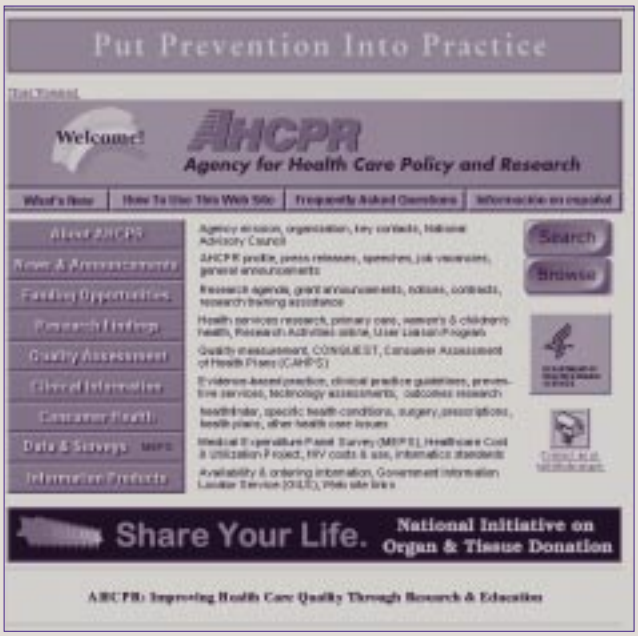
MEPS

Use of Health Care Services, 1996

# Research #7 Findings

**U.S. Department of Health and Human Services**
Public Health Service
Agency for Health Care Policy and Research

# Health Care Information and Electronic Ordering Through the AHCPR Web Site




The Agency for Health Care Policy and Research's Web site—http://www.ahcpr.gov/—makes practical, science-based health care information available in one convenient place.

Buttons correspond to major categories of Web site information, including funding opportunities, research findings, quality assessments, clinical information, consumer health, and data and surveys.

The Web site features an Electronic Catalog to the more than 450 information products generated by AHCPR, with information on how to obtain these resources. Many information products have an electronic ordering form and are mailed free of charge from the AHCPR Clearinghouse within 5 working days.

**http://www.ahcpr.gov/**


## Abstract

This report from the Agency for Health Care Policy and Research presents estimates of health care use for the civilian noninstitutionalized population of the United States during calendar year 1996. Data are derived from the 1996 Medical Expenditure Panel Survey (MEPS) Household Component (HC). Aspects of health care use described in this report include the proportion of people receiving ambulatory medical care in office-based and hospital-based settings, dental care, inpatient hospital care, home health services, and prescription medicines. Specific comparisons are made by selected demographic characteristics—such as age, sex, and race/ethnicity—as well as by health insurance coverage, perceived health status, and whether or not people had a usual source of care. Separate estimates, also are reported for children's use of ambulatory medical and dental services. About three-quarters (74.9 percent) of the population received ambulatory care from a medical provider and 7.3 percent of the population (19.6 million people) had at least one hospital stay during 1996. In general, health care use estimates were highest for elderly people, people in poor health, and those who died during calendar year 1996. The uninsured, both elderly and non-elderly, were less likely to use both ambulatory and inpatient services.



**Suggested citation**

Krauss NA, Machlin S, Kass BL. Use of health care services, 1996. Rockville (MD): Agency for Health Care Policy and Research; 1999. *MEPS Research Findings No. 7*. AHCPR Pub. No. 99-0018.

MEPS

Use of Health Care Services, 1996

# Research #7 Findings

**U.S. Department of Health and Human Services**
Public Health Service
Agency for Health Care Policy and Research

AHCPR Pub. No. 99-0018
March 1999

## Background

The Medical Expenditure Panel Survey (MEPS) is conducted to provide nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. MEPS also includes a nationally representative survey of nursing homes and their residents. MEPS is cosponsored by the Agency for Health Care Policy and Research (AHCPR) and the National Center for Health Statistics (NCHS).

MEPS comprises four component surveys: the Household Component (HC), the Medical Provider Component (MPC), the Insurance Component (IC), and the Nursing Home Component (NHC). The HC is the core survey, and it forms the basis for the MPC sample and part of the IC sample. The separate NHC sample supplements the other MEPS components. Together these surveys yield comprehensive data that provide national estimates of the level and distribution of health care use and expenditures, support health services research, and can be used to assess health care policy implications.

MEPS is the third in a series of national probability surveys conducted by AHCPR on the financing and use of medical care in the United States. The National Medical Care Expenditure Survey (NMCES) was conducted in 1977, the National Medical Expenditure Survey (NMES) in 1987. Beginning in 1996, MEPS continues this series with design enhancements and efficiencies that provide a more current data resource to capture the changing dynamics of the health care delivery and insurance system.

The design efficiencies incorporated into MEPS are in accordance with the Department of Health and Human Services (DHHS) Survey Integration Plan of June 1995, which focused on consolidating DHHS surveys, achieving cost efficiencies, reducing respondent burden, and enhancing analytical capacities. To accommodate these goals, new MEPS design features include linkage with the National Health Interview Survey (NHIS), from which the sample for the MEPS HC is drawn, and enhanced longitudinal data collection for core survey components. The MEPS HC augments NHIS by selecting a sample of NHIS respondents, collecting additional data on their health care expenditures, and linking these data with additional information collected from the respondents' medical providers, employers, and insurance providers.

## Household Component

The MEPS HC, a nationally representative survey of the U.S. civilian noninstitutionalized population, collects medical expenditure data at both the person and household levels. The HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, satisfaction with care, health insurance coverage, income, and employment.

The HC uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2½-year period. Using computer-assisted personal interviewing (CAPI) technology, data on medical expenditures and use for 2 calendar years are collected from each household. This series of data collection rounds is launched each subsequent year on a new sample of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of health care expenditures.

The sampling frame for the MEPS HC is drawn from respondents to NHIS, conducted by NCHS. NHIS provides a nationally representative sample of the U.S. civilian noninstitutionalized population, with oversampling of Hispanics and blacks.

## Medical Provider Component

The MEPS MPC supplements and validates information on medical care events reported in the MEPS HC by contacting medical providers and pharmacies identified by household respondents. The MPC sample includes all hospitals, hospital physicians, home health agencies, and pharmacies reported in the

HC. Also included in the MPC are all office-based physicians:

- Providing care for HC respondents receiving Medicaid.
- Associated with a 75-percent sample of households receiving care through an HMO (health maintenance organization) or managed care plan.
- Associated with a 25-percent sample of the remaining households.

Data are collected on medical and financial characteristics of medical and pharmacy events reported by HC respondents, including:

- Diagnoses coded according to ICD-9 (9th Revision, International Classification of Diseases) and DSM-IV (Fourth Edition, *Diagnostic and Statistical Manual of Mental Disorders*).
- Physician procedure codes classified by CPT-4 (Current Procedural Terminology, Version 4).
- Inpatient stay codes classified by DRG (diagnosis-related group).
- Prescriptions coded by national drug code (NDC), medication names, strength, and quantity dispensed.
- Charges, payments, and the reasons for any difference between charges and payments.

The MPC is conducted through telephone interviews and mailed survey materials.

## Insurance Component

The MEPS IC collects data on health insurance plans obtained through employers, unions, and other sources of private health insurance. Data obtained in the IC include the number and types of private insurance plans offered, benefits associated with these plans, premiums, contributions by employers and employees, and employer characteristics.

Establishments participating in the MEPS IC are selected through four sampling frames:

- A list of employers or other insurance providers identified by MEPS HC respondents who report having private health insurance at the Round 1 interview.
- A Bureau of the Census list frame of private-sector business establishments.
- The Census of Governments from the Bureau of the Census.
- An Internal Revenue Service list of the self-employed.

To provide an integrated picture of health insurance, data collected from the first sampling frame (employers and other insurance providers) are linked back to data provided by the MEPS HC respondents. Data from the other three sampling frames are collected to provide annual national and State estimates of the supply of private health insurance available to American workers and to evaluate policy issues pertaining to health insurance.

The MEPS IC is an annual panel survey. Data are collected from the selected organizations through a prescreening telephone interview, a mailed questionnaire, and a telephone followup for nonrespondents.

## Nursing Home Component

The 1996 MEPS NHC was a survey of nursing homes and persons residing in or admitted to nursing homes at any time during calendar year 1996. The NHC gathered information on the demographic characteristics, residence history, health and functional status, use of services, use of prescription medications, and health care expenditures of nursing home residents. Nursing home administrators and designated staff also provided information on facility size, ownership, certification status, services provided, revenues and expenses, and other facility characteristics. Data on the income, assets, family relationships, and caregiving services for sampled nursing home residents were obtained from next-of-kin or other knowledgeable persons in the community.

The 1996 MEPS NHC sample was selected using a two-stage stratified probability design. In the first stage, facilities were selected; in the second stage, facility residents were sampled, selecting both persons in residence on January 1, 1996, and those admitted during the period January 1 through December 31.

The sampling frame for facilities was derived from the National Health Provider Inventory, which is updated periodically by NCHS. The MEPS NHC data were collected in person in three rounds of data collection over a 1½-year period using the CAPI system. Community data were collected by telephone using computer-assisted telephone interviewing (CATI) technology. At the end of three rounds of data collection,

the sample consisted of 815 responding facilities, 3,209 residents in the facility on January 1, and 2,690 eligible residents admitted during 1996.

## Survey Management

MEPS data are collected under the authority of the Public Health Service Act. They are edited and published in accordance with the confidentiality provisions of this act and the Privacy Act. NCHS provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports and microdata files. Summary reports are released as printed documents and electronic files. Microdata files are released on CD-ROM and/or as electronic files.

Printed documents and CD-ROMs are available through the AHCPR Publications Clearinghouse. Write or call:

AHCPR Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547
Silver Spring, MD 20907
800-358-9295
410-381-3150 (callers outside the United States only)
888-586-6340 (toll-free TDD service; hearing impaired only)

Be sure to specify the AHCPR number of the document or CD-ROM you are requesting. Selected electronic files are available through the Internet on the AHCPR Web site:

**http://www.ahcpr.gov/**

On the AHCPR Web site, under Data and Surveys, click the MEPS icon.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Cost and Financing Studies, Agency for Health Care Policy and Research, 2101 East Jefferson Street, Suite 500, Rockville, MD 20852 (301-594-1406).

# Table of Contents

Introduction . . . . . 1
Ambulatory Care . . . . . 1
Dental Services . . . . . 3
Ambulatory Medical and Dental Care for Children . . . . . 4
Use of Inpatient Hospital-Based Services . . . . . 5
Home Health Care . . . . . 6
Prescription Medicines . . . . . 6
Summary . . . . . 7
References . . . . . 8

**Figures showing:**

1. Type of provider for people with an ambulatory care visit . . . . . 2
2. Type of provider within age groups for people with an ambulatory care visit . . . . . 2
3. Selected characteristics of people with a dental visit . . . . . 4

**Tables showing selected types of care by population characteristics:**

1. Ambulatory medical care by setting . . . . . 9
2. Ambulatory medical and dental care for children . . . . . 11
3. Inpatient hospital services . . . . . 13
4. Formal home health care and prescription medicines . . . . . 15

**Technical Appendix**

Utilization Variables . . . . . 17
Event Types . . . . . 17
Population Characteristics . . . . . 18
Characteristics of Parents . . . . . 20
Sample Design and Accuracy of Estimates . . . . . 20
Rounding . . . . . 21
Standard Error Tables . . . . . 22

# Use of Health Care Services, 1996

by Nancy A. Krauss, M.S., Steven Machlin, M.S., and Barbara L. Kass, M.P.H., C.H.E.S., Agency for Health Care Policy and Research

## Introduction

Examining variations in the use of health care services is an important means for evaluating the adequacy of access to care across the population. Underutilization of health care services can be the result of limited access to care because of the lack of adequate health insurance or financial resources, or limited availability of services in certain areas. Comparing patterns of use by subpopulations presumed to require more care—such as the elderly, those in poor health, or the terminally ill—with the general population is one way of determining whether those most in need of care actually receive it.

**During 1996, three-quarters of the population had an ambulatory care visit to a medical provider.**

This report describes several aspects of health care use in the United States during calendar year 1996, including the proportion of people receiving ambulatory medical care in office-based and hospital-based settings, dental care, inpatient hospital stays, home health services, and prescription medicines. Specific comparisons are made by age, sex, race/ethnicity, perceived health status, health insurance coverage, usual source of care, and metropolitan vs. nonmetropolitan residence. Separate estimates also are reported for children's use of ambulatory medical and dental services.

The health care use estimates presented in this report are for the civilian noninstitutionalized population of the United States during calendar year 1996. The estimates are derived from data provided by household respondents in the 1996 Medical Expenditure Panel Survey (MEPS) Household Component (HC). A technical appendix at the end of this report provides detailed descriptions of the MEPS HC, including data collection methods, data editing, sample size, and statistical procedures used for deriving estimates.

## Ambulatory Care

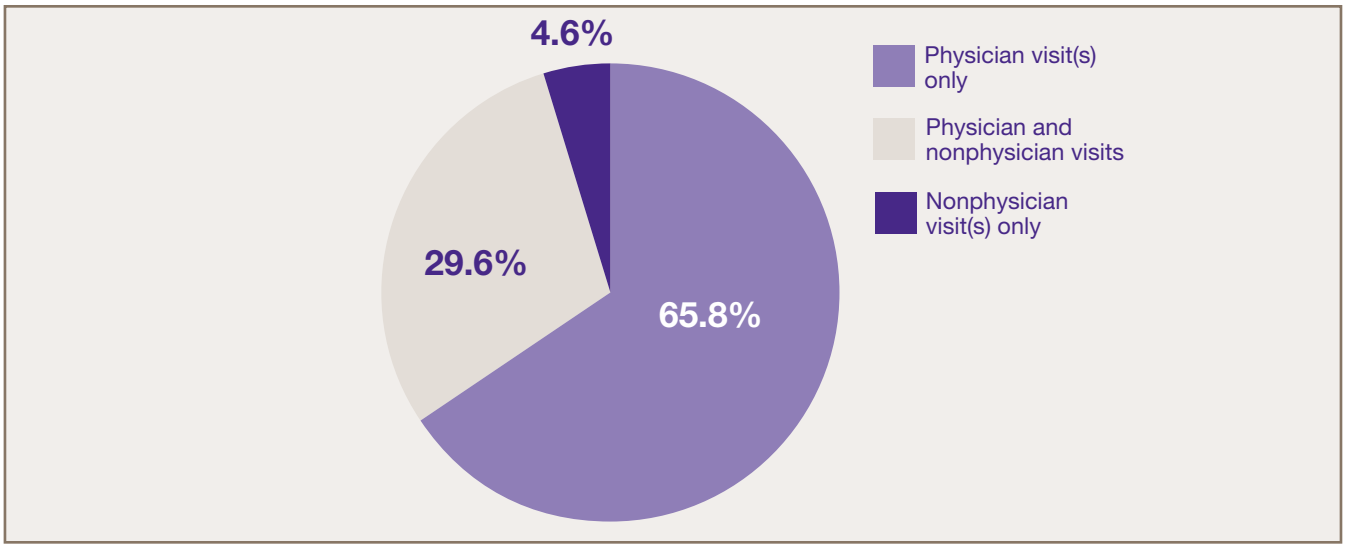
During 1996, three-quarters (74.9 percent) of the U.S. civilian noninstitutionalized population received ambulatory care from at least one medical provider (physician or nonphysician) in an office-based or hospital-based setting (Table 1). For people using these services, the mean number of visits per person was 7.1, while the median number of visits (not shown in table) was 4.0. While 72.0 percent of Americans visited an office-based setting, only one-quarter (24.6 percent) of the population received ambulatory hospital-based services, which include visits to hospital outpatient clinics, emergency room visits, and hospital admissions that did not result in an overnight stay. The mean number of office-based visits (6.5) was more than twice as large as the mean number of hospital-based visits (2.7) for people with those types of ambulatory visits. Approximately 21.7 percent of people received care in both hospital-based and office-based settings (not shown in table).

### Types of Office-Based Providers

Figure 1 displays the types of health care providers who gave care to the 72.0 percent of the population who had at least one office-based visit. Of this group, most people (95.4 percent) received medical care from a physician: 65.8 percent received care from physician providers only and 29.6 percent received care from both physicians and nonphysician providers. Only 4.6 percent received health care exclusively from nonphysician providers, which include nurses and nurse practitioners, physical and occupational therapists, podiatrists, optometrists, chiropractors, and mental health workers.

The type of provider seen varies dramatically by age (Figure 2). The percent of people who saw medical doctors for all their visits decreased with age, from 82.0 percent for children under age 6 to 57.1 percent for people age 65 and over. In contrast, the percent of people who saw physicians in some visits and

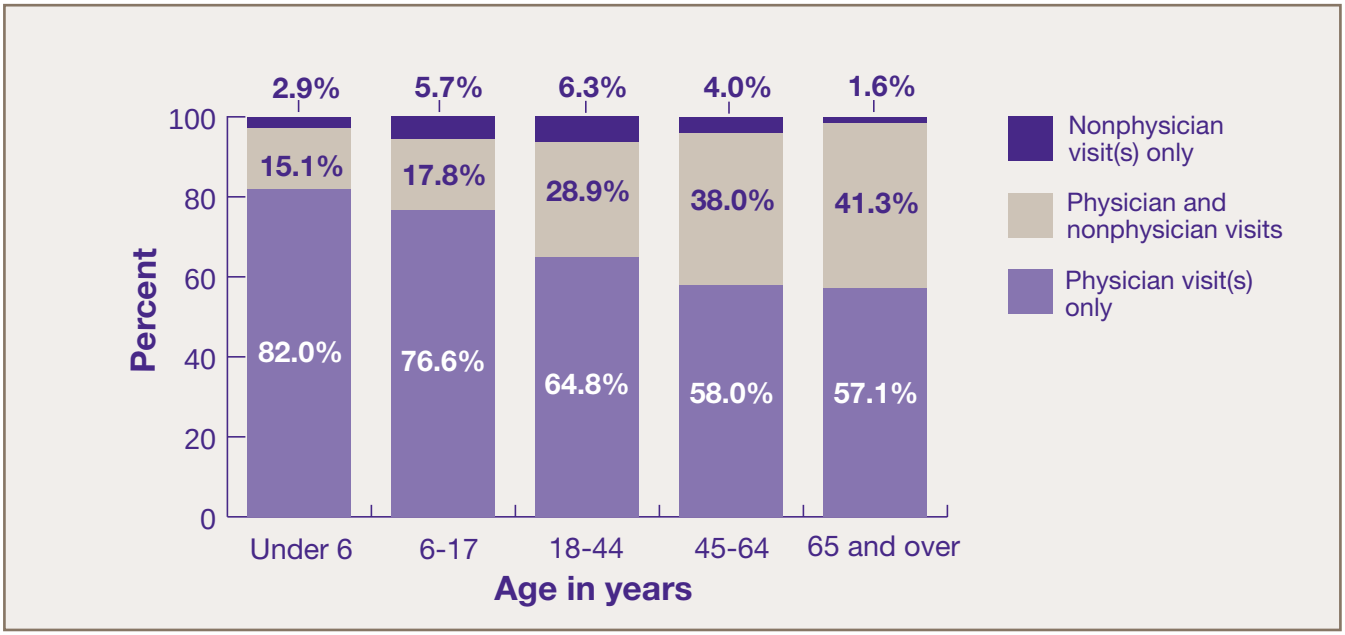
## Figure 1. Percent distribution of people with at least 1 ambulatory care office visit, by type of provider: United States, 1996




**Note:** Restricted to civilian noninstitutionalized population. Nonphysician providers include nurses and nurse practitioners, chiropractors, podiatrists, optometrists, physical and occupational therapists, and mental health workers.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Figure 2. Percent distribution of people with at least 1 ambulatory care office visit, by type of provider, within age groups: United States, 1996




**Note:** Restricted to civilian noninstitutionalized population. Nonphysician providers include nurses and nurse practitioners, chiropractors, podiatrists, optometrists, physical and occupational therapists, and mental health workers. Reflects age on 12/31/96 except that age at last interview was used for persons who were not in the survey on 12/31/96. Total for ages 6-17 does not add to 100.0 because of rounding.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

nonphysicians in other visits rose from 15.1 percent for young children to about 41.3 percent for the elderly population. The proportion of people who saw only nonphysician providers was small in all age groups (6.3 percent or less).

## Demographic Characteristics

As shown in Table 1, children under age 6 and persons age 65 and over were the most likely to have received ambulatory care (85.1 percent and 89.7 percent, respectively) in 1996. Among those who used ambulatory care, older age groups (45-64 and 65 and over) had more ambulatory visits than younger people, regardless of the setting.

Overall, men were less likely than women to have received any ambulatory medical services (69.2 percent and 80.4 percent, respectively). This trend is observed for both office-based and hospital-based settings. Among those who received ambulatory care, there was no difference in the mean number of visits for men and women in hospital-based settings, but women averaged about one more visit than men in office-based settings.

Use of ambulatory care was significantly lower among blacks and Hispanics (65.9 percent and 64.0 percent, respectively) compared with the group of whites and people of other racial/ethnic backgrounds (78.0 percent). Furthermore, among those who received any ambulatory care in 1996, the mean number of visits also was higher for the group of whites and others (7.5) than for blacks (5.6) and Hispanics (6.0). People in the white and other group were more likely than blacks or Hispanics to have received either office-based or hospital-based medical care, but smaller racial/ethnic differences were observed in hospital-based settings.

## Other Characteristics

Health care use estimates for the approximately 1.9 million civilian noninstitutionalized persons who died during calendar year 1996 are included in Table 1. Indicative of higher health care use rates during the last months of life, the mean number of ambulatory visits for people who died is about $2^1/2$ times higher than for the rest of the population (19.0 visits compared with 7.0 visits for people who had at least one visit). Although people who died in 1996 were just as likely as the rest of the population to have used office-based services, they were almost twice as likely to have had at least one hospital-based visit (47.0 percent) compared with the rest of the population (24.4 percent).

Higher ambulatory medical care use, both in terms of the likelihood of use and the number of visits, was associated with fair or poor health for both the elderly and the non-elderly (Table 1). Elderly people in fair or poor health were significantly more likely to use ambulatory care than any other age group, regardless of health status.

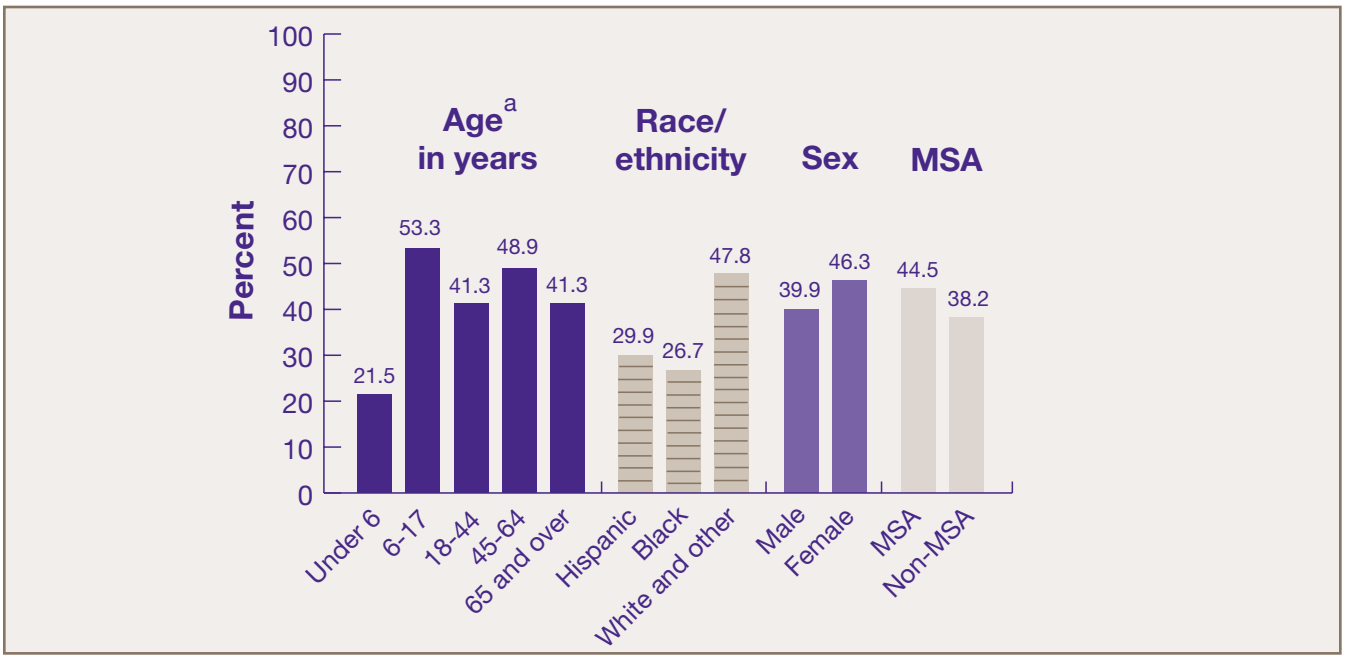
Having a usual source of care also was associated with higher use. People without a usual source of care were less likely to have had any ambulatory medical care in 1996, regardless of the type of setting. The mean number of visits to office-based providers also was significantly lower for people lacking a usual source of care (5.1 visits) than for those who reported a usual source of care (6.7 visits). Having a usual source of care also increased the likelihood of using hospital-based services (26.6 percent, compared with 15.8 percent for those without a usual source of care) but had no relationship to the number of hospital-based visits.

Overall, people under age 65 who had public or private health insurance coverage during the first half of 1996 were more likely than their uninsured counterparts to use ambulatory medical services. Among people under 65 who reported at least one ambulatory visit, those covered only by public insurance had significantly more ambulatory visits (8.7) than either the uninsured (5.1) or persons with private coverage (6.5). For elderly people, having coverage in addition to Medicare was not associated with differences in the use of ambulatory services.

# Dental Services

In 1996, approximately 115 million Americans, or 43.2 percent of the population (not shown in table), received dental care. (Dental care includes visits to general dentists, dental hygienists, dental technicians, endodontists, orthodontists, and periodontists.) Figure 3 shows the proportion of people who had at least one dental visit by selected demographic characteristics. Children ages 6-17 were more likely than any other age group to have had a dental visit. Men were less likely than women to have received any dental care in 1996 (39.9 percent and 46.3 percent, respectively). Blacks (26.7 percent) and Hispanics (29.9 percent) were less likely than whites and others (47.8 percent) to have received dental care in 1996. People not living in

**Figure 3. Percent of people with at least 1 dental visit, by age, race/ethnicity, sex, and metropolitan statistical area (MSA): United States, 1996**




[a]Reflects age on 12/31/96 except that age at last interview was used for persons who were not in the survey on 12/31/96.

**Note:** Restricted to civilian noninstitutionalized population. Dental visits include visits to general dentists, dental hygienists, orthodontists, periodontists, and endodontists in office-based or outpatient hospital settings..

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996 (Rounds 1 and 2).

metropolitan statistical areas (MSAs) were less likely than those who did live in MSAs to receive dental care.

## Ambulatory Medical and Dental Care for Children

Use of health care services is critical not only for children's health, but for their overall well-being and development. Table 2 shows the use of ambulatory medical and dental care by selected demographic, health, and family characteristics for children under age 18.

### Ambulatory Medical Care

Approximately three-quarters (74.2 percent) of children under age 18 received ambulatory medical care in 1996, averaging a mean number of 4.2 visits for children with at least one visit. The median number of visits for children with at least one visit was 2.0 (not shown in table). Children under 6 (85.1 percent) were more likely than children ages 6-12 (69.8 percent) or 13-17 (67.1 percent) to have seen a medical provider in an ambulatory setting. Although boys and girls were equally likely to have received ambulatory medical services, boys had a higher average number of visits (4.5, compared to 3.9 for girls). Children in the white and other group were more likely to have had at least one provider visit in 1996 (78.3 percent) compared with either black children (64.3 percent) or Hispanic children (65.5 percent). Furthermore, among those who did receive ambulatory care, blacks and Hispanics averaged fewer visits (3.0 and 3.5, respectively) than children who were classified as white and other (4.5). Children living in MSAs were about as likely as their counterparts outside MSAs to have received ambulatory services during 1996 (74.9 percent and 71.3 percent, respectively).

Perceived health status was associated with both the likelihood of receiving any care and the number of provider visits. Most children (90.3 percent) reported as being in fair or poor health received at least one provider visit during 1996, significantly more than the percent for children reported as being in excellent, very good, or good health (73.6 percent). Children in fair or poor health averaged 5.2 more ambulatory provider visits than children in excellent, very good, or good health.

Having a usual source of care was associated with a nearly twofold increase in the likelihood that a child received some ambulatory medical services in 1996 (77.5 percent versus 43.3 percent). Furthermore, children with a usual source of care had a mean of 1.6 more visits than children lacking a usual source of care (4.3 versus 2.7).

Like the general population, children with public and private health insurance coverage made more use of ambulatory services—both in terms of the likelihood of use and the number of visits—than uninsured children. Among children with at least one visit, having two parents in the home is associated with a higher average number of visits, but children living with neither parent were likely to have more visits on average (5.1) than children living either with both parents (4.4) or one parent (3.5).

The level of parents' education was significantly associated with children's ambulatory care use. In general, a higher level of parental education was associated with an increased likelihood that a child had at least one ambulatory visit in 1996. Moreover, children living in a household where neither parent attended at least some college had significantly fewer provider visits than children living in a household where at least one parent attended or completed college.

### Dental Care

Table 2 shows that, overall, only 42.7 percent of children under age 18 received dental care in 1996. However, about half of children ages 6-12 (54.8 percent) and ages 13-17 (51.2 percent) had at least one dental visit. Children under age 6 were the least likely (only 21.5 percent) to receive dental care. For those receiving any dental care, older children (ages 13-17) averaged 1.2 visits more than children ages 6-12 and 2.1 visits more than the youngest age group (under 6). This differential is likely attributable to more orthodontic visits among children ages 13-17. Dental care use was not different for boys than for girls, nor were any differences noted by place of residence (MSA versus non-MSA). Children grouped as white and other were more likely than either black or Hispanic children to have had a dental visit: 48.6 percent for the white and other group, compared with 28.1 percent for blacks and 30.4 percent for Hispanics. Children in good health and those in poor health were about equally likely to have received any dental care (44.8 percent and 39.2 percent, respectively). However, of those who had a visit, children in good health averaged more visits (2.7) than children in poor health (2.0).

Children living with both parents were more likely to have had dental care (47.6 percent) than children living with only one parent (37.1 percent) or children living with neither parent (29.4 percent). As with children's ambulatory medical care, increases in parents' education were associated with an increase in the likelihood of receiving dental services. Therefore, children living in a household with a parent who had completed college were almost twice as likely to see a dental provider as those living in a household where neither parent had completed high school (59.5 percent and 27.4 percent, respectively).

## Use of Inpatient Hospital-Based Services

Table 3 shows that 7.3 percent of the total population (approximately 19.6 million Americans) had at least one inpatient hospital stay during calendar year 1996. The mean number of nights spent in the hospital per stay was 6.0. The likelihood of an inpatient stay was lowest for children ages 6-17 (2.1 percent) and highest for people age 65 and over (17.6 percent). Among those who had an inpatient stay, people age 45 and over averaged 6.9 nights per stay, significantly higher than children under age 18, who averaged about 5 nights per stay.

**About 19.6 million Americans had at least one inpatient hospital stay during 1996.**

While women (8.5 percent) were more likely than men (6.1 percent) to have at least one overnight hospital stay, stays for men were about 2 nights longer, on average, than those for women: 7.1 nights per stay for men compared with 5.1 nights per stay for women. There were no observed racial/ethnic differences

regarding the likelihood of a hospital stay, but blacks averaged more nights per stay (7.7) than Hispanics (5.2).

Nearly two-thirds (62.4 percent) of people who died during calendar year 1996 had a hospitalization during the year, a substantially higher proportion than for the rest of the population (6.9 percent). Moreover, people who died in 1996 spent about twice as many nights in the hospital per stay (12.0) as the rest of the population (5.4).

Poor health increased the likelihood of an inpatient stay as well as the average number of nights per stay for both the elderly and the non-elderly population. Having a usual source of care was also associated with a higher likelihood of an inpatient stay during 1996 (7.5 percent, compared with 4.1 percent for those lacking a usual source of care).

For the population under age 65, people covered only by public insurance were almost twice as likely (10.2 percent) as those with private health insurance (5.2 percent) and 2 1/2 times as likely as the uninsured population (3.7 percent) to have had a hospital stay. There were no significant differences in the mean number of nights per stay by type of insurance coverage for people who had a hospital stay.

Similarly, people age 65 and over who had other public insurance coverage in addition to Medicare were more likely to have had a hospital stay than elderly people with only Medicare or Medicare and private insurance. However, for people with at least one stay, having insurance in addition to Medicare was not associated with significant differences in the mean number of nights per stay.

Elderly people with Medicare and private insurance were less likely to have an inpatient stay (17.0 percent) and averaged fewer nights in the hospital per stay (6.4 nights) than those with Medicare and other public insurance: 22.4 percent of the latter group had at least one hospital stay and averaged 8.2 nights per stay.

## Home Health Care

During 1996, 2.7 percent of the population, approximately 7.2 million Americans, received home health care provided by hospitals, home health agencies, nursing homes, or self-employed individuals (Table 4).

Approximately 13.8 percent of the elderly population received home health care, substantially more than any other age group. Among the elderly, 16.0 percent of women received home health services, significantly more than men (10.9 percent). For both the elderly and non-elderly, racial/ethnic differences were not significant. There were no observed differences in home health care use by place of residence among younger people, but elderly people not residing in MSAs were more likely to receive home health care (16.6 percent) than those living in MSAs (13.0 percent).

The likelihood of receiving home health care was substantially hini0( aPof nn,crliopeople) 2

## References

Cohen J. Design and methods of the Medical Expenditure Panel Survey Household Component. Rockville (MD): Agency for Health Care Policy and Research; 1997. *MEPS Methodology Report No. 1*. AHCPR Pub. No. 97-0026.

Cohen JW, Monheit AC, Beauregard KM, et al. The Medical Expenditure Panel Survey: a national health information resource. Inquiry 1996;33:373-89.

Cohen S. Sample design of the 1996 Medical Expenditure Panel Survey Household Component. Rockville (MD): Agency for Health Care Policy and Research; 1997. *MEPS Methodology Report No. 2*. AHCPR Pub. No. 97-0027.

Haupt BJ. Characteristics of hospice care users: data from the 1996 National Home and Hospice Care Survey. Hyattsville (MD): National Center for Health Statistics; 1998. *Advance Data From Vital and Health Statistics,* No. 299. DHHS Pub. No. (PHS) 98-1250.

Vistnes JP, Monheit AC. Health insurance status of the U.S. civilian noninstitutionalized population: 1996. Rockville (MD): Agency for Health Care Policy and Research; 1997. *MEPS Research Findings No. 1*. AHCPR Pub. No. 97-0030.

## Table 1. Use of ambulatory medical care, by setting and selected population characteristics: United States, 1996

| Population characteristics | Total population in thousands | Ambulatory medical care setting | | | | | |
|---|---|---|---|---|---|---|---|
| | | All settings[a] | | Office based | | Hospital based[b] | |
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| Total | [i]268,130 | 74.9 | 7.1 | 72.0 | 6.5 | 24.6 | 2.7 |
| **Age in years[d]** | | | | | | | |
| Under 6 | 23,843 | 85.1 | 4.4 | 82.8 | 4.1 | 22.0 | 1.7 |
| 6-17 | 47,693 | 68.7 | 4.0 | 66.0 | 3.8 | 16.1 | 1.7 |
| 18-44 | 108,796 | 68.7 | 6.7 | 65.0 | 6.3 | 21.9 | 2.3 |
| 45-64 | 54,451 | 79.1 | 9.0 | 76.8 | 8.0 | 28.8 | 3.3 |
| 65 and over | 33,347 | 89.7 | 10.6 | 88.4 | 9.2 | 40.5 | 3.4 |
| **Sex** | | | | | | | |
| Male | 131,148 | 69.2 | 6.4 | 65.7 | 5.9 | 22.1 | 2.7 |
| Female | 136,982 | 80.4 | 7.7 | 78.1 | 7.0 | 26.9 | 2.6 |
| **Race/ethnicity** | | | | | | | |
| Hispanic | 29,948 | 64.0 | 6.0 | 60.3 | 5.7 | 18.9 | 2.3 |
| Black | 33,576 | 65.9 | 5.6 | 62.2 | 5.0 | 20.4 | 2.8 |
| White and other | 204,606 | 78.0 | 7.5 | 75.4 | 6.8 | 26.1 | 2.7 |
| **Metropolitan statistical area (MSA)** | | | | | | | |
| MSA | 215,087 | 75.1 | 7.1 | 72.3 | 6.6 | 23.7 | 2.6 |
| Non-MSA | 53,044 | 74.1 | 7.0 | 71.1 | 6.2 | 28.2 | 2.8 |
| **Vital status (as of 12/31/96)[e]** | | | | | | | |
| Alive | 266,261 | 74.9 | 7.0 | 72.0 | 6.4 | 24.4 | 2.6 |
| Deceased | 1,870 | 78.0 | 19.0 | 74.4 | 15.9 | 47.0 | — |
| **Perceived health status[f]** | | | | | | | |
| Under age 65: | | | | | | | |
| Excellent, very good, or good | 211,109 | 71.5 | 5.8 | 68.5 | 5.4 | 20.6 | 2.2 |
| Fair or poor | 21,347 | 87.6 | 13.0 | 84.3 | 11.6 | 42.3 | 3.7 |
| Age 65 and over: | | | | | | | |
| Excellent, very good, or good | 23,098 | 88.1 | 9.7 | 87.1 | 8.5 | 38.8 | 3.0 |
| Fair or poor | 8,423 | 94.8 | 13.3 | 92.8 | 11.3 | 45.3 | 4.5 |
| **Had usual source of care[g]** | | | | | | | |
| Yes | 217,731 | 80.8 | 7.4 | 78.4 | 6.7 | 26.6 | 2.7 |
| No | 46,319 | 49.3 | 5.3 | 44.4 | 5.1 | 15.8 | 2.3 |

*Continued*

## Table 1. Use of ambulatory medical care, by setting and selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Total population in thousands | Ambulatory medical care setting | | | | | |
|---|---|---|---|---|---|---|---|
| | | All settings[a] | | Office based | | Hospital based[b] | |
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Health insurance status[h]** | | | | | | | |
| Under age 65: | | | | | | | |
| Any private | 162,342 | 77.2 | 6.5 | 74.7 | 6.0 | 22.4 | 2.5 |
| Public only | 26,342 | 76.2 | 8.7 | 72.4 | 7.9 | 30.6 | 3.0 |
| Uninsured | 44,112 | 55.7 | 5.1 | 50.7 | 4.8 | 18.6 | 2.1 |
| Age 65 and over: | | | | | | | |
| Medicare only | 8,479 | 88.2 | 9.4 | 86.7 | 8.0 | 37.0 | 3.6 |
| Medicare and private | 19,501 | 90.9 | 11.2 | 89.8 | 9.7 | 42.0 | 3.4 |
| Medicare and other public | 3,222 | 89.6 | 11.0 | 88.5 | 9.8 | 41.8 | 3.0 |

[a]Includes all care received in person from physician and nonphysician providers.

[b]Includes outpatient visits, emergency room visits, and same-day hospital discharges.

[c]For persons with 1 or more visits.

[d]Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[e]Does not include persons who left the community and died in an institution.

[f]Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[g]Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[h]Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[i]The total population estimate represents the overall eligible civilian noninstitutionalized population over the course of 1996 rather than being a point-in-time estimate.

—Sample size is too small to support reliable estimation.

**Note:** Restricted to civilian noninstitutionalized population. Numbers may not add to totals due to rounding.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table 2. Use of ambulatory medical care and dental care by children under age 18, by selected population characteristics: United States, 1996

| Population characteristics | Total population in thousands | Ambulatory medical care[a] | | Dental care[b] | |
|---|---|---|---|---|---|
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Total** | [j]71,536 | 74.2 | 4.2 | 42.7 | 2.7 |
| **Age in years[d]** | | | | | |
| Under 6 | 23,843 | 85.1 | 4.4 | 21.5 | 1.6 |
| 6-12 | 28,363 | 69.8 | 3.6 | 54.8 | 2.5 |
| 13-17 | 19,330 | 67.1 | 4.6 | 51.2 | 3.7 |
| **Sex** | | | | | |
| Male | 36,989 | 74.0 | 4.5 | 41.6 | 2.6 |
| Female | 34,548 | 74.4 | 3.9 | 43.9 | 2.8 |
| **Race/ethnicity** | | | | | |
| Hispanic | 10,628 | 65.5 | 3.5 | 30.4 | 2.2 |
| Black | 11,188 | 64.3 | 3.0 | 28.1 | 1.8 |
| White and other | 49,720 | 78.3 | 4.5 | 48.6 | 2.9 |
| **Metropolitan statistical area (MSA)** | | | | | |
| MSA | 57,145 | 74.9 | 4.2 | 43.0 | 2.8 |
| Non-MSA | 14,391 | 71.3 | 4.0 | 41.6 | 2.5 |
| **Perceived health status[e]** | | | | | |
| Excellent, very good, or good | 65,670 | 73.6 | 4.0 | 44.8 | 2.7 |
| Fair or poor | 2,679 | 90.3 | 9.2 | 39.2 | 2.0 |
| **Had usual source of care[f]** | | | | | |
| Yes | 64,342 | 77.5 | 4.3 | n/a | n/a |
| No | 5,897 | 43.3 | 2.7 | n/a | n/a |
| **Health insurance status[g]** | | | | | |
| Any private | 44,411 | 79.2 | 4.5 | n/a | n/a |
| Public only | 13,690 | 70.9 | 4.1 | n/a | n/a |
| Uninsured | 10,345 | 57.8 | 3.0 | n/a | n/a |
| **Number of parents in home[h]** | | | | | |
| 2 parents | 50,612 | 76.4 | 4.4 | 47.6 | 2.8 |
| 1 parent | 15,944 | 68.7 | 3.5 | 37.1 | 2.1 |
| No parent | 1,893 | 66.4 | 5.1 | 29.4 | — |

*Continued*

## Table 2. Use of ambulatory medical care and dental care by children under age 18, by selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Total population in thousands | Ambulatory medical care[a] | | Dental care[b] | |
|---|---|---|---|---|---|
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Highest education of either parent[i]** | | | | | |
| Less than high school | 9,269 | 64.8 | 3.4 | 27.4 | 2.1 |
| High school | 20,722 | 68.8 | 3.6 | 40.0 | 2.3 |
| Some college | 16,295 | 75.5 | 4.5 | 43.9 | 2.8 |
| College | 20,092 | 84.1 | 4.8 | 59.5 | 3.1 |

[a] Includes all care received in person from physician and nonphysician providers in office-based care, outpatient department, and emergency room settings. Also includes same-day hospital discharges.

[b] Includes general dentists, dental hygienists, orthodontists, periodontists, and endodontists in office-based or outpatient hospital settings.

[c] For children with 1 or more visits.

[d] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[e] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 68,509,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.2 percent missing data due to item nonresponse.

[f] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 70,413,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.2 percent missing data due to item nonresponse.

[g] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[h] Number of parents in home was collected during Round 1 and refers to the number of parents in the home during the first half of 1996; there were 181 children living with neither parent. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[i] Highest education of either parent was collected during Round 1 and refers to the highest education level of either parent during the first half of 1996. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[j] The total population estimate represents the overall eligible civilian noninstitutionalized population over the course of 1996 rather than being a point-in-time estimate.

n/a Estimates omitted because usual source of care and health insurance status refer only to medical care and insurance for medical care.

—Sample size is too small to support reliable estimation.

**Note:** Restricted to noninstitutionalized children who were under age 18 on 12/31/96 or at the time of their last interview during 1996 (unless otherwise specified). Numbers may not add to totals due to rounding.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table 3. Use of inpatient hospital services, by selected population characteristics: United States, 1996

| Population characteristics | Total population in thousands | Percent with at least 1 stay[a] | Total stays in thousands | Mean number of nights per stay[b] |
|---|---|---|---|---|
| **Total** | [h]268,130 | 7.3 | 26,528 | 6.0 |
| **Age in years[c]** | | | | |
| Under 6 | 23,843 | 8.8 | 2,599 | 5.2 |
| 6-17 | 47,693 | 2.1 | 1,291 | 5.3 |
| 18-44 | 108,796 | 6.2 | 8,145 | 4.8 |
| 45-64 | 54,451 | 7.1 | 5,598 | 6.9 |
| 65 and over | 33,347 | 17.6 | 8,894 | 6.9 |
| **Sex** | | | | |
| Male | 131,148 | 6.1 | 11,534 | 7.1 |
| Female | 136,982 | 8.5 | 14,993 | 5.1 |
| **Race/ethnicity** | | | | |
| Hispanic | 29,948 | 6.8 | 2,576 | 5.2 |
| Black | 33,576 | 7.0 | 3,041 | 7.7 |
| White and other | 204,606 | 7.4 | 20,910 | 5.8 |
| **Metropolitan statistical area (MSA)** | | | | |
| MSA | 215,087 | 7.1 | 20,267 | 6.2 |
| Non-MSA | 53,044 | 8.1 | 6,260 | 5.3 |
| **Vital status (as of 12/31/96)[d]** | | | | |
| Alive | 266,261 | 6.9 | 24,168 | 5.4 |
| Deceased | 1,870 | 62.4 | 2,359 | 12.0 |
| **Perceived health status[e]** | | | | |
| Under age 65: | | | | |
| Excellent, very good, or good | 211,109 | 4.5 | 11,191 | 4.5 |
| Fair, or poor | 21,347 | 15.0 | 5,351 | 6.8 |
| Age 65 and over: | | | | |
| Excellent, very good, or good | 23,098 | 13.8 | 4,309 | 6.1 |
| Fair or poor | 8,423 | 27.6 | 4,006 | 7.6 |
| **Had usual source of care[f]** | | | | |
| Yes | 217,731 | 7.5 | 22,093 | 5.3 |
| No | 46,319 | 4.1 | 2,479 | 8.3 |

*Continued*

## Table 3. Use of inpatient hospital services, by selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Total population in thousands | Percent with at least 1 stay[a] | Total stays in thousands | Mean number of nights per stay[b] |
|---|---|---|---|---|
| **Health insurance status[g]** | | | | |
| Under age 65: | | | | |
| Any private | 162,342 | 5.2 | 10,952 | 5.2 |
| Public only | 26,342 | 10.2 | 3,753 | 6.3 |
| Uninsured | 44,112 | 3.7 | 2,044 | 5.8 |
| Age 65 and over: | | | | |
| Medicare only | 8,479 | 18.5 | 2,326 | 7.3 |
| Medicare and private | 19,501 | 17.0 | 4,994 | 6.4 |
| Medicare and other public | 3,222 | 22.4 | 1,164 | 8.2 |

[a] Based on all stays that began and/or ended during calendar year 1996.

[b] Excludes 15 persons with missing data on nights in hospital (less than 1 percent of population).

[c] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[d] Does not include persons who left the community and died in an institution.

[e] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data. Variable based on age at Round 1 interview.

[f] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[g] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[h] The total population estimate represents the overall eligible civilian noninstitutionalized population over the course of 1996 rather than being a point-in-time estimate.

**Note:** Restricted to civilian noninstitutionalized population. Numbers may not add to totals due to rounding.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table 4. Use of formal home health care and prescription medicines, by selected population characteristics: United States, 1996

| Population characteristics | Total population in thousands | Percent with at least 1 formal home health care visit[a] | Percent with at least 1 prescription medicine |
|---|---|---|---|
| **Total** | [g]268,130 | 2.7 | 63.7 |
| **Age in years[b]** | | | |
| Under age 65 | 234,784 | 1.1 | 60.4 |
| Under 6 | 23,843 | 1.6 | 64.7 |
| 6-17 | 47,693 | 0.4 | 49.9 |
| 18-44 | 108,796 | 0.9 | 57.9 |
| 45-64 | 54,451 | 2.0 | 72.5 |
| Age 65 and over | 33,347 | 13.8 | 87.1 |
| **Sex** | | | |
| Under age 65: | | | |
| Male | 117,048 | 0.9 | 53.6 |
| Female | 117,736 | 1.4 | 67.1 |
| Age 65 and over: | | | |
| Male | 14,101 | 10.9 | 86.7 |
| Female | 19,246 | 16.0 | 87.4 |
| **Race/ethnicity** | | | |
| Under age 65: | | | |
| Hispanic | 28,347 | 0.9 | 50.8 |
| Black | 30,914 | 1.3 | 51.4 |
| White and other | 175,523 | 1.1 | 63.5 |
| Age 65 and over: | | | |
| Hispanic | 1,601 | 12.3 | 80.6 |
| Black | 2,662 | 16.7 | 82.6 |
| White and other | 29,083 | 13.6 | 87.9 |
| **Metropolitan statistical area (MSA)** | | | |
| Under age 65: | | | |
| MSA | 189,416 | 1.1 | 60.5 |
| Non-MSA | 45,368 | 1.2 | 60.0 |
| Age 65 and over: | | | |
| MSA | 25,671 | 13.0 | 86.5 |
| Non-MSA | 7,675 | 16.6 | 89.1 |
| **Vital status (as of 12/31/96)[c]** | | | |
| Alive | 266,261 | 2.4 | 63.6 |
| Deceased | 1,870 | 41.0 | 78.9 |
| **Perceived health status[d]** | | | |
| Under age 65: | | | |
| Excellent, very good, or good | 211,109 | 0.6 | 58.8 |
| Fair or poor | 21,347 | 5.1 | 82.4 |
| Age 65 and over: | | | |
| Excellent, very good, or good | 23,098 | 9.3 | 84.9 |
| Fair or poor | 8,423 | 27.7 | 94.7 |

*Continued*

## Table 4. Use of formal home health care and prescription medicines, by selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Total population in thousands | Percent with at least 1 formal home health care visit[a] | Percent with at least 1 prescription medicine |
|---|---|---|---|
| **Had usual source of care[e]** | | | |
| Yes | 217,731 | 2.8 | 69.5 |
| No | 46,319 | 0.9 | 38.3 |
| **Health insurance status[f]** | | | |
| Under age 65: | | | |
| Any private | 162,342 | 0.8 | 65.0 |
| Public only | 26,342 | 3.7 | 65.8 |
| Uninsured | 44,112 | 0.6 | 43.2 |
| Age 65 and over: | | | |
| Medicare only | 8,479 | 13.9 | 81.3 |
| Medicare and private | 19,501 | 12.1 | 89.7 |
| Medicare and other public | 3,222 | 29.5 | 89.9 |

[a] Includes paid care from hospital, agency, and self-employed providers. Does not include unpaid care from family, friends, or volunteers.

[b] Reflects age on 12/31/96. Age at last interview was used for persons who were not included in the survey on 12/31/96.

[c] Does not include persons who left the community and died in an institution.

[d] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[e] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[f] Health insurance status was collected during Round 1 and refers to health insurance during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[g] The total population estimate represents the overall eligible civilian noninstitutionalized population over the course of 1996 rather than being a point-in-time estimate.

**Note:** Restricted to civilian noninstitutionalized population. Numbers may not add to totals due to rounding.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

# Technical Appendix

The data in this report were obtained in the first three rounds of interviews for the Household Component (HC) of the 1996 Medical Expenditure Panel Survey (MEPS). MEPS is cosponsored by the Agency for Health Care Policy and Research (AHCPR) and the National Center for Health Statistics (NCHS). The MEPS HC is a nationally representative survey of the U.S. civilian noninstitutionalized population that collects medical expenditure data at both the person and household levels. The focus of the MEPS HC is to collect detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, health insurance coverage, income, and employment. In other components of MEPS, data are collected on the use, charges, and payments reported by providers, residents of licensed or certified nursing homes, and the supply side of the insurance market.

The sample for the MEPS HC was selected from respondents to the 1995 National Health Interview Survey (NHIS), which was conducted by NCHS. NHIS provides a nationally representative sample of the U.S. civilian noninstitutionalized population and reflects an oversampling of Hispanics and blacks. The MEPS HC collects data through an overlapping panel design. In this design, data are collected through a precontact interview that is followed by a series of five rounds of interviews over a period of 2 1/2 years. Interviews are conducted with one member of each family, who reports on the health care experiences of the entire family. Two calendar years of medical expenditure and utilization data are collected in each household and captured using computer-assisted personal interviewing (CAPI). This series of data collection rounds is launched again each subsequent year on a new sample of households to provide overlapping samples of survey data that will provide continuous and current estimates of health care expenditures. The reference period for Round 1 of the MEPS HC was from January 1, 1996, to the date of the first interview, which occurred during the period from March through August 1996. The reference period for Round 2 of the MEPS HC was from the date of the first interview (March-August 1996) to the date of the second interview, which took place during the period from August through December 1996. The reference period for Round 3 was from the date of the second interview (August-December 1996) to the date of the third interview, which occurred during the period from February through July 1997. Estimates in this report are based on characteristics as of December 31, 1996, or the last date that the sample person was part of the civilian noninstitutionalized population living in the United States prior to December 31, 1996.

## Utilization Variables

The utilization variables used to derive estimates for this report are based on the number of visits for health care that were reported as occurring in calendar year 1996 during the first three rounds of interviews. Utilization events for sampled persons are classified as office-based visits, ambulatory hospital-based visits, inpatient hospital stays, dental visits, home health visits, and obtaining prescription medicine. Minimal data editing was done on health care utilization variables.

Unless otherwise specified, the utilization estimates are based on 21,571 sample persons who were in the U.S. civilian noninstitutionalized population for part or all of calendar year 1996. Examples of persons with part-year information include newborns, persons who died during the year, and those who resided in an institution or were in the military for part of the year. Utilization was measured for deceased persons for the period between January 1 and the date of death, while utilization for newborns was measured from the date of birth to December 31. Utilization that occurred during periods of full-time active-duty military service or while residing in an institution was not included. The 21,571 sample persons were used to develop population estimates for a total of 268,130,477 persons who were in the U.S. civilian noninstitutionalized population for part or all of 1996.

## Event Types

### Ambulatory Office-Based Events

Office-based events include visits to physician and nonphysician providers as well as office-based providers of unknown type. Telephone contact with office-based providers, regardless of provider type, is not included in the estimates. Examples of nonphysician providers include chiropractors, physical and occupational therapists, nurses and nurse practitioners, podiatrists, technicians, and receptionists, clerks, or secretaries.

### Ambulatory Hospital-Based Events

Ambulatory hospital-based events include visits to physician and nonphysician providers as well as providers of unknown type in hospital outpatient departments and emergency rooms. Same-day hospital discharges (hospital events classified as inpatient that did not result in an overnight stay) also are treated as ambulatory hospital-based events in these estimates. Telephone contact with hospital-based providers is not included in these estimates.

### Hospital Inpatient Events

Hospital stays include all nights spent in a hospital during calendar year 1996. Population estimates for total stays have been adjusted for small levels of item nonresponse for the control variables of perceived health status, usual source of care, and health insurance status. The number of hospital inpatient stays in Table 3 is underestimated because some inpatient stays for newborns were not reported in the MEPS HC. Analysts could reconstruct inpatient stay estimates by analyzing the 1996 MEPS utilization data under the assumption that all infants whose mothers had hospital discharges were delivered in and discharged from the hospital.

### Dental Events

In each round of interviews, respondents were asked to enumerate all dental visits for each family member. Dental events include visits to general dentists, dental hygienists, dental technicians, orthodontists, endodontists, and periodontists.

### Home Health Care Events

In each round of interviews, respondents were asked to provide a monthly summary of home health care visits for each family member provided by a home health agency, hospital, nursing home, or self-employed provider, as well as home health care provided from unpaid informal providers such as friends, neighbors, or relatives. Estimates in this report exclude unpaid informal care provided by friends, neighbors, or family members.

### Prescription Medicines

During each interview, respondents were asked whether or not each family member purchased or received any prescription medicine.

## Population Characteristics

### Age

The respondent was asked to report the age of each family member as of the date of each interview for Rounds 1, 2, and 3. Unless otherwise specified, in this report age is based on the sample person's age as of December 31, 1996. If data were not collected during Round 3 because the sample person was out of scope (e.g., deceased or institutionalized), then age at the time of the Round 2 interview was used. Similarly, if age at Round 2 was not collected because the person was out of scope, then age at Round 1 was used.

### Race/Ethnicity

Classification by race and ethnicity is based on information reported for each family member. Respondents were asked if the race of the sample person was best described as American Indian, Alaska Native, Asian or Pacific Islander, black, white, or other. They also were asked if the sample person's main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexicano, Mexican American, or Chicano; other Latin American; or other Spanish. All persons whose main national origin or ancestry was reported in one of these Hispanic groups, regardless of racial background, are classified as Hispanic. Since the Hispanic grouping can include black Hispanic, white Hispanic, and other Hispanic, the race categories of black and white/other do not include Hispanic persons.

### Place of Residence

Individuals are identified as residing either inside or outside a metropolitan statistical area (MSA) as designated by the U.S. Office of Management and Budget (OMB), which applied 1990 standards using population counts from the 1990 U.S. Census. An MSA is a large population nucleus combined with adjacent communities that have a high degree of economic and

social integration with the nucleus. Each MSA has one or more central counties containing the area's main population concentration. In New England, metropolitan areas consist of cities and towns rather than whole counties. MSA data are based on MSA status as of December 31, 1996. If MSA status was not collected during Round 3 because the sample person was out of scope, then MSA status at Round 1 was used.

## Perceived Health Status

Perceived health status is derived from cross-sectional data collected during Round 1 and represents the sample person's status during approximately the first half of 1996. This is the most current MEPS information available for perceived health status. The respondent was asked to rate the health of each person in the family at the time of the Round 1 interview according to the following categories: excellent, very good, good, fair, and poor.

For Tables 1, 3, and 4, perceived health status estimates exclude 59 persons because of item nonresponse in Round 1. Estimates are based on 21,271 persons with positive full-year weights, representing a weighted population of 264,714,000.

For Table 2, perceived health status estimates exclude 12 children because of item nonresponse in Round 1. Estimates are based on 6,016 children with positive full-year weights, resulting in a weighted population of 68,509,000.

## Health Insurance Status

Health insurance status is also derived from Round 1 data, the most current MEPS data for health insurance status available. The household respondent was asked if, between January 1, 1996, and the time of the Round 1 interview, anyone in the family was covered by any of the sources of public and private health insurance coverage discussed in the following paragraphs. For this report, Medicare and CHAMPUS/CHAMPVA coverage represent coverage as of the date of the Round 1 interview. (CHAMPUS and CHAMPVA are the Civilian Health and Medical Programs for the Uniformed Services and Veterans Affairs.) All other sources of insurance represent coverage at any time during the Round 1 reference period. Persons counted as uninsured were uninsured throughout the Round 1 reference period. For additional details on health insurance status measures in MEPS, see Vistnes and Monheit (1997).

For Tables 1, 3, and 4, health insurance status estimates exclude 58 persons because of item nonresponse in Round 1. Estimates are based on 21,271 persons with positive full-year weights, resulting in a weighted population of 264,714,000.

For Table 2, health insurance status estimates exclude two children because of item nonresponse in Round 1. Estimates are based on 6,016 children with positive full-year weights, resulting in a weighted population of 68,476,000.

### Public Coverage

For this report, individuals are considered to have public coverage only if they met both of the following criteria:

- They were not covered by private insurance.
- They were covered by one of the following public programs: Medicare, Medicaid, or other public hospital/physician coverage.

### Private Health Insurance

Private health insurance is defined for this report as insurance that provides coverage for hospital and physician care. Insurance that provides coverage for a single service only, such as dental or vision coverage, is not counted. Coverage by CHAMPUS/CHAMPVA is included as private health insurance.

### Uninsured

The uninsured are defined as persons not covered by Medicare, CHAMPUS/CHAMPVA, Medicaid, other public hospital/physician programs, or private hospital/physician insurance throughout the entire Round 1 reference period. Individuals covered only by noncomprehensive State-specific programs (e.g., Maryland Kidney Disease Program, Colorado Child Health Plan) or private single-service plans (e.g., coverage for dental or vision care only, coverage for accidents or specific diseases) are not considered to be insured.

### Usual Source of Care

Usual source of care was collected in a supplementary module on access to care administered in Round 2. For each family member, the MEPS interviewer ascertained whether there is a particular doctor's office, clinic, health center, or other place that the individual usually goes when sick or in need of health advice. Usual source of care was collected in a supplementary module on access to care administered in Round 2. For each family member, the MEPS interviewer ascertains whether there is a particular doctor's office, clinic, health center, or other place that the individual usually goes when sick or in need of health advice.

For Tables 1, 3, and 4, usual source of care estimates exclude 156 persons because of missing data in Round 2. Estimates are based on 21,386 persons with positive full-year weights, resulting in a weighted population of 265,966,000.

For Table 2, usual source of care estimates exclude 18 children because of missing data in Round 2. Estimates are based on 6,190 children with positive full-year weights, resulting in a weighted population of 70,413,000.

## Characteristics of Parents

Table 2 contains two variables that pertain to the characteristics of parents of children under age 18: the number of parents living in the home and the highest education of either parent for children living with at least one parent.

### Number of Parents Living in the Home

Number of parents living in the home was derived from data collected during Round 1. It indicates the number of parents living in the home at the time of the Round 1 interview and does not account for changes in family structure that may have occurred during the time period between the Round 1 interview and December 31, 1996. Estimates are based on children who were under age 18 as of December 31, 1996. This resulted in a weighted population of 68,476,000 upon which estimates are based.

### Highest Education of Either Parent

Highest education of either parent for children living with at least one parent (181 children were not living with either parent) was also derived from education data collected during Round 1. It represents parents' educational status at the time of the Round 1 interview.

## Sample Design and Accuracy of Estimates

The sample selected for the 1996 MEPS, a subsample of the 1995 NHIS, was designed to produce national estimates that are representative of the civilian noninstitutionalized population of the United States. Round 1 data were obtained for approximately 9,400 households in MEPS, resulting in a survey response rate of 78 percent. This figure reflects participation in both NHIS and MEPS. For Round 2, the response rate was 95 percent, resulting in a response rate of 74 percent overall from the NHIS interview through Round 2 of MEPS. For Round 3, the response rate was 95 percent, resulting in a full-year response rate of 70 percent.

The statistics presented in this report are affected by both sampling error and sources of nonsampling error, which include nonresponse bias, respondent reporting errors, and interviewer effects. For a detailed description of the MEPS survey design, the adopted sample design, and methods used to minimize sources of nonsampling error, see J. Cohen (1997), S. Cohen (1997), and Cohen, Monheit, Beauregard, et al. (1996).

The MEPS person-level estimation weights include nonresponse adjustments and poststratification adjustments to population totals obtained from the March 1997 Current Population Survey (CPS) to reflect the Census Bureau estimated population distribution across age and sex categories as of December 1996. The person-level poststratification incorporated the following variables: region, MSA, age, race/ethnicity, and sex. Overall, the weighted population estimate for the civilian noninstitutionalized population as of December 31, 1996, is 265,439,511. The inclusion of persons who were in scope at some time in 1996 but were out of scope (deceased, institutionalized, active-duty military, or out of the country) as of December 31, 1996, brings the estimated total number of persons represented by MEPS respondents over the course of the year up to 268,130,477.

Tests of statistical significance were used to determine whether the differences between populations exist at specified levels of confidence or whether they occurred by chance. Differences were tested using *Z*-scores having asymptotic normal properties at the 0.05 level of significance. Unless otherwise noted, only statistically significant differences between estimates are discussed in the text.

## Rounding

Estimates presented in the tables were rounded to the nearest 0.1 percent. Standard errors were rounded to the nearest 0.01. Some of the estimates for population totals of subgroups presented in the tables will not add exactly to the overall estimated population total as a consequence of rounding.

## Table A. Standard errors for use of ambulatory medical care, by setting and selected population characteristics: United States, 1996

*Corresponds to Table 1*

| Population characteristics | Total population in thousands | Ambulatory medical care setting | | | | | |
|---|---|---|---|---|---|---|---|
| | | All settings[a] | | Office based | | Hospital based[b] | |
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| Total | (i) | 0.41 | 0.14 | 0.45 | 0.13 | 0.45 | 0.08 |
| **Age in years[d]** | | | | | | | |
| Under 6 | 724 | 1.02 | 0.13 | 1.02 | 0.13 | 1.08 | 0.07 |
| 6-17 | 912 | 1.01 | 0.14 | 1.03 | 0.14 | 0.68 | 0.10 |
| 18-44 | 1,207 | 0.59 | 0.25 | 0.60 | 0.26 | 0.58 | 0.09 |
| 45-64 | 1,046 | 0.73 | 0.31 | 0.78 | 0.27 | 0.83 | 0.21 |
| 65 and over | 1,046 | 0.72 | 0.31 | 0.76 | 0.27 | 1.10 | 0.25 |
| **Sex** | | | | | | | |
| Male | 751 | 0.58 | 0.18 | 0.64 | 0.18 | 0.54 | 0.12 |
| Female | 751 | 0.46 | 0.16 | 0.49 | 0.15 | 0.60 | 0.12 |
| **Race/ethnicity** | | | | | | | |
| Hispanic | 1,475 | 1.08 | 0.58 | 1.13 | 0.61 | 0.72 | 0.17 |
| Black | 1,796 | 1.16 | 0.26 | 1.17 | 0.23 | 0.94 | 0.32 |
| White and other | 2,118 | 0.45 | 0.15 | 0.49 | 0.14 | 0.53 | 0.09 |
| **Metropolitan statistical area (MSA)** | | | | | | | |
| MSA | 2,628 | 0.46 | 0.15 | 0.51 | 0.14 | 0.09 | 0.49 |
| Non-MSA | 2,628 | 1.02 | 0.33 | 1.08 | 0.32 | 0.22 | 1.15 |
| **Vital status (as of 12/31/96)[e]** | | | | | | | |
| Alive | 161 | 0.41 | 0.13 | 0.45 | 0.13 | 0.45 | 0.08 |
| Deceased | 161 | 3.77 | 3.04 | 3.98 | 2.81 | 4.17 | — |
| **Perceived health status[f]** | | | | | | | |
| Under age 65: | | | | | | | |
| Excellent, very good, or good | 1,260 | 0.48 | 0.13 | 0.52 | 0.12 | 0.47 | 0.08 |
| Fair or poor | 697 | 0.90 | 0.83 | 0.95 | 0.82 | 1.42 | 0.26 |
| Age 65 and over: | | | | | | | |
| Excellent, very good, or good | 831 | 0.86 | 0.31 | 0.91 | 0.27 | 1.25 | 0.21 |
| Fair or poor | 456 | 0.95 | 0.78 | 1.14 | 0.64 | 2.07 | 0.74 |
| **Had usual source of care[g]** | | | | | | | |
| Yes | 1,180 | 0.42 | 0.15 | 0.45 | 0.14 | 0.50 | 0.09 |
| No | 1,180 | 1.03 | 0.33 | 1.01 | 0.31 | 0.72 | 0.26 |

## Table A. Standard errors for use of ambulatory medical care, by setting and selected population characteristics: United States, 1996 (*continued*)

| Population characteristics | Total population in thousands | Ambulatory medical care setting | | | | | |
|---|---|---|---|---|---|---|---|
| | | All settings[a] | | Office based | | Hospital based[b] | |
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Health insurance status[h]** | | | | | | | |
| Under age 65: | | | | | | | |
| Any private | 2,038 | 0.49 | 0.14 | 0.52 | 0.13 | 0.50 | 0.10 |
| Public only | 1,394 | 1.31 | 0.82 | 1.30 | 0.84 | 1.45 | 0.25 |
| Uninsured | 1,367 | 1.06 | 0.24 | 1.06 | 0.25 | 0.87 | 0.14 |
| Age 65 and over: | | | | | | | |
| Medicare only | 456 | 1.47 | 0.49 | 1.50 | 0.37 | 2.02 | 0.65 |
| Medicare and private | 778 | 0.89 | 0.41 | 0.98 | 0.34 | 1.57 | 0.34 |
| Medicare and other public | 268 | 1.95 | 1.09 | 2.02 | 1.07 | 3.27 | 0.44 |

[a] Includes all care received in person from physician and nonphysician providers.

[b] Includes outpatient visits, emergency room visits, and same-day hospital discharges.

[c] For persons with 1 or more visits.

[d] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[e] Does not include persons who left the community and died in an institution.

[f] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[g] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[h] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[i] Standard error approximately zero due to poststratification to Census Bureau population control totals.

— Sample size is too small to support reliable estimation.

**Note:** Restricted to civilian noninstitutionalized population.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table B. Standard errors for use of ambulatory medical care and dental care by children under age 18, by selected population characteristics: United States, 1996

*Corresponds to Table 2*

| Population characteristics | Total population in thousands | Ambulatory medical care[a] | | Dental care[b] | |
|---|---|---|---|---|---|
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Total** | [i]n/a | 0.77 | 0.10 | 1.02 | 0.08 |
| **Age in years[d]** | | | | | |
| Under 6 | 587 | 1.02 | 0.13 | 1.05 | 0.05 |
| 6-12 | 501 | 1.22 | 0.15 | 1.48 | 0.09 |
| 13-17 | 486 | 1.33 | 0.28 | 1.66 | 0.15 |
| **Sex** | | | | | |
| Male | 472 | 1.10 | 0.16 | 1.31 | 0.10 |
| Female | 472 | 0.92 | 0.13 | 1.25 | 0.10 |
| **Race/ethnicity** | | | | | |
| Hispanic | 644 | 1.63 | 0.20 | 1.49 | 0.13 |
| Black | 672 | 1.95 | 0.19 | 1.94 | 0.12 |
| White and other | 880 | 0.89 | 0.13 | 1.36 | 0.09 |
| **Metropolitan statistical area (MSA)** | | | | | |
| MSA | 909 | 0.85 | 0.12 | 1.18 | 0.09 |
| Non-MSA | 909 | 1.79 | 0.19 | 2.07 | 0.14 |
| **Perceived health status[e]** | | | | | |
| Excellent, very good, or good | 222 | 0.82 | 0.10 | 1.07 | 0.08 |
| Fair or poor | 222 | 1.81 | 1.10 | 3.75 | 0.16 |
| **Has usual source of care[f]** | | | | | |
| Yes | 408 | 0.79 | 0.11 | n/a | n/a |
| No | 408 | 2.68 | 0.25 | n/a | n/a |
| **Health insurance status[g]** | | | | | |
| Any private | 901 | 0.94 | 0.14 | n/a | n/a |
| Public only | 773 | 1.66 | 0.19 | n/a | n/a |
| Uninsured | 565 | 2.11 | 0.23 | n/a | n/a |
| **Number of parents in home[h]** | | | | | |
| 2 parents | 801 | 0.84 | 0.12 | 1.33 | 0.09 |
| 1 parent | 773 | 1.63 | 0.17 | 1.63 | 0.12 |
| No parent | 207 | 4.27 | 0.87 | 4.78 | — |

## Table B. Standard errors for use of ambulatory medical care and dental care by children under age 18, by selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Total population in thousands | Ambulatory medical care[a] | | Dental care[b] | |
|---|---|---|---|---|---|
| | | Percent with at least 1 visit | Mean number of visits[c] | Percent with at least 1 visit | Mean number of visits[c] |
| **Highest education of either parent[i]** | | | | | |
| Less than high school | 630 | 2.08 | 0.20 | 2.32 | 0.13 |
| High school | 823 | 1.56 | 0.15 | 1.69 | 0.12 |
| Some college | 651 | 1.46 | 0.28 | 2.19 | 0.15 |
| College | 966 | 1.27 | 0.20 | 1.95 | 0.12 |

[a] Includes all care received in person from physician and nonphysician providers in office-based care, outpatient department, and emergency room settings. Also includes same-day hospital discharges.

[b] Includes general dentists, dental hygienists, orthodontists, periodontists, and endodontists in office-based or outpatient hospital settings.

[c] For children with 1 or more visits.

[d] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[e] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 68,509,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.2 percent missing data due to item nonresponse.

[f] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 70,413,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.2 percent missing data due to item nonresponse.

[g] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[h] Number of parents in home was collected during Round 1 and refers to the number of parents in the home during the first half of 1996. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[i] Highest education of either parent was collected during Round 1 and refers to the highest education level of either parent during the first half of 1996. The estimated population for the first half of 1996 is 68,476,000 children who were under 18 years of age as of 12/31/96 and excludes less than 0.1 percent missing data due to item nonresponse.

[j] Standard error approximately zero due to poststratification to Census Bureau population control totals.

n/a Estimates omitted because usual source of care and health insurance status refer only to medical care and insurance for medical care.

—Sample size is too small to support reliable estimation.

**Note:** Restricted to noninstitutionalized children who were under age 18 on 12/31/96 or at the time of their last interview during 1996 (unless otherwise specified).

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table C. Standard errors for use of inpatient hospital services, by selected population characteristics: United States, 1996

*Corresponds to Table 3*

| Population characteristics | Percent with at least one stay[a] | Total stays in thousands | Mean number of nights per stay[b] |
|---|---|---|---|
| **Total** | 0.23 | 1.085 | 0.35 |
| **Age in years[c]** | | | |
| Under 6 | 0.71 | 280 | 0.81 |
| 6-17 | 0.27 | 230 | 0.91 |
| 18-44 | 0.27 | 473 | 0.82 |
| 45-64 | 0.43 | 406 | 0.84 |
| 65 and over | 0.81 | 524 | 0.32 |
| **Sex** | | | |
| Male | 0.28 | 629 | 0.73 |
| Female | 0.31 | 728 | 0.24 |
| **Race/ethnicity** | | | |
| Hispanic | 0.49 | 294 | 0.57 |
| Black | 0.58 | 372 | 1.14 |
| White and other | 0.27 | 980 | 0.39 |
| **Metropolitan statistical area (MSA)** | | | |
| MSA | 0.25 | 878 | 0.44 |
| Non-MSA | 0.56 | 653 | 0.38 |
| **Vital status (as of 12/31/96)[d]** | | | |
| Alive | 0.22 | 1004 | 0.34 |
| Deceased | 4.08 | 335 | 1.75 |
| **Perceived health status[e]** | | | |
| Under age 65: | | | |
| Excellent, very good, or good | 0.18 | 553 | 0.62 |
| Fair or poor | 0.94 | 493 | 0.66 |
| Age 65 and over: | | | |
| Excellent, very good, or good | 0.89 | 347 | 0.40 |
| Fair or poor | 1.73 | 350 | 0.56 |
| **Has usual source of care[f]** | | | |
| Yes | 0.24 | 934 | 0.24 |
| No | 0.37 | 249 | 2.58 |
| **Health insurance status[g]** | | | |
| Under age 65: | | | |
| Any private | 0.24 | 624 | 0.68 |
| Public only | 0.66 | 363 | 0.74 |
| Uninsured | 0.37 | 238 | 1.10 |
| Age 65 and over: | | | |
| Medicare only | 1.78 | 287 | 0.74 |
| Medicare and private | 1.03 | 395 | 0.43 |
| Medicare and other public | 2.55 | 186 | 1.02 |

[a] Based on all stays that began and/or ended during calendar year 1996.

[b] Excludes 15 persons with missing data on nights in hospital (less than 1 percent of population).

[c] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[d] Does not include persons who left the community and died in an institution.

[e] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[f] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[g] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

**Note:** Restricted to civilian noninstitutionalized population.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table D. Standard errors for use of formal home health care and prescription medicines, by selected population characteristics: United States, 1996

*Corresponds to Table 4*

| Population characteristics | Percent with at least 1 formal home health care visit[a] | Percent with at least 1 prescription medicine |
|---|---|---|
| **Total** | 0.14 | 0.44 |
| **Age in years[b]** | | |
| Under age 65 | 0.09 | 0.46 |
| Under 6 | 0.27 | 1.34 |
| 6-17 | 0.11 | 0.97 |
| 18-44 | 0.12 | 0.63 |
| 45-64 | 0.24 | 0.73 |
| Age 65 and over | 0.75 | 0.76 |
| **Sex** | | |
| Under age 65: | | |
| Male | 0.11 | 0.59 |
| Female | 0.14 | 0.56 |
| Age 65 and over: | | |
| Male | 1.02 | 1.15 |
| Female | 0.92 | 0.89 |
| **Race/ethnicity** | | |
| Under age 65: | | |
| Hispanic | 0.17 | 1.21 |
| Black | 0.23 | 1.14 |
| White and other | 0.11 | 0.55 |
| Age 65 and over: | | |
| Hispanic | 2.03 | 2.92 |
| Black | 2.42 | 2.53 |
| White and other | 0.82 | 0.82 |
| **Metropolitan statistical area (MSA)** | | |
| Under age 65: | | |
| MSA | 0.10 | 0.51 |
| Non-MSA | 0.20 | 1.09 |
| Age 65 and over: | | |
| MSA | 0.89 | 0.87 |
| Non-MSA | 1.37 | 1.64 |
| **Vital status (as of 12/31/96)[c]** | | |
| Alive | 0.13 | 0.44 |
| Deceased | 5.14 | 3.37 |
| **Perceived health status[d]** | | |
| Under age 65: | | |
| Excellent, very good, or good | 0.07 | 0.49 |
| Fair or poor | 0.62 | 1.07 |
| Age 65 and over: | | |
| Excellent, very good, or good | 0.83 | 0.91 |
| Fair or poor | 1.88 | 1.00 |

## Table D. Standard errors for use of formal home health care and prescription medicines, by selected population characteristics: United States, 1996 *(continued)*

| Population characteristics | Percent with at least 1 formal home health care visit[a] | Percent with at least 1 prescription medicine |
|---|---|---|
| **Has usual source of care[e]** | | |
| Yes | 0.15 | 0.46 |
| No | 0.17 | 0.90 |
| **Health insurance status[f]** | | |
| Under age 65: | | |
| Any private | 0.08 | 0.56 |
| Public only | 0.46 | 1.29 |
| Uninsured | 0.14 | 0.94 |
| Age 65 and over: | | |
| Medicare only | 1.52 | 1.54 |
| Medicare and private | 0.95 | 0.92 |
| Medicare and other public | 2.99 | 1.95 |

[a] Includes paid care from hospital, agency, and self-employed providers. Does not include unpaid care from family, friends, or volunteers.

[b] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

[c] Does not include persons who left the community and died in an institution.

[d] Perceived health status was collected during Round 1 and refers to health status during the first half of 1996. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data due to item nonresponse. Variable based on age at Round 1 interview.

[e] Usual source of care was collected during Round 2 and refers to the usual source of care at the time of the interview. The estimated population for the second half of 1996 is 265,966,000 and excludes less than 0.7 percent missing data due to item nonresponse.

[f] Health insurance status was collected during Round 1 and refers to health insurance status during the first half of 1996. Public and private insurance categories refer to individuals with public or private insurance at any time during this period; individuals with private and public insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed Forces-related coverage) are considered private health insurance in the report. The estimated population for the first half of 1996 is 264,714,000 and excludes less than 0.3 percent missing data. Variable based on age at Round 1 interview.

**Note:** Restricted to civilian noninstitutionalized population.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table E. Standard errors for percent distribution of people with at least 1 office visit, by type of provider: United States, 1996

*Corresponds to Figure 1*

| Type of provider(s) | Standard error |
|---|---|
| Physician visit(s) only | 0.71 |
| Physician and nonphysician visits | 0.65 |
| Nonphysician visit(s) only | 0.22 |

**Note:** Restricted to civilian noninstitutionalized population. Nonphysician providers include nurses and nurse practitioners, chiropractors, podiatrists, acupuncturists, optometrists, physical and occupational therapists, nutritionists, and mental health workers.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table F. Standard errors for percent distribution of people with at least 1 office visit, by type of provider, within age groups: United States, 1996

*Corresponds to Figure 2*

| Age in years | Physician visit(s) only | Physician and nonphysician visits | Nonphysician visit(s)only |
|---|---|---|---|
| Under 6 | 1.17 | 1.09 | 0.51 |
| 6-17 | 1.01 | 0.93 | 0.59 |
| 18-44 | 0.99 | 0.89 | 0.39 |
| 45-64 | 1.21 | 1.21 | 0.38 |
| 65 and over | 1.46 | 1.45 | 0.26 |

**Note:** Restricted to civilian noninstitutionalized population. Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96. Nonphysician providers include nurses and nurse practitioners, chiropractors, podiatrists, optometrists, physical and occupational therapists, and mental health workers.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

## Table G. Standard errors for percent of people with at least 1 dental visit, by age, race/ethnicity, sex, and metropolitan statistical area (MSA): United States, 1996

*Corresponds to Figure 3*

| Population characteristics | Standard error |
|---|---|
| **Age in years**[a] | |
| Under 6 | 1.05 |
| 6-17 | 1.26 |
| 18-44 | 0.78 |
| 45-64 | 1.01 |
| 65 and over | 1.31 |
| **Sex** | |
| Male | 0.81 |
| Female | 0.74 |
| **Race/ethnicity** | |
| Hispanic | 1.19 |
| Black | 1.08 |
| White and other | 0.83 |
| **Metropolitan statistical area** | |
| MSA | 0.78 |
| Non-MSA | 1.51 |

[a] Reflects age on 12/31/96. Age at last interview was used for persons who were not in the survey on 12/31/96.

**Note:** Restricted to civilian noninstitutionalized population. Dental visits include visits to general dentisits, dental hygienists, orthodontists, periodontists, and endodontists in office-based or outpatient hospital settings.

**Source:** Center for Cost and Financing Studies, Agency for Health Care Policy and Research: Medical Expenditure Panel Survey Household Component, 1996.

**U.S. Department of Health and Human Services**
Public Health Service
Agency for Health Care Policy and Research
2101 East Jefferson Street
Suite 501
Rockville, MD 20852

Official Business
Penalty for Private Use $300

BULK RATE
POSTAGE & FEES PAID
PHS/AHCPR
Permit No. G-282

AHCPR

AHCPR Pub. No. 99-0018
March 1999