

Access to Health Care—  
Sources and Barriers, 1996

# Research #3 Findings

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### Abstract

This report presents estimates of access to health care by the civilian noninstitutionalized population of the United States during 1996, as derived from 1996 Medical Expenditure Panel Survey Household Component data. Two major topics are addressed: usual sources of health care and barriers to receiving needed care. Specific comparisons are made by age, race/ethnicity, sex, perceived health status, health insurance coverage, and place of residence. Nearly 18 percent of the population had no usual source of health care in 1996, and nearly 12 percent of families had members who had changed their usual source of care within the last 12 months. Almost 12 percent of

families had members who experienced difficulty or delay in obtaining health care or who did not receive needed care. Hispanics and the uninsured were more likely than other Americans to lack a usual source of health care and to experience barriers to receiving needed care.

### Suggested citation

Weinick RM, Zuvekas SH, Drilea SK. Access to health care—sources and barriers, 1996. Rockville (MD): Agency for Health Care Policy and Research; 1997. *MEPS Research Findings No. 3*. AHCPR Pub. No. 98-0001.

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

AHCPR Pub. No 98-0001  
October 1997



# The Medical Expenditure Panel Survey (MEPS)

## 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 2 1/2-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. A subsample of 10,500 households was drawn from the NHIS sampling frame for the initial 1996 MEPS HC panel. Every 5 years the HC sample size is increased. Beginning with the 1997 panel, policy-relevant population subgroups are oversampled. The subgroups initially targeted include adults with functional impairments, children with functional limitations in their activities, individuals aged 18-64 who are predicted to have high levels of medical expenditures, and individuals with family income less than 200 percent of the poverty level.

## Medical Provider Component

The MEPS MPC supplements and validates information on medical care events reported in the MEPS HC by contacting medical providers 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.

The 1996 sample is projected to provide data from approximately 2,700 hospitals, 12,400 office-based physicians, 7,000 separately billing hospital physicians, and 500 home health providers.

Data are collected on medical and financial characteristics of medical 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 DRGs (diagnosis-related groups).
- 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. For the survey conducted in 1997, the sample includes approximately 7,000 establishments identified through the MEPS HC, 27,000 identified through the business establishments list frame, 1,900 from the Census of Governments, and 1,000 identified through the list of the self-employed. 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 is a survey of nursing homes and persons residing in or admitted to nursing homes at any time during calendar year 1996. The NHC gathers 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 provide information on facility size, ownership, certification status, services provided, revenues and expenses, and other facility characteristics. Data on the income, assets, family relationships, and care-giving services for

sampled nursing home residents are obtained from next-of-kin or other knowledgeable persons in the community. In keeping with the DHHS Survey Integration Plan, the NHC is designed to be conducted every 5 years.

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 sample frame for facilities was derived from the National Health Provider Inventory, which is updated periodically by NCHS. The MEPS NHC data are collected in person in three rounds of data collection over a 1 1/2-year period using the CAPI system. Community data are collected by telephone using computer-assisted telephone interviewing (CATI) technology. At the end of three rounds of data collection, the sample will consist of approximately 800 responding facilities, 3,100 residents in the facility on January 1, and approximately 2,200 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.

Data collection is conducted under contract by Westat, Inc., Rockville, MD, and the National Opinion Research Center at the University of Chicago, as well as through an interagency agreement with Bureau of the Census. Technical consultation is provided by Medstat,

Inc., Boston, MA. Data processing support is provided under contract by Social & Scientific Systems, Inc., Bethesda, MD.

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:

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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).

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## Access to Health Care—Sources and Barriers, 1996

by Robin M. Weinick, Ph.D., Samuel H. Zuvekas, Ph.D., and Susan K. Drilea, M.S., Agency for Health Care Policy and Research

### Introduction

Adequate access to health care services can significantly influence health care use and health outcomes. Consequently, measures of access to care provide an important mechanism for evaluating the quality of the Nation's health care system. Limitations in access to care extend beyond such simple issues as a shortage of health care providers or facilities in some areas. Even where health care services are readily available, individuals may not have a usual source of health care or may experience barriers to receiving services because of financial or insurance restrictions, a lack of availability of providers at night or on weekends, or other difficulties.

This report describes several aspects of access to health care in America in 1996, including the proportion of the population lacking a usual source of care as well as the types and characteristics of providers used by those who do have a usual source of care. A number of measures of satisfaction with the usual source of health care are presented. Estimates also are reported on the percentage of American families that experience difficulty or delay in obtaining health care or do not receive needed health care services. Specific comparisons are made by age, race/ethnicity, sex, perceived health status, health insurance coverage, and place of residence.

This report presents estimates of access to health care by the civilian noninstitutionalized population of the United States during 1996. The estimates are derived from 1996 Medical Expenditure Panel Survey (MEPS) Household Component (HC) data. A technical appendix at the end of this report presents detailed descriptions of the MEPS HC, including data collection methods, questionnaire items, data editing, sample sizes, and statistical procedures for deriving estimates.

### Usual Sources of Health Care

Access to health care is a complex, multidimensional concept. Having a usual source of health care is one indicator of access that has been studied extensively. Among other findings, persons with a usual source of health care have been shown to be more likely than those without a usual source of care to receive a variety of preventive health care services (Caplan and Haynes, 1996; Ettner, 1996; Mark and Paramore, 1996; Martin, Calle, Wingo, et al., 1996) and to receive treatment if they have hypertension (Moy, Bartman, and Weir, 1995).

Table 1 presents a profile of Americans' usual sources of health care in 1996. Nearly 18 percent of the population (17.6 percent) did not have a usual source of health care. Thus, more than 46 million Americans had no particular doctor's office, clinic, health center, or other place that they would usually go if they were sick or needed advice about their health. Among those who did have a usual source of health care, 88.3 percent (72.7 percent of all Americans) had an office-based provider and 11.2 percent (9.2 percent of all Americans) had a hospital outpatient department or clinic as their usual source of care.

### Population Characteristics

Americans' usual sources of health care can vary among groups with different demographic and health-related characteristics, including age, race/ethnicity, sex, perceived health status, health insurance coverage, and place of residence.

#### Age

Young children and elderly adults were more likely than adults ages 18-64 to have a usual source of health care. Still, 5.5 percent of children under age 6, representing more than 1.3 million children, did not have a usual source of health care. Likewise, 9.2 percent



of persons age 65 and over had no usual source of health care.

Approximately 23 percent of persons ages 18-64 had no usual source of health care (not shown in Table 1). Young adults ages 18-24 were more likely than any other age group to lack a usual source of health care (34.0 percent).

### Race/Ethnicity

Among the racial/ethnic groups considered in this report, Hispanics were the least likely to have a usual source of care. Almost 30 percent (29.6 percent) of Hispanics lacked a usual source of care, compared with 20.2 percent of blacks and 15.5 percent of a combined category of whites and other racial/ethnic groups.

Among those who had a usual source of care, blacks and Hispanics were more likely than those in the group of whites and others to have hospital-based providers (including hospital clinics and outpatient departments) as their usual source of care. Conversely, whites and other racial/ethnic groups were more likely to have an office-based usual source of care.

**Uninsured individuals were more likely to lack a usual source of health care.**

### Sex

Males were substantially more likely to lack a usual source of health care than females (21.3 percent versus 14.1 percent). Males were also less likely than females to have an office-based usual source of care (69.3 percent vs. 76.0 percent).

### Perceived Health Status

Persons whose perceived health status was poor were more likely to have a usual source of health care than persons whose health status was reported to be excellent, very good, or good. Even so, 10.1 percent of those whose health status was reported to be poor had no usual source of health care; this represents nearly 800,000 Americans.

### Health Insurance Coverage

Health insurance coverage can be an important determinant of many aspects of access to health care. Table 1 shows that persons under age 65 who were uninsured were substantially more likely to lack a usual source of health care (38.0 percent) than those who had

either private (14.5 percent) or public health insurance (13.3 percent). When compared with their counterparts who had private health insurance, persons under age 65 who were uninsured were 2.6 times more likely to lack a usual source of health care. Persons under age 65 who had private insurance were more likely to have an office-based usual source of care (77.2 percent) than those who had public insurance (70.8 percent) or were uninsured (51.8 percent).

Individuals age 65 and over who had Medicare as their only health insurance coverage were more likely to lack a usual source of health care (11.9 percent) than persons with Medicare and additional public or private insurance coverage (7.7 percent; not shown in Table 1). In addition, among persons age 65 and over who had a usual source of health care, those with health insurance coverage in addition to Medicare were more likely to have an office-based usual source of care than those for whom Medicare was the sole source of insurance (not shown in Table 1).

### Metropolitan Statistical Areas

Americans living in metropolitan statistical areas (MSAs) were more likely to lack a usual source of health care (18.1 percent) than those living outside of MSAs (15.8 percent).

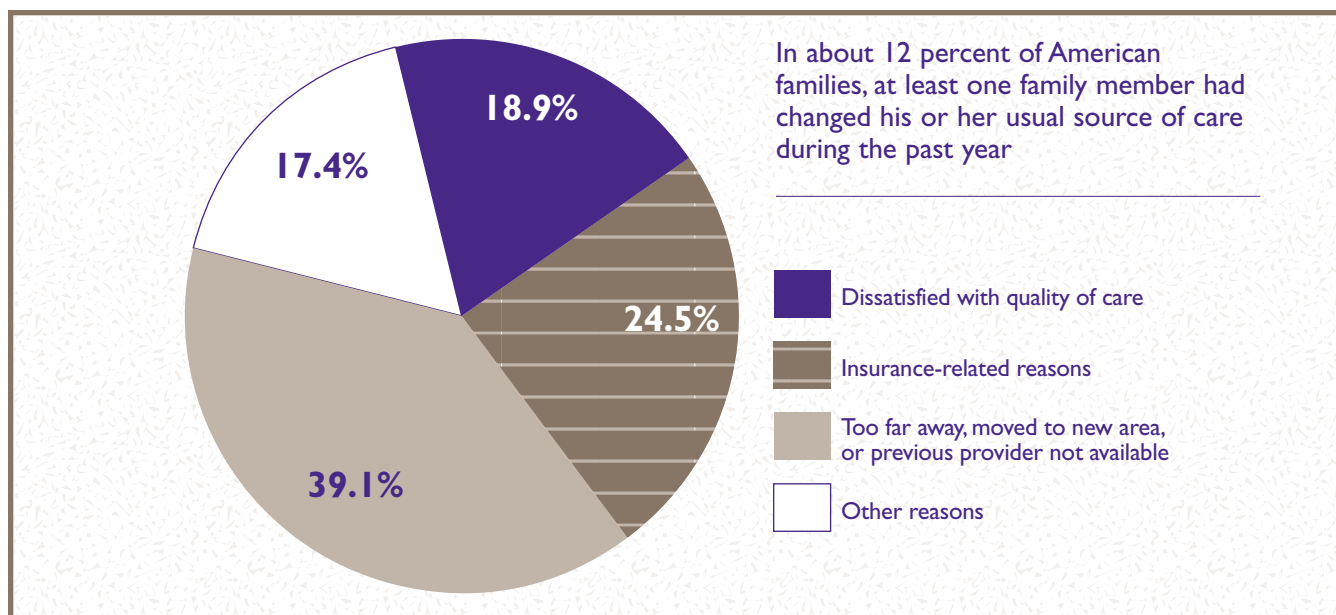
### Other Characteristics

Other important aspects of access to care include reasons why people change their usual source of care, types and characteristics of usual sources of health care, and satisfaction.

### Changes in Usual Source of Care

The extent to which individuals change their usual source of health care is of interest when examining access to health care, as it may reflect a lack of continuity of care, dissatisfaction with care, or poor quality. In approximately 12 percent of American families, at least one member had changed his or her usual source of health care within the 12-month period prior to the survey date. To the extent that this represents an annual rate of change in usual source of care, it suggests a fairly high rate of turnover in the long run. The reasons why family members changed their usual source of health care are displayed in Figure 1. Nearly 25 percent (24.5 percent) of the families with members who changed their usual source of care

**Figure 1. Percent distribution of families with members who changed their usual source of care in the past 12 months by reason for change, United States, 1996**



**Note:** Restricted to civilian noninstitutionalized population. Percents do not add to 100 due to rounding.

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

switched for insurance-related reasons, including having changed health insurance plans or the insurance plan having changed the doctors it covers. Another 18.9 percent had family members who made a change because they were dissatisfied with the quality of care they were receiving. Almost 40 percent (39.1 percent) had changed their usual source of health care because their provider was too far away, they had moved to a new area, or their previous provider was no longer available. The remaining 17.4 percent changed their usual source of care for a variety of other reasons, such as a change in their health care needs.

### Types of Office-Based Providers

Figure 2 displays the types of health care providers for the 72.7 percent of Americans who had an office-based usual source of health care. Of this group, 38.2 percent had a family practitioner or general practitioner, 18.8 percent had an internist or pediatrician, and 4.2 percent had another medical specialist—such as an obstetrician/gynecologist or surgeon—as their usual provider. Another 38.4 percent had a group or clinic

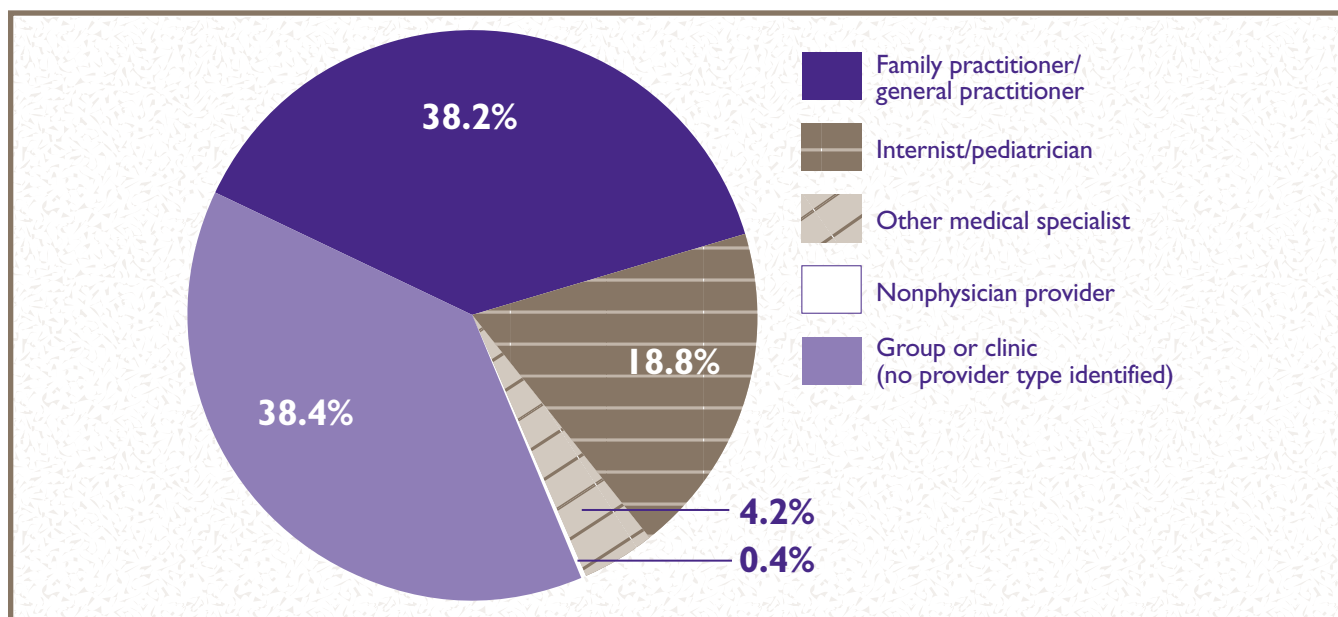
practice as their usual source of health care, without a particular provider type identified.

Nonphysician providers, including nurses, nurse practitioners, physician's assistants, midwives, and chiropractors, comprised less than 1 percent of office-based usual sources of care for Americans in 1996. However, because many nonphysician providers practice in group or clinic settings, this probably understates the impact such providers have on the health care of the American population.

### Characteristics of Usual Sources of Care

Table 2 describes the characteristics of Americans' usual sources of health care (excluding emergency rooms). Nearly half (48.6 percent) of people whose usual source of health care was either office based or a hospital outpatient department or clinic had providers with office hours at night or on weekends. They represented nearly 105 million Americans. Approximately three-fourths (76.3 percent) usually had an appointment to see their provider, and 23.2 percent (or 50 million people) found it very difficult or

**Figure 2. Percent distribution of persons by type of office-based usual source of care, United States, 1996**



**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 (Round 2).

somewhat difficult to contact their provider by telephone.

### Continuity of Care and Satisfaction

Continuity of care and satisfaction with usual source of health care are additional aspects of access to care, and they are also key components of quality health care.

Table 3 profiles several dimensions of satisfaction and continuity of care for the 82 percent of Americans who had office-based, hospital outpatient department, or hospital clinic providers as their usual source of care.

Levels of satisfaction with the usual source of health care were quite high. Nearly all Americans whose usual source was not an emergency room were “somewhat satisfied” or “very

satisfied” with the overall quality of care received (97.1 percent) and with the professional staff (95.5 percent). An equally high proportion of people (96.6 percent) had a usual provider who generally listened to them and gave them the information they needed about health and health care. Likewise, 95.9 percent were confident in

their usual provider’s ability to help when they had a medical problem. Americans who had a usual source of health care were overwhelmingly satisfied with and confident in their provider. However, continuity of care, as measured by whether their usual provider typically asked about prescription medications and treatments provided by other doctors, was experienced by only 77.4 percent of Americans with a usual source of health care.

### Barriers to Care

American families’ experiences of difficulty in obtaining health care, delays in obtaining care, or not receiving the health care that family members thought they needed are shown in Table 4. Approximately 12.8 million families (11.6 percent of American families) experienced difficulty or delay in obtaining care or did not receive needed health care services for one or more of the reasons asked about in the MEPS HC. (These reasons are shown in detail in the technical appendix.)

Among families that experienced barriers to care, inability to afford health care was cited by the majority (59.9 percent) as the main reason for family members’ difficulty, delay, or not receiving needed health care.

**About 12 million families experienced barriers to receiving needed health care.**

Another 19.5 percent cited insurance-related reasons as the main obstacle to receiving needed health care. These reasons included their insurance company not approving, covering, or paying for care; having pre-existing conditions (for which insurance coverage is often restricted); referrals being required but

**Hispanic families were more likely to report barriers to receiving health care.**

unobtainable; and doctors' refusing to accept the family's insurance plan. The remaining 20.7 percent of families experienced a variety of other problems receiving health care, including transportation problems, physical barriers, communication problems, child care limitations, lack of time or information, or refusal of services.

Barriers to care vary among families with different demographic and health characteristics, including

race/ethnicity, perceived health status, and health insurance status.

## Race/Ethnicity of Head of Family

Families with a Hispanic head of the family were more likely to report barriers to receiving health care (15.1 percent) than those with heads of family who were either black (9.9 percent) or white or other race/ethnicity (11.4 percent). Among families that encountered problems in receiving care, those headed by Hispanics also were more likely (69.1 percent) than those headed by persons in the white and other group (58.5 percent) to be unable to afford health care.

## Perceived Health Status

Families in which any member's health status was reported as either fair or poor were almost twice as likely to experience difficulty, delay, or lack of health care (17.9 percent) as families in which all members' health status was reported as excellent, very good, or good (9.9 percent). There were no significant differences by health status in the types of problems experienced.

## Health Insurance Coverage

Families in which one or more members lacked health insurance were 2.9 times more likely to experience difficulty or delay in obtaining health care or

to not receive needed care than families in which all members were insured (not shown in Table 4). For example, families in which all members were uninsured were more likely to experience barriers to needed health care (27.1 percent) than the average for all families (11.6 percent). This represents almost 3.3 million uninsured families in which at least one family member experienced difficulty or delay or did not receive needed health care. Among these, 87.0 percent, or nearly 2.9 million families, identified their main problem as being unable to afford care.

Families in which only some members were uninsured were more likely to experience barriers to needed health care than the average family. Table 4 shows that problems were experienced by:

- 18.1 percent of families with some uninsured and some privately insured.
- 21.8 percent of families with some uninsured and some publicly insured.
- 27.5 percent of families with some uninsured, some privately insured, and some publicly insured.

Similarly, among families that experienced obstacles to receiving health care, those in which one or more members were uninsured generally were more likely than other families to report the inability to afford care as their main barrier. Families in which all members were privately insured were the least likely to report barriers to care (7.0 percent).

## Conclusions

Data from the 1996 MEPS HC indicate that satisfaction with usual source of health care is nearly universal. Even so, almost 12 percent of families had members who had changed their usual source of care within the last 12 months, frequently for quality-of-care or insurance-related reasons. A 12-percent annual rate of change suggests a potentially high rate of turnover in usual sources of health care in the long run.

Nearly 18 percent of the civilian noninstitutionalized population had no usual source of health care in 1996, and almost 12 percent of families had members who experienced difficulty or delay in obtaining health care or did not receive needed care. However, these experiences were not distributed evenly across the population. Two groups were consistently at higher risk of lacking a usual source of care and experiencing barriers to obtaining care: Hispanics and the uninsured.

Hispanic Americans were substantially more likely than other Americans to lack a usual source of health care and were more likely to use hospital-based sources when they did have a usual source of care. In addition, families with a Hispanic head of family were more likely than others to experience obstacles to receiving care, particularly the inability to afford health care. This lack of access to health care among the Hispanic population of the United States may reflect the fact that they were among the most likely to be uninsured (Beauregard, Drilea, and Vistnes, 1997; Vistnes and Monheit, 1997).

Lacking health insurance is a major factor associated with the access-to-care measures presented in this report. Uninsured individuals under age 65 were substantially more likely than others to lack a usual source of health care. Similarly, families in which one or more members lacked health insurance were more likely than other families to experience obstacles that resulted in difficulty or delays in receiving care or not receiving needed medical care. Among families that experienced such barriers, those with uninsured members generally were more likely than those in which everyone had health insurance to be unable to afford needed health care.

While there are substantial barriers to access to health care among persons and families that are uninsured, having health insurance does not guarantee that health care will be accessible or affordable. A substantial minority of persons with private health insurance still reported having no usual source of care. Similarly, more than two-thirds of privately insured families experiencing barriers to health care cited affordability or health insurance problems as the main reason for their difficulty.

MEPS results indicate that insurance coverage is strongly associated with access to health care. Monitoring the relationship between health insurance coverage and measures of access to health care will provide important information in future years as the Nation continues efforts to constrain health care costs while placing increased emphasis on quality of care.

## References

Beauregard KM, Drilea SK, Vistnes JP. The uninsured in America—1996. Rockville (MD): Agency for Health Care Policy and Research; 1997. *MEPS Highlights No. 1*. AHCPR Pub. No. 97-0025.

Caplan LS, Haynes SG. Breast cancer screening in older women. *Public Health Review* 1996;24(2):193-204.

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.

Ettner SL. The timing of preventive services for women and children: the effect of having a usual source of care. *American Journal of Public Health* 1996;86(12):1748-54.

Mark TL, Paramore LC. Pneumococcal pneumonia and influenza vaccination: access to and use by U.S. Hispanic Medicare beneficiaries. *American Journal of Public Health* 1996;86(11):1545-50.

Martin LM, Calle EE, Wingo PA, Heath CW Jr. Comparison of mammography and Pap test use from the 1987 and 1992 National Health Interview Surveys: are we closing the gap? *American Journal of Preventive Medicine* 1996;12(2):82-90.

Moy E, Bartman BA, Weir MR. Access to hypertensive care: effects of income, insurance, and source of care. *Archives of Internal Medicine* 1995;155(14):1497-1502.

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. Percent distribution of population by usual source of health care and selected population characteristics, United States, 1996**

Population characteristics	Total population in thousands	No usual source of health care	Usual source of health care is:		
			Office-based <sup>a</sup>	Hospital outpatient department or clinic <sup>b</sup>	Emergency room
<b>Total<sup>c</sup></b>	262,654		Percent distribution of population		
		17.6	72.7	9.2	0.5
<b>Age in years</b>					
Under 6	24,164	5.5	83.8	10.1	*0.5
6-17	47,253	10.4	80.2	9.0	*0.4
18-24	24,854	34.0	57.4	7.6	*1.0
25-54	114,359	22.7	68.1	8.8	0.4
55-64	20,899	13.2	75.2	10.9	*0.7
65 and over	31,125	9.2	80.3	10.1	*0.4
<b>Race/ethnicity</b>					
Hispanic	28,350	29.6	57.9	11.9	0.6
Black	32,838	20.2	63.6	14.9	*1.3
White and other	201,466	15.5	76.3	7.8	0.3
<b>Sex</b>					
Male	127,922	21.3	69.3	8.9	0.4
Female	134,732	14.1	76.0	9.4	0.5
<b>Perceived health status</b>					
Excellent	95,817	18.4	73.0	8.2	0.3
Very good	79,193	18.3	72.4	8.8	0.5
Good	58,405	18.0	71.9	9.5	*0.5
Fair	21,115	13.3	73.1	12.8	*0.8
Poor	7,868	10.1	77.8	10.9	*1.2
<b>Health insurance status<sup>d</sup></b>					
Under age 65:					
Any private	161,356	14.5	77.2	8.1	0.2
Public only	26,278	13.3	70.8	14.5	1.4
Uninsured	43,896	38.0	51.8	9.1	1.1
Age 65 and over:					
Medicare only	8,123	11.9	74.9	12.8	*0.4
Medicare and private	19,344	7.5	83.4	8.7	*0.3
Medicare and other public	3,056	8.9	78.3	12.2	*0.5
<b>Metropolitan statistical area (MSA)</b>					
MSA	208,887	18.1	72.3	9.1	0.4
Non-MSA	53,767	15.8	74.3	9.3	*0.6

<sup>a</sup>Includes all types of physicians and nonphysician providers seen in an office setting as well as office-based group practices or clinics.

<sup>b</sup>Includes outpatient departments and clinics owned and operated by hospitals.

<sup>c</sup>Includes individuals with unknown health status and those few individuals age 65 and over who did not have Medicare. Excludes a small number of persons who were eligible for data collection in the first half of 1996 but died or were institutionalized in the second half of the year. See Technical Appendix for details.

<sup>d</sup>This refers to health insurance status during the first half of 1996. Uninsured refers to persons uninsured during the entire period. Public and private insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed-Forces-related coverage) are considered private health insurance in this report.

\*Relative standard error is greater than or equal to 30 percent.

**Note:** Restricted to civilian noninstitutionalized population. Percents may not add to 100 due to rounding.

**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).

**Table 2. Percent of population by selected characteristics of usual source of health care, United States, 1996**

Characteristics of usual source of care	Percent	Population in thousands
Has office hours at night or on weekends	48.6	104,676
Usually have an appointment	76.3	164,137
Somewhat difficult or very difficult to contact by telephone	23.2	49,904

**Note:** Excludes individuals whose usual source of care is an emergency room. 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 (Round 2).

**Table 3. Percent of population by satisfaction with usual source of health care and continuity of care, United States, 1996**

Satisfaction or continuity of care	Percent	Population in thousands
Somewhat satisfied or very satisfied with overall quality of care	97.1	208,976
Somewhat satisfied or very satisfied with professional staff	95.5	205,469
Provider generally listens to them and gives them needed health information	96.6	207,786
Confident in provider's ability to help with a medical problem	95.9	206,443
Provider usually asks about prescription medications and treatments from other doctors	77.4	166,539

**Note:** Excludes individuals whose usual source of care is an emergency room. 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 (Round 2).

**Table 4. Percent of families with members experiencing difficulty or delay in obtaining health care or not receiving needed health care by main problem in receiving care and family characteristics, United States, 1996**

Family characteristics	Total number of families in thousands	Percent with any problem	Main problem		
			Inability to afford care	Insurance-related reasons <sup>a</sup>	Other problems <sup>b</sup>
<b>Total</b>	110,207	11.6	Percent distribution of families with problem		
			59.9	19.5	20.7
<b>Race/ethnicity of head of family</b>					
Hispanic	9,408	15.1	69.1	15.8	15.0
Black	12,770	9.9	60.4	12.3	27.3
White and other	88,029	11.4	58.5	20.9	20.6
<b>Perceived health status<sup>c</sup></b>					
Any family member in fair or poor health	23,227	17.9	60.9	17.9	21.3
All family members in excellent, very good, or good health	86,938	9.9	59.3	20.3	20.4
<b>Health insurance status of family<sup>d</sup></b>					
All members private insurance	68,539	7.0	36.7	32.2	31.1
All members public insurance	12,495	12.2	46.2	21.8	32.0
All members uninsured	12,125	27.1	87.0	6.0	7.0
Some private, some uninsured	8,006	18.1	77.4	14.2	*8.5
Some public, some uninsured	4,250	21.8	80.8	*2.5	16.7
Some private, some public	3,830	12.6	—	—	—
Some private, some public, some uninsured	962	27.5	—	—	—
<b>Metropolitan statistical area (MSA)</b>					
MSA	87,972	11.5	59.4	19.9	20.7
Non-MSA	22,235	12.0	61.6	17.9	20.6

<sup>a</sup>Includes insurance company wouldn't approve, cover, or pay for care; pre-existing condition; insurance required a referral but couldn't get one; doctor refused to accept family's insurance plan.

<sup>b</sup>Includes transportation problems (medical care was too far away, can't drive or don't have car/no public transportation available, too expensive to get there); physical problems (hard to get into building, hard to get around inside building, no appropriate equipment in office); communication problems (hearing impairment or loss, different language); and other problems (couldn't get time off work, didn't know where to go to get care, was refused services, couldn't get child care, didn't have time or took too long).

<sup>c</sup>A small number of families with missing health status for all family members are excluded from this breakdown but included in the total line of the table. See Technical Appendix for details.

<sup>d</sup>Refers to health insurance status during the first half of 1996. Uninsured refers to persons uninsured during the entire period. The public and private insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed-Forces-related coverage) are considered private health insurance in this report.

\*Relative standard error is greater than or equal to 30 percent.

— Sample sizes are too small to support reliable estimation.

**Note:** Restricted to civilian noninstitutionalized population. Percents may not add to 100 due to rounding.

**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).



## Technical Appendix

The data in this report were obtained in the first and second 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, satisfaction with care, health insurance coverage, income, and employment. In other components of MEPS, data are collected on residents of licensed or certified nursing homes and the supply side of the health 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 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 from 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 panels 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 July 1996. The reference period for Round 2 of the MEPS HC was from the date of the first interview (March-July 1996) to the date of the second interview, which took place during the period from August through November 1996.

## Information on Access to Care

A supplementary module on access to care was administered in Round 2 of the MEPS HC. This supplement serves a number of purposes in MEPS. It gathers information on three main topic areas: whether each family member has a usual source of health care, the characteristics of usual sources of health care for the family, and barriers the family has faced in obtaining needed health care.

### Usual Source of Health Care

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 those family members who do not have a usual source of health care, the interviewer ascertains the reason or reasons why. If any family members changed their usual source of health care during the 12 months prior to the Round 2 interview, information is obtained on the reason why this change was made.

### Characteristics of Usual Source of Health Care

For each unique usual source of health care provider for a given family, the interviewer asks for the following information:

- Is the provider a medical doctor or some other type of medical provider? (This question is followed by questions asking either the provider's medical specialty or the type of nonphysician provider.) Is the provider hospital based?
- Is the provider the person or place that family members would go to for new health problems, preventive health care, and referrals to other health professionals?
- Does the provider have office hours on nights and weekends? What are the characteristics of the provider related to appointments and waiting time? How difficult is it to contact a medical person at the provider's office by telephone?
- Does the provider generally listen to family members and ask about prescription medications other doctors may have given them? (This question is followed by a number of other questions about quality-related

characteristics of the provider, including family members' confidence in and satisfaction with the care received from the provider.)

Since these questions are asked once for each usual source of health care provider, responses represent the average experience of all family members who use that provider for their usual source of health care, as reported by the survey respondent.

## Barriers to Health Care

The interviewer also gathers information on barriers to health care for the family. The interviewer asks if any family members have recently gone without needed health care because the family needed money to buy food or clothing or to pay for housing. In addition, the respondent is asked to rate his or her satisfaction with the ability of family members to obtain health care if needed. Questions are asked to directly assess whether any family members experienced difficulty obtaining any type of health care, experienced delays in obtaining care, or did not receive health care they thought they needed because of:

- Financial/insurance problems, including “couldn’t afford care,” “insurance company wouldn’t approve, cover, or pay for care,” “pre-existing condition,” “insurance required a referral, but couldn’t get one,” and “doctor refused to accept family’s insurance plan.”
- Transportation problems, including “medical care was too far away,” “can’t drive or don’t have car/no public transportation available,” and “too expensive to get there.”
- Communication problems, including “hearing impairment or loss” and “different language.”
- Physical problems, including “hard to get into building,” “hard to get around inside building,” and “no appropriate equipment in office.”
- Other problems, including “couldn’t get time off work,” “didn’t know where to go to get care,” “was refused services,” “couldn’t get child care,” “didn’t have time or took too long,” and other reasons.

## Data Editing and Handling of Missing Data

Minimal data editing was done on the variables in the access-to-care supplement. Editing consisted of the construction of new variables from a series of data elements and some logical editing that was carried out to ensure consistency among the variables. “Other specify” text fields were reviewed and either classified into existing categories or put into new categories created to accommodate this information.

Missing data is a relatively small problem for the access-to-care information. Of the 22,149 individuals who had positive Round 2 person-level weights, 72 were excluded entirely from this report because they were either dead or institutionalized at the time of the Round 2 interview, making them ineligible for the access-to-care supplement questions. (The weighted population estimate for these 72 omitted individuals is 861,629.) This leaves an unweighted population of 22,077 on which the estimates in Table 1 are based. Of these, 98 were missing data on whether they had a usual source of care, resulting in an unweighted population of 21,979 for the column “percent of population with no usual source of health care.” An additional 32 people had a usual source of health care but had missing data on the type of place, resulting in an unweighted population of 21,947 for the last three columns of this table. The strategy of omitting cases that are missing data is based on the assumption that the unknown cases are distributed in the same way as the known cases. This strategy for dealing with missing data is used throughout this report except where otherwise noted. An additional 15 people for whom health status was unknown are included in the total line of Table 1 but are not included in the breakdown by health status. Similarly, 48 people who were age 65 and over but not covered by Medicare are included in the total line but not in the breakdown by insurance status.

Figure 1 shows the reasons why family members who changed their usual source of care in the last 12 months did so. It includes those who lacked a usual source of care at the time of the interview, but who had one in the 12 months prior to the interview date. Only 37 families (0.4 percent of all responding families) were missing data on whether there had been a change in usual source of health care, and an additional 4 families (0.04 percent) had experienced such a change but were

missing data on the reason for the change. They are omitted from the figure.

Tables 2 and 3 are based on the Table 1 population ( $n = 21,947$ ) but exclude 4,213 people who had no usual source of health care (the 17.6 percent shown in Table 1) and 104 people whose usual source of health care was an emergency room (the 0.5 percent shown in Table 1). The unweighted population for Tables 2 and 3 totals 17,630. In addition, Tables 2 and 3 are affected by small amounts of item nonresponse, as follows:

- Table 2: Provider has office hours at nights or on weekends (7.2 percent), usually have an appointment (0.3 percent), and difficulty contacting by telephone (7.7 percent).
- Table 3: Satisfaction with quality (1.1 percent), satisfaction with professional staff (1.2 percent), provider generally listens to them (2.1 percent), confident in provider's ability to help (1.6 percent), and provider usually asks about prescription medications (4.8 percent).

For Figure 2, the unweighted population is 15,509—the population for Tables 2 and 3 less 2,121 people whose usual source of care was hospital based but not an emergency room. The small number of cases (9) with office-based usual sources of health care who could not be classified are omitted from Figure 2. Persons included in the “group or clinic” category are those whose usual source of health care was office based with no particular individual provider specified.

Table 4 is a family-level analysis. Of the 9,084 families with positive weights, 1,089 reported any barriers to care. The distribution of reasons for experiencing difficulty, delay, or not receiving needed health care is based on 1,088 of these cases; the remaining case did not specify a type of barrier and is omitted from this distribution. The reasons for experiencing difficulty, delay, or not receiving needed care shown in Table 4 are the main reasons reported by respondents for their families. For families in which one or more full-time students ages 17-23 were living away at school, the students' experiences are characterized by those of their families (i.e., the primary household respondent's response to the question on barriers to care is assumed to represent the student's experience).

The family characteristics shown in Table 4 are obtained in two ways. For race/ethnicity of head of family and place of residence, the characteristic of the reference person (the person in whose name the family's home is owned or rented) is used to describe the family.

For 54 cases in which the reference person was missing such data, available information from the next oldest individual in the family is used. For perceived health status and health insurance status of the family, all members who were eligible for data collection are included in the description of the family. When an individual was missing data on health status or health insurance, the family is characterized based on data from the remaining individuals with nonmissing values. This strategy is based on the assumption that the health insurance and health status of family members missing such data are distributed in the same way as for those family members whose status is known. For the family-level estimates, 792 individuals were missing health insurance data; 790 of these were not present in Round 1 of MEPS, the round from which the health insurance information in this report is derived. (See below.) Similarly, 1,580 people were missing health status data; 790 of these were not present for the Round 1 MEPS interview. Three families' health status could not be determined, as data were missing for all family members. Health insurance information was available from one or more family members for all families in Round 2 of MEPS.

## Population Characteristics

All population characteristics used in this report come from the MEPS HC Round 1 data collection effort, the most recently available data as of the writing of this report.

### Age

The respondent was asked to report the age of each family member as of the date of the Round 1 interview.

### Race/Ethnicity

Classification by race and ethnicity is based on information reported for each family member. Respondents were asked if their race was best described as American Indian, Alaska Native, Asian or Pacific Islander, black, white, or other. They were also asked if their main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexicano, Mexican American, or Chicano; other Latin American; or other Spanish. All persons who claimed main national origin or ancestry 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.

## 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.

## Health Insurance Status

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).

### 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.

## 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. Regions of residence are in accordance with the U.S. Bureau of the Census definition and are determined as of the date of the Round 1 interview.

## Additional Cautions

Very few respondents named emergency rooms as usual sources of care for members of their families. As a result, the relative standard errors for many of the estimates in the "Emergency room" column in Table 1 are quite high. Standard errors that are greater than or equal to 30 percent of the estimate are indicated with an asterisk. Exact relative standard errors can be calculated by dividing the appropriate standard error, shown in Tables A-F, by the estimate. Caution should be used in interpreting estimates in the "Emergency room" column. They are presented for the benefit of those interested in the use of emergency rooms as a usual source of health care, but are best combined with the "Hospital outpatient department or clinic" column.

As of the writing of this report, population characteristics for MEPS are available only from the

first round of data collection. In contrast, the access-to-care supplement was administered in Round 2. Population characteristics may have changed between Rounds 1 and 2 for members of the MEPS panel, so caution should be used in interpreting these data. This concern is particularly applicable to health insurance status.

## 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.

The person-level estimates presented in this report were derived from a nationally representative sample of the civilian noninstitutionalized population defined as of the first half of 1996. The estimates should be interpreted as attributes of the target population defined as of the first half of 1996. While the survey interviews that obtained data on access to care were conducted in the second half of 1996, the questions on access were not explicitly constrained by that time period.

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 estimates derived from the March 1996 Current Population Survey (CPS) based on cross-classifications by region, age, race/ethnicity, and sex.

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 percent distribution of families with members who changed their usual source of care in the past 12 months by reason for change, United States, 1996**

*Corresponds to Figure 1*

Reason	Standard error
Insurance-related reasons	1.68
Dissatisfied with quality of care	1.48
Too far away, moved to new area, or previous provider not available	1.68
Other reasons	1.34

**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 (Round 2).

**Table B. Standard errors for percent distribution of persons by type of office-based usual source of care, United States, 1996**

*Corresponds to Figure 2*

Type of provider	Standard error
Family practitioner/general practitioner	0.97
Internist/pediatrician	0.70
Other medical specialist	0.27
Nonphysician provider	0.08
Group or clinic (no provider type identified)	1.11

**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 (Round 2).

**Table C. Standard errors for percent distribution of population by usual source of health care and selected population characteristics, United States, 1996**

*Corresponds to Table 1*

Population characteristics	No usual source of health care	Usual source of health care is:		
		Office-based <sup>a</sup>	Hospital outpatient department or clinic <sup>b</sup>	Emergency room
<b>Total<sup>c</sup></b>	0.43	0.60	0.46	0.07
<b>Age in years</b>				
Under 6	0.64	1.14	0.96	0.25
6-17	0.67	0.91	0.68	0.11
18-24	1.27	1.39	0.71	0.34
25-54	0.59	0.70	0.49	0.08
55-64	0.86	1.38	1.15	0.22
65 and over	0.71	1.11	0.90	0.15
<b>Race/ethnicity</b>				
Hispanic	1.21	1.30	0.88	0.16
Black	0.95	1.34	1.11	0.41
White and other	0.45	0.65	0.51	0.06
<b>Sex</b>				
Male	0.54	0.71	0.48	0.08
Female	0.45	0.61	0.50	0.09
<b>Perceived health status</b>				
Excellent	0.65	0.87	0.58	0.09
Very good	0.59	0.76	0.59	0.10
Good	0.74	0.95	0.64	0.18
Fair	1.01	1.33	0.97	0.25
Poor	1.22	1.86	1.46	0.53
<b>Health insurance status<sup>d</sup></b>				
Under age 65:				
Any private	0.48	0.65	0.52	0.05
Public only	0.98	1.61	1.23	0.38
Uninsured	1.10	1.23	0.75	0.27
Age 65 and over:				
Medicare only	1.47	2.01	1.58	0.32
Medicare and private	0.81	1.27	1.06	0.17
Medicare and other public	1.77	2.94	2.17	0.51
<b>Metropolitan statistical area (MSA)</b>				
MSA	0.50	0.68	0.49	0.08
Non-MSA	0.89	1.29	1.13	0.17

<sup>a</sup>Includes all types of physicians and nonphysician providers seen in an office setting as well as office-based group practices or clinics.

<sup>b</sup>Includes outpatient departments and clinics owned and operated by hospitals.

<sup>c</sup>Includes individuals with unknown health status and those few individuals age 65 and over who do not have Medicare coverage. Excludes a small number of persons who were eligible for data collection in the first half of 1996 but died or were institutionalized in the second half of the year. See Technical Appendix for details.

<sup>d</sup>This refers to health insurance status during the first half of 1996. Uninsured refers to persons uninsured during the entire period. Public and private insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed-Forces-related coverage) are considered private health insurance in this report.

**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 (Rounds 1 and 2).

**Table D. Standard errors for percent of population by selected characteristics of usual source of health care, United States, 1996**

*Corresponds to Table 2*

Characteristics of usual source of care	Standard error for percent
Has office hours at night or on weekends	0.91
Usually have an appointment	0.73
Somewhat difficult or very difficult to contact by telephone	0.68

**Note:** Excludes individuals whose usual source of care is an emergency room. 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 (Round 2).

**Table E. Standard errors for percent of population by satisfaction with usual source of health care and continuity of care, United States, 1996**

*Corresponds to Table 3*

Satisfaction or continuity of care	Standard error for percent
Somewhat satisfied or very satisfied with overall quality of care	0.20
Somewhat satisfied or very satisfied with professional staff	0.26
Provider generally listens to them and gives them needed health information	0.25
Confident in provider's ability to help with a medical problem	0.25
Provider usually asks about prescription medications and treatments from other doctors	0.67

**Note:** Excludes individuals whose usual source of care is an emergency room. 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 (Round 2).



**Table F. Standard errors for percent of families with members experiencing difficulty or delay or not receiving needed health care by main problem in receiving care and family characteristics, United States, 1996**

*Corresponds to Table 4*

Family characteristics	Any problem	Main problem		
		Inability to afford care	Insurance-related reasons <sup>a</sup>	Other problems <sup>b</sup>
<b>Total</b>	0.40	1.84	1.33	1.31
<b>Race/ethnicity of head of family</b>				
Hispanic	1.26	3.96	3.00	2.87
Black	0.92	5.29	2.84	4.33
White and other	0.45	2.06	1.57	1.52
<b>Perceived health status<sup>c</sup></b>				
Any family member in fair or poor health	1.00	2.84	1.96	2.19
All family members in excellent, very good, or good health	0.40	2.14	1.63	1.61
<b>Health insurance status of family<sup>d</sup></b>				
All members private insurance	0.35	2.38	2.20	2.31
All members public insurance	1.20	5.85	5.11	4.56
All members uninsured	1.67	2.30	1.49	1.69
Some private, some uninsured	1.75	4.39	3.17	2.64
Some public, some uninsured	2.18	4.35	1.47	4.18
Some private, some public	1.83	—	—	—
Some private, some public, some uninsured	4.87	—	—	—
<b>Metropolitan statistical area (MSA)</b>				
MSA	0.44	2.11	1.55	1.44
Non-MSA	0.84	3.56	2.62	3.07

<sup>a</sup>Includes insurance company wouldn't approve, cover, or pay for care; pre-existing condition; insurance required a referral but couldn't get one; doctor refused to accept family's insurance plan.

<sup>b</sup>Includes transportation problems (medical care was too far away, can't drive or don't have car/no public transportation available, too expensive to get there); physical problems (hard to get into building, hard to get around inside building, no appropriate equipment in office); communication problems (hearing impairment or loss, different language); and other problems (couldn't get time off work, didn't know where to go to get care, was refused services, couldn't get child care, didn't have time or took too long).

<sup>c</sup>A small number of families with missing health status for all family members are excluded from this breakdown but included in the total line of the table. See Technical Appendix for details.

<sup>d</sup>Refers to health insurance status during the first half of 1996. Uninsured refers to persons uninsured during the entire period. The public and private insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance are considered privately insured. CHAMPUS and CHAMPVA (Armed-Forces-related coverage) are considered private health insurance in this report.

— Sample sizes are 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 (Rounds 1 and 2).

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and Human Services**  
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AHCPH Pub. No. 98-0001  
October 1997