



Stability and Change in Health Insurance
Status: New Estimates from the 1996 MEPS

MEPS

Research #18 Findings

U.S. Department of Health and Human Services
Public Health Service
Agency for Healthcare Research and Quality



Health Care Information and Electronic Ordering Through the AHRQ Web Site



The Agency for Healthcare Research and Quality's Web site—<http://www.ahrq.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 AHRQ, with information on how to obtain these resources. Many information products have an electronic ordering form and are mailed free of charge from the AHRQ Clearinghouse within 5 working days.

<http://www.ahrq.gov/>

Abstract

Initiatives to expand health insurance coverage have focused not only on the size of the uninsured population but also on the stability and continuity of coverage. This report from the Agency for Healthcare Research and Quality (AHRQ) describes the health insurance experience of the U.S. population during 1996, using data from the 1996 Medical Expenditure Panel Survey (MEPS). It provides alternative estimates of the uninsured population and the prevalence of full-year and part-year coverage. It also examines the extent to which people insured at the beginning of a calendar year become uninsured and the likelihood that those uninsured at the beginning of the year will acquire coverage. The findings point to the importance of public insurance as a means through which many disadvantaged Americans acquire coverage but also reveal that public coverage is less stable than private

The estimates in this report are based on the most recent data available at the time the report was written. However, selected elements of MEPS data may be revised on the basis of additional analyses, which could result in slightly different estimates from those shown here. Please check the MEPS Web site for the most current file releases.

health insurance. Only a small proportion of people uninsured at the beginning of 1996 acquired health insurance during the year.

Suggested citation

Monheit AC, Vistnes JP, Zuvekas SH. Stability and change in health insurance: new estimates from the 1996 MEPS. Rockville (MD): Agency for Healthcare Research and Quality; 2001. MEPS Research Findings No. 18. AHRQ Pub. No. 02-0006.



Stability and Change in Health Insurance
Status: New Estimates from the 1996 MEPS

MEPS

Research #18 Findings

U.S. Department of Health and Human Services
Public Health Service
Agency for Healthcare Research and Quality

AHRQ Pub. No. 02-0006
December 2001



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 Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research, 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 AHRQ 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 private and public-sector employers. 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 three 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.

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. Beginning in 2000, national estimates of employer contributions to group health insurance from the MEPS IC are being used in the computation of Gross Domestic Product (GDP) by the Bureau of Economic Analysis.

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 AHRQ Publications Clearinghouse. Write or call:

AHRQ 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 AHRQ number of the document or CD-ROM you are requesting. Selected electronic files are available through the Internet on the AHRQ Web site:

<http://www.ahrq.gov/>

On the AHRQ 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 Healthcare Research and Quality, 2101 East Jefferson Street, Suite 500, Rockville, MD 20852 (301-594-1406).

Table of Contents

Introduction	1
Size of Uninsured Population for Different Time Periods	1
Annual Estimates of Insurance Status	2
Acquisition of Insurance by Uninsured Americans	4
Stability of Private Insurance Coverage	7
Stability of Public Insurance Coverage	9
Conclusions	12
References	13

Tables showing:

1. Alternative estimates of the uninsured	2
2. Full-year health insurance status	3
3. Full-year health insurance status—persons uninsured in January 1996	5
4. Full-year health insurance status—persons privately insured in January 1996	8
5. Full-year health insurance status—persons publicly insured in January 1996	10

Technical Appendix

Survey Design	14
Health Insurance Status	14
Population Characteristics	15
Sample Design and Accuracy of Estimates	16
Rounding	17
Standard Error Tables	17

Stability and Change in Health Insurance Status: New Estimates from the 1996 MEPS

by Alan C. Monheit, Ph.D., Jessica P. Vistnes, Ph.D., and Samuel H. Zuvekas, Ph.D., Agency for Healthcare Research and Quality

Introduction

Public policy efforts to expand access to health insurance are concerned not only with reducing the size of the uninsured population but also with assuring the continuity and stability of health care coverage. In particular, some population groups have difficulty maintaining continuous coverage. This problem has been an important impetus to the design of incremental health care reform efforts, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the early provisions of the 1985 Consolidated Omnibus Budget Reconciliation Act (COBRA), and State health insurance reform laws that have mandated health insurance portability and access to coverage. Instability in an individual's health insurance status has been associated with both changes in labor market activity (e.g., shifts between full- and part-time employment status, transitions between jobs, and changes in labor force attachment) and changes in an individual's circumstances (e.g., changes in marital status, economic status, or age).

In this report, data from the Medical Expenditure Panel Survey (MEPS) on individuals' monthly health insurance status are used to describe the health insurance experience of the U.S. population over calendar year 1996. These data complement static point-in-time estimates of health insurance status (Vistnes and Monheit, 1997) by distinguishing among coverage all year, coverage part of the year, and lack of coverage throughout the entire year, as well as changes in coverage during the year, for specific insurance cohorts.

Such measures can provide a more complete picture of the population's experience with coverage. They also can help to identify specific population groups whose characteristics make them especially vulnerable to being uninsured for extended periods of time, as well as those that are likely to experience instability in their health insurance status. Identifying such groups can help to provide information for more targeted policy interventions directed at both the uninsured and insured populations. The estimates presented in this report are

based on data from the 1996 MEPS Household Component. MEPS is a nationally representative survey of the civilian noninstitutionalized population.

This analysis uses MEPS monthly data on individuals' health insurance status during calendar year 1996. Estimates are presented for the population who were under age 65 at the end of 1996 and were in scope for MEPS for the entire year. As a result, these findings can be generalized to the U.S. noninstitutionalized population with the following exclusions: people who died, left the country, or were institutionalized during the course of the year and babies born after January 1996.

The monthly insurance variables indicate the presence of a particular type of coverage for at least 1 day in a given month. People *uninsured for the entire year* did not have coverage in any month during the year; people *insured for the entire year* had 12 months of coverage. Part-year insured individuals were insured for at least 1 month but did not have 12 months of coverage.

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.

Size of Uninsured Population for Different Time Periods

Estimates of the uninsured population from various household surveys reflect differences in the time period studied as well as differences in questionnaire design, sample design, and estimation procedures (Lewis, Ellwood, and Czajka, 1998; Monheit, 1994; Swartz, 1986; Swartz and Purcell, 1989). MEPS data permit construction of a variety of health insurance status measures to examine the relationship between the time

Table 1. Alternative estimates of the uninsured population under age 65 from the 1996 Medical Expenditure Panel Survey

Definition	Number of uninsured in thousands	Percent of non-elderly population
Without coverage on December 31, 1996	47,119	20.5
Without coverage throughout the first half of 1996 (first round of interview)	42,298	18.4
Without coverage the entire year	31,613	13.8
Without coverage for part of the year only (1 to 11 months)	30,406	13.3

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year (229.3 million individuals).

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

period considered and the size of the uninsured population for a given sample design and questionnaire content. Table 1 presents four estimates of the size of the uninsured population:

- A true point-in-time estimate as of December 31, 1996—47.1 million people, representing a fifth of the non-elderly population.
- An estimate of the full-year uninsured for calendar year 1996—31.6 million people, or 13.8 percent of the non-elderly population.
- An estimate of the part-year uninsured (those uninsured for part but not all of the year)—30.4 million people, or 13.3 percent of the non-elderly population.
- An estimate of people uninsured throughout the first MEPS interview round—42.3 million individuals (18.4 percent of the non-elderly population) who, on average, were uninsured during the first half of calendar year 1996. (See Vistnes and Monheit, 1997, for a detailed description of this population.)¹

As expected, the December 31st “pure” point-in-time estimate of the uninsured population is larger than the full-year estimate (47.1 million vs. 31.6 million). This difference reflects the fact that a point-in-time

¹In comparison, data from the Current Population Survey (CPS) yield an estimate of 41.4 million non-elderly Americans (17.6 percent) who lacked health insurance during the entire 1996 calendar year. However, CPS estimates of the uninsured most closely resemble those obtained at a point in time or for reference periods much shorter than a year. As a result, most analysts regard CPS estimates of the uninsured as hybrids of point-in-time and annual estimates. See Lewis, Ellwood, and Czajka (1998), Monheit (1994), Swartz (1986), and Swartz and Purcell (1989) for a discussion.

estimate includes people uninsured all year as well as the part-year uninsured who were without coverage at that time. When individuals who were uninsured for at least 1 month during 1996 (the part-year and full-year uninsured) are considered, it is seen that 62 million Americans, or 27.1 percent of non-elderly individuals, experienced an uninsured spell during 1996. These data reveal that people uninsured all year represented half of this population.²

Annual Estimates of Insurance Status

Table 2 presents more detailed estimates of the full-year health insurance status of non-elderly Americans during calendar year 1996 by selected demographic characteristics. It focuses on three mutually exclusive groups: insured by private and/or public coverage throughout 1996; insured for part of 1996; and uninsured throughout 1996. As noted above, a substantial percentage of non-elderly Americans lacked coverage at some point during 1996 (27.1 percent, or 62 million individuals), with a fairly even split between those who were continuously uninsured during the year and those who were without coverage for part of the year.

²Analyses of data from the 1987 National Medical Expenditure Survey reveal that half (51.2 percent) of the 47.8 million non-elderly Americans ever uninsured in 1987 were uninsured for the entire year (Short, 1990). Estimates from the 1977 National Medical Care Expenditure Survey indicate that just over half (53 percent) of the 34.6 million persons ever uninsured in 1977 were uninsured for the entire year (Walden, Wilensky, and Kasper, 1985).

Table 2. Full-year health insurance status of the population under age 65: United States, 1996

Population characteristic	Population in thousands	Insured all year	Percent distribution	
			Insured part of year	Uninsured all year
Total^a	229,325	73.0	13.3	13.8
Age in years				
Less than 7	24,229	76.9	14.7	8.4
7-17	43,340	75.5	13.1	11.4
18-24	24,798	54.5	22.8	22.7
25-34	39,587	65.2	17.8	17.0
35-54	76,769	77.8	9.1	13.0
55-64	20,602	82.1	7.2	10.8
Race/ethnicity				
Total Hispanic	27,202	53.5	17.8	28.7
Total black	29,924	64.1	18.5	17.4
Total white	162,084	77.9	11.6	10.5
Total other	10,114	71.8	11.6	16.6
Hispanic male	14,002	50.2	16.0	33.8
Black male	14,150	62.5	18.2	19.3
White male	80,778	77.3	11.3	11.4
Hispanic female	13,200	57.0	19.7	23.3
Black female	15,774	65.6	18.8	15.6
White female	81,306	78.5	11.9	9.6
Marital status^b				
Married all year	86,758	80.9	9.3	9.8
Widowed all year	2,293	73.4	8.4	18.2
Divorced all year	11,459	68.4	13.4	18.2
Separated all year	3,574	55.9	19.6	24.6
Never married all year	49,925	60.8	17.6	21.7
Changed marital status	13,007	60.2	19.3	20.4
Perceived health status				
Excellent, very good, or good all year	201,195	73.8	13.1	13.1
Fair or poor all year	10,889	67.4	14.3	18.3
Ever fair or poor during year	27,786	66.5	14.5	18.9
Employment status^b				
Employed all year	114,545	76.5	11.1	12.4
Employed part year	25,437	53.2	22.9	23.9
Not employed all year	26,286	70.8	11.6	17.5
Income^c				
Poor	30,489	55.2	20.3	24.5
Near-poor	9,203	45.2	27.6	27.3
Low income	30,826	55.8	19.1	25.1
Middle income	76,619	75.7	12.1	12.3
High income	81,637	86.7	7.8	5.5

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year. Percents may not add to 100 because of rounding.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

Table 2 shows that individuals who were, on average, the most at risk of lacking coverage during the first half of 1996 (discussed in Vistnes and Monheit, 1997) were also the most at risk of lacking coverage all year. Most prominent among this population were young adults and racial/ethnic minorities. For example, only half of all people 18-24 years of age (54.5 percent) were insured throughout the year.³ In contrast, over three-quarters of adults 35-54 years of age and 82.1 percent of adults 55-64 years of age were insured all year. Only about half of all Hispanics were insured for the full year and nearly 29 percent were uninsured all year. Less than two-thirds (64.1 percent) of black Americans were insured all year and 17.4 percent were uninsured all year. In comparison, nearly four out of five white Americans (77.9 percent) were insured all year and only 10.5 percent lacked coverage for the entire year. Of all racial/ethnic groups, Hispanic males were the most at risk, as one out of three Hispanic males were uninsured throughout the year.

Annual health insurance status was also related to marital status, health status, and family income.⁴ Compared to people in the other all-year marital status categories in Table 2, people who were married throughout 1996 were most likely to have full-year coverage and least likely to be uninsured all year.⁵ People married all year were also more likely to have full-year coverage than people who changed marital status during the year.

With regard to health status, people reported as being in fair or poor health status for either the whole year or part of the year were less likely than others to have full-year coverage and more likely to lack coverage throughout the year.

³The low rates of coverage for young adults reflect a number of factors, including insurance carrier rules that limit dependency coverage for people 18-24 years of age to full-time students; transitions from full-time student status to more transient part-time and part-year employment patterns that may limit eligibility for employment-based coverage; and a preference for wage income over nonpecuniary fringe benefits by some young adults who expect to have small health care expenses.

⁴Full-year marital status and health status were constructed from information available at three points in time in 1996: the interview dates for the first two rounds of MEPS and December 31, 1996.

⁵In contrast to people who are widowed, divorced, or separated, married people can have access to private coverage through their own employment and/or that of their spouse. Moreover, married couples generally have greater household income than unmarried individuals, so they are better able to afford private coverage.

Family income exhibited a strong association with continuous insurance coverage during 1996. People who were poor, near-poor, or low income (incomes less than or equal to 200 percent of the Federal poverty line) were nearly five times as likely to be uninsured all year and two to three times more likely to be insured only part of the year than high-income people (incomes over 400 percent of the poverty line). Near-poor persons (100 to 125 percent of poverty) had the lowest rate of full-year coverage and also exhibited the highest rate of part-year coverage, a finding that may reflect their inability to pay for continuous private coverage or to remain eligible for public coverage, given periodic reviews of asset and income levels over the year. While middle-income individuals (200 to 400 percent of poverty) had more stable coverage than those in lower income households, they still experienced important gaps in coverage compared to high-income families. For example, 75.7 percent of middle-income individuals were insured all year, compared to 86.7 percent of high-income individuals.

Acquisition of Insurance by Uninsured Americans

An important prerequisite for developing strategies to expand health insurance coverage is understanding the extent to which uninsured individuals are able to acquire coverage through the present systems of private and public insurance. Toward that end, the health insurance experience of a specific cohort of non-elderly individuals who were without coverage in January 1996 is examined. This cohort, consisting of 45.2 million uninsured people, represents a snapshot of the uninsured population at a point in time. By examining the experience of this group over the year, the characteristics of the uninsured that are associated with the acquisition of coverage, as well as the characteristics of those who may be chronically uninsured, can be examined.

A minority of the uninsured—only 30.0 percent of the 45.2 million people uninsured in January 1996—obtained coverage during the year (Table 3). The data in Table 3 also reveal several important demographic correlates of coverage acquisition during 1996. Over two-fifths (41.9 percent) of children under age 7 obtained coverage. Over half of the children under age 7 who obtained coverage were enrolled in public insurance. This result may reflect the fact that, in contrast to other

Table 3. Full-year health insurance status of persons under age 65 who were uninsured in January 1996: United States

Population characteristic	Population in thousands	Obtained insurance		
		Total	Private	Public
			Percent	
Total^a	45,184	30.0	21.6	8.4
Age in years				
Less than 7	3,501	41.9	18.4	23.5
7-17	7,309	32.1	21.2	11.0
18-24	8,299	32.1	24.4	7.7
25-34	9,901	31.9	25.5	6.4
35-54	13,399	25.2	20.2	5.0
55-64	2,774	19.9	11.7	8.2
Race/ethnicity				
Total Hispanic	10,221	23.7	13.3	10.4
Total black	7,889	34.2	22.6	11.6
Total white	24,763	31.6	24.9	6.7
Total other	2,310	27.5	20.3	7.2
Hispanic male	5,887	19.7	12.0	7.7
Black male	4,103	33.5	23.9	9.6
White male	13,036	29.6	23.5	6.1
Hispanic female	4,335	29.1	15.1	14.0
Black female	3,786	34.9	21.1	13.8
White female	11,727	33.8	26.4	7.4
Marital status^b				
Married all year	12,017	29.4	24.0	5.4
Widowed, divorced, or separated all year	4,504	24.9	17.5	7.4
Never married all year	15,098	28.4	21.9	6.5
Changed marital status	3,816	30.4	21.9	8.5
Perceived health status				
Excellent, very good, or good all year	37,818	30.5	23.2	7.3
Fair or poor all year	2,884	31.0	11.7	19.3
Ever fair or poor during year	7,295	27.9	13.5	14.4
Employment status^b				
Employed all year	20,511	30.6	27.8	2.8
Employed part year	8,285	26.5	17.8	8.7
Not employed all year	6,119	24.7	8.5	16.2
Income^c				
Poor	10,368	28.0	11.2	16.8
Near-poor	3,594	30.2	16.8	13.3
Low income	10,592	27.0	20.7	6.3
Middle income	13,445	30.2	25.0	5.2
High income	7,081	36.7	34.1	2.6

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year. For "Obtained insurance," percents may not add to total because of rounding.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

age groups, young children have been targeted for eligibility in public insurance programs. Older children had a lower likelihood of obtaining any coverage, and when they did obtain coverage it was more likely to be private than public coverage. Adults were also more likely to obtain private than public coverage, which reflects the fact that there are generally few avenues for adults without serious health problems to obtain public coverage.

The findings for children show that, despite efforts to expand children's access to public coverage through the Medicaid program in the late 1980s and early 1990s, in 1996 nearly two-thirds of children under age 18 in the uninsured cohort experienced lengthy periods (at least a year) without coverage. Only 41.9 percent of uninsured children under age 7 and 32.1 percent of uninsured children ages 7-17 obtained insurance during the course of the year.

The data on health insurance acquisition also reveal some interesting contrasts with more static analyses when the experience of adults is considered. For

Only 30 percent of people under 65 who were uninsured at the beginning of 1996 became insured during the year.

example, while young adults had the highest likelihood of lacking coverage all year (Table 2), about one-third of those ages 18-24 were able to obtain coverage (mostly private health insurance) during 1996 (Table 3). This contrasts sharply with the experience of older adults

ages 55-64. Although people ages 55-64 were the group least likely to lack coverage at any time during the year (Table 2), this high propensity for full-year coverage did not translate into a high probability of *acquiring coverage* when people this age were uninsured (Table 3). The data suggest that, among the uninsured cohort, older adults may face considerably more difficulty than younger persons in acquiring coverage. In particular, older adults ages 55-64 were half as likely as young adults to obtain private coverage.

Among racial and ethnic groups, Hispanics were less likely than blacks or whites to obtain health insurance, especially private coverage.⁶ These disparities largely

⁶The difference between Hispanics and groups categorized as "other" was not statistically significant because of small sample sizes for the "other" group.

reflect the experience of Hispanic males, who exhibited the lowest coverage acquisition rate, at least 10 percentage points below any other racial/ethnic group except the group categorized as "other" (not white, black or Hispanic). Hispanic males were only about half as likely as other males to obtain private coverage, yet another indication of the poor health insurance prospects of Hispanic males described in Table 2 (and in many other reports). The failure of Hispanic males to acquire coverage also reflects their worsening access to private coverage compared to other groups. For example, Hispanic males were the only racial/ethnic group of working Americans to experience a decline in offers of employment-related health insurance over the last decade (Monheit and Vistnes, 2000). While there was no difference in the likelihood or type of coverage obtained by black and white males, the data indicate that minority females were more likely than white females to acquire public coverage. In addition, Hispanic females were less likely than white females to obtain private coverage.

While uninsured people in fair or poor health and those in excellent, very good, or good health were equally likely to acquire coverage, there were differences in the type of coverage obtained. Uninsured people in fair or poor health throughout the year were more than twice as likely as those in better health to obtain public coverage. Uninsured people in better health, in turn, were twice as likely as those in fair or poor health throughout the year to obtain private coverage. These findings suggest that uninsured people with health problems may face difficulties enrolling in private health insurance and point to the important role of public coverage as a component of the social safety net. Whether these differences by health status reflect issues related to affordability, different access to the kinds of jobs that provide coverage, or the ability to work the hours required for eligibility, or are a result of exclusions based on health conditions, remains an important issue for research.

The likelihood of acquiring health insurance and the type of coverage obtained also displayed some variation according to employment status.⁷ People not employed during 1996 were less likely than those employed all year

⁷In this study, workers are considered to have worked throughout 1996 if they were working at three points in time in 1996: each of the interview dates for the first two rounds of MEPS and December 31, 1996. Part-year workers were defined as individuals who were working on one or two of those dates, and those not employed were individuals not employed on any of those dates.

to obtain coverage. People employed all year were far more likely to obtain private coverage than those with part-year or no employment experience during 1996. When the nonworking uninsured did obtain coverage, they were nearly six times as likely as those employed all year to obtain public coverage.

There was little variation by income in the likelihood of obtaining insurance except that people in the highest income group (over 400 percent of poverty) were less likely to remain uninsured than those with lower incomes. The sources of coverage also varied by income, with higher income levels strongly associated with the acquisition of private coverage. For example, people with the highest family income were two to three times more likely to enroll in private coverage than people who were poor or near-poor (up to 125 percent of poverty). Similarly, the likelihood of obtaining public insurance increased markedly as family income declined. In this regard, it is important to recognize that public coverage played an important role in ensuring that lower income groups (up to 125 percent of poverty) were as likely to leave an uninsured state as all but those in the highest income group.

Stability of Private Insurance Coverage

Ensuring the stability of private health insurance has been an important focus of past and recently enacted health reform measures. In particular, provisions of the 1985 COBRA legislation were designed to provide workers and their dependents with continued access to their employment-based coverage if change in a worker's employment circumstances triggers a specific COBRA qualifying event.⁸ In addition, HIPAA legislation promotes health insurance portability by limiting the use of pre-existing health conditions to deny people changing jobs access to health insurance.

⁸For employees, COBRA qualifying events include job loss (other than for gross misconduct) and a reduction in hours. For dependents, qualifying events include employee termination, death, divorce or legal separation, employee eligibility for Medicare, and dependent children who no longer meet plan definitions of dependents. Continuation coverage extends for 18 months in the case of a job loss or hours reduction and 36 months for other qualifying events, and premiums under COBRA can be as high as 102 percent of the costs for an employer's active employees (Congressional Research Service, 1988).

The estimates in Table 4 provide information on the degree of coverage stability for non-elderly people who were privately insured in January 1996. People with private insurance at the beginning of the year exhibited a high rate of stable coverage, with 92.0 percent of them retaining their private coverage throughout the year. Of those who lost their private insurance after January, almost all became uninsured for some or all of the rest of 1996. These data reveal little evidence that individuals switched from private insurance in the beginning of the year to public coverage later in the year.

The relatively high degree of stability in private health insurance masks several important differences among population subgroups. For example, while the stability of coverage did not vary among children of different ages, it declined for young adults and increased substantially as adults aged. Nearly 1 out of 5 young adults ages 18-24 lost private insurance coverage during the year (17 percent) compared to about 1 in 20 adults ages 35-54 and 55-64.

There were smaller disparities across racial/ethnic groups for the privately insured than were observed in the earlier tables. Of the population that was privately insured in January, 87.0 percent of blacks and 88.9 percent of Hispanics had full-year private coverage, compared to 92.7 percent of whites. In addition, Hispanic males, the group most at risk of lacking health insurance, do not emerge as a group especially at risk of losing private coverage. In fact, private health insurance coverage stability was equivalent for men and women within each racial/ethnic group (data not presented). Thus, the data point to an interesting contrast in the health insurance status of minority groups: While wide disparities in all-year uninsured rates and coverage acquisition rates between whites and minority groups are found, the health insurance experience of these groups is similar once they hold private coverage. Whether this result reflects a greater congruence of demographic characteristics and economic status for those with private coverage and a greater disparity in these factors among the uninsured remains a question for further research.

In contrast to earlier findings that revealed that people in fair or poor health had reduced probabilities of full-year coverage (Table 2), there was little evidence that such people had greater instability in their private health insurance coverage than those in better health. Thus, the data suggest that health problems do not interfere with the ability to maintain private coverage. However, it cannot be determined from the data in this report

Table 4. Full-year health insurance status of persons under age 65 who were privately insured in January 1996: United States

Population characteristic	Population in thousands	Private all year	Ever uninsured	Ever public coverage
			Percent	
Total^a	159,998	92.0	7.6	0.7
Age in years				
Less than 7	15,096	92.1	6.8	1.7
7-17	28,648	92.6	6.9	0.9
18-24	14,396	83.1	16.0	1.8
25-34	26,843	87.5	12.1	0.6
35-54	58,851	94.9	4.9	0.2
55-64	16,164	95.1	4.6	0.6
Race/ethnicity				
Total Hispanic	11,626	88.9	9.9	2.0
Total black	15,006	87.0	11.5	2.0
Total white	126,788	92.7	7.1	0.5
Total other	6,578	94.6	5.4	0.0
Marital status^b				
Married all year	71,676	94.3	5.5	0.3
Widowed all year	1,487	97.2	2.6	0.2
Divorced all year	7,325	90.2	9.2	0.9
Separated all year	1,645	88.2	11.4	1.5
Never married all year	29,785	87.7	11.7	0.9
Changed marital status	7,903	87.0	12.9	1.1
Perceived health status				
Excellent, very good, or good all year	145,912	92.1	7.6	0.6
Fair or poor all year	4,634	91.4	7.5	1.8
Ever fair or poor during year	13,857	91.0	7.9	2.1
Employment status^b				
Employed all year	91,788	93.8	6.2	0.1
Employed part year	14,518	79.9	19.2	2.2
Not employed all year	13,384	92.2	6.2	2.3
Income^c				
Poor	6,174	77.7	17.9	6.8
Near-poor	3,147	73.6	25.6	2.9
Low income	15,965	86.9	12.0	1.8
Middle income	60,905	92.0	7.7	0.6
High income	73,398	95.1	4.9	0.1

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year. The categories shown in the last two columns of this table, people ever uninsured and people ever publicly covered, are not mutually exclusive.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

whether the health problems of those already holding private coverage are less severe from the perspective of an insurer or reflect the impact of reform measures (particularly at the State level) that have improved portability and reduced the impact of pre-existing health conditions.

Given the importance of the workplace as the primary source of private coverage, there is strong evidence that changes in employment status had a large effect on the stability of private coverage. Of people employed part of the year (Table 4), only 79.9 percent retained private coverage throughout the year, with most of the remainder of the group becoming uninsured. In contrast, 93.8 percent of those employed throughout the year retained their private coverage. People who were not employed at all during the year were as likely to retain their private insurance (92.2 percent) as those employed all year, a finding that probably reflects the role of dependency coverage, which affords access to stable health insurance coverage for many nonworkers.

Particularly compelling is the strong relationship among family income, the stability of private coverage, and the likelihood of becoming uninsured should private coverage end. About 95 percent of high-income people (over 400 percent of the Federal poverty line) held private coverage all year, as did 92 percent of people in middle-income families (over 200 percent to 400 percent of poverty). In contrast, people who were poor or near-poor were at a significantly greater risk of losing their private coverage: Only 77.7 percent of those below the poverty line and 73.6 percent between 100 and 125 percent of the poverty line retained private coverage for the entire year. About 18 percent of privately insured poor people and a quarter of privately insured near-poor people became uninsured, and these rates greatly exceeded the rates for privately insured people in middle- or high-income families. Note also that public coverage played a relatively small role in filling the gap in coverage for these lower income privately insured cohorts. These data may reflect issues of affordability of coverage for lower income households and/or the possibility of less stable employment among members of such households.

Stability of Public Insurance Coverage

Public programs that provide health insurance are an important source of coverage, especially for vulnerable

populations such as the disabled, low-income children, and pregnant women. Since such groups are likely to have greater health care needs than the general non-elderly population, it is important to assess whether this component of the public safety net provides a stable source of coverage or whether such populations are likely to experience gaps in coverage during the year. Such assessments are likely to increase in importance as more children enroll in the State Children's Health Insurance Program (SCHIP) and as former welfare clients make the transition to the labor market. Moreover, since periodic reviews of income and assets are made to determine continued eligibility for public insurance programs, it is also important to assess the extent to which those who leave public coverage are able to obtain alternative sources of coverage.

Table 5 presents estimates of the full-year health insurance status of non-elderly people with public insurance coverage as their only source of coverage in January 1996. In contrast to the cohort covered by private health insurance in January 1996, those enrolled in public insurance had substantially less stability in their coverage. In particular, three-quarters (75.1 percent) of people publicly insured in January retained such coverage throughout the year and about one-fifth (19.1 percent) became uninsured at some point during 1996. Only a relatively small proportion (7.3 percent) of people who began the year with public coverage obtained private coverage at some point in calendar year 1996.

Children and adults were equally likely to retain public coverage during 1996, with about three-quarters of each group covered throughout the year (aggregate data not shown). There was no variation in rates of full-year public coverage among children of different ages, and nearly a fifth of children at all ages became uninsured (18.3 percent, data not shown). Such gaps in coverage for children enrolled in public health insurance can have serious implications for the quality and continuity of the care that they receive (Berman, Bondy, Lezotte, et al., 1999). Contrary to the experience of children, rates of full-year coverage did vary by age

Coverage was less stable for people under 65 who had public insurance at the beginning of 1996 than for people with private insurance.

Table 5. Full-year health insurance status of persons under age 65 who were publicly insured in January 1996: United States

Population characteristic	Population in thousands	Public all year	Ever uninsured	Ever private coverage
		Percent		
Total^a	24,143	75.1	19.1	7.3
Age in years				
Less than 7	5,632	74.8	18.8	8.0
7-17	7,383	75.5	17.9	8.6
18-24	2,104	61.7	33.0	5.4
25-34	2,843	71.6	21.9	9.2
35-54	4,518	79.4	16.4	5.1
55-64	1,664	85.0	10.8	4.3
Race/ethnicity				
Total Hispanic	5,354	73.8	23.6	3.1
Total black	7,029	79.5	16.0	5.5
Total white	10,533	71.6	19.4	11.5
Total other	1,226	85.1	14.9	0.0
Hispanic male	2,200	75.3	21.8	3.3
Black male	2,903	83.6	13.7	3.0
White male	5,032	73.4	17.9	11.2
Hispanic female	3,155	72.8	24.9	2.9
Black female	4,126	76.6	17.6	7.3
White female	5,501	69.9	20.9	11.7
Marital status^b				
Married all year	3,065	74.7	19.4	6.5
Widowed or separated all year	1,022	68.3	24.0	10.0
Divorced all year	1,344	86.3	11.6	3.2
Never married all year	5,042	76.8	19.5	4.8
Changed marital status	1,288	64.9	26.3	10.1
Perceived health status				
Excellent, very good, or good all year	17,465	71.7	21.2	8.6
Fair or poor all year	3,371	88.2	9.3	3.0
Ever fair or poor during year	6,633	83.9	13.6	3.8
Employment status^b				
Employed all year	2,246	51.5	34.0	16.6
Employed part year	2,634	64.8	31.9	6.5
Not employed	6,784	87.1	10.5	2.4
Income^c				
Poor	13,947	82.1	15.6	2.9
Near-poor	2,462	67.6	26.3	8.6
Low income	4,269	59.6	25.9	18.5
Middle income	2,269	69.7	21.8	10.6
High income	1,159	73.3	16.4	10.3

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year. The categories shown in the last two columns of this table, people ever uninsured and people ever privately covered, are not mutually exclusive.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

among adults. For example, only 61.7 percent of young adults ages 18-24 retained coverage all year and about a third (33.0 percent) became uninsured at some point during the year. In contrast, 79.4 percent and 85.0 percent of people ages 35-54 and 55-64, respectively, who had public coverage in January 1996 were covered by public insurance all year.

People who were married all year and those who never married were equally likely to retain public coverage, but divorced people were significantly more likely (86.3 percent) to retain public coverage all year.

Rates of full-year retention of public coverage were not statistically different across most racial/ethnic groups. The only exception was higher rates of full-year public coverage for people in the “other” racial/ethnic group than for whites and Hispanics. When comparisons are made by race/ethnicity and gender, black males’ higher rate of full-year public coverage is the only full-year estimate to differ significantly from their white counterparts (83.6 vs. 73.4 percent). This difference mainly reflects white males’ higher likelihood of obtaining private coverage. For both males and females, whites were also more likely than Hispanics to obtain private coverage. Transitions from public coverage to no coverage showed little statistical difference among racial/ethnic groups.

Public health insurance appears to have provided a more stable source of coverage for people who were in fair or poor health (either throughout the year or ever during the year) than for those in better health in 1996. Rates of full-year coverage for individuals consistently in fair or poor health were 88.2 percent, higher than the 71.7 percent for those in better health all year and comparable to full-year coverage rates of their privately insured counterparts (91.4 percent from Table 4). However, private coverage for people who were ever in fair or poor health during 1996 was still substantially more stable (91.0 percent from Table 4) than public coverage (83.9 percent from Table 5). This latter result may reflect the fact that people whose health status improved from fair or poor to better health during 1996 might have lost public coverage because of periodic reviews for eligibility.

Employment status was also associated with the stability of public coverage. Approximately 87 percent of people publicly insured in January 1996 who were not employed all year retained their public coverage throughout the year. Publicly insured people who were employed either all year or part of the year had

substantially lower rates of stable coverage (51.5 percent and 64.8 percent, respectively). Because employment is tied directly to key eligibility requirements for many public insurance programs, this result is not surprising. Note also that publicly insured people employed at any time during 1996 also exhibited low rates of transition to private health insurance (16.6 percent for those employed all year and 6.5 percent for part year), especially when compared to the rate at which these individuals became uninsured (34.0 percent for those employed all year and 31.9 percent for part year). Whether this reflects the inability to find jobs that make coverage available or whether limits on employment activity associated with public coverage affect eligibility for private insurance is an important research issue and especially relevant given welfare reform.

Family income is also tied directly to eligibility requirements for many Federal and State public insurance programs. Approximately 82 percent of publicly insured individuals in poor families retained their public coverage all year, compared to only 60 to 70 percent of those who were near-poor, low income, or middle income. Publicly insured people in poor families were less likely than their near-poor or low-income counterparts to become uninsured during the year but less likely than their low-income counterparts to acquire private coverage.⁹ Because of small sample sizes, the 9-percentage-point difference in the rates of stable public coverage between high-income individuals and poor individuals is not statistically significant, although the high-income group was significantly more likely to acquire private coverage.

In sum, MEPS data reveal that populations of particular policy interest, such as the poor, those not employed, and those in fair or poor health, experience greater stability in public coverage than other groups do. In fact, for individuals consistently in fair or poor health, public coverage provides the same stability in full-year coverage as private insurance. Poor people have greater stability in their public coverage than any other income group except high income. However, poor people (either publicly or privately insured) have less stable coverage than the average for all privately insured persons. Coverage for most other income groups is less stable for individuals beginning the year with public coverage than for those with private coverage.

⁹The rates of becoming uninsured for poor and near-poor publicly insured people differed at the 10-percent significance level.

Conclusions

This analysis of MEPS monthly health insurance data for 1996 provides a number of perspectives on the measurement of health insurance status and on the population's experience with health care coverage. First, a variety of time-dependent measures of health insurance status are available for use, and care must be exercised as to how such data are applied to describe the extent of the uninsured problem. For example, the more static, point-in-time uninsured estimates and the full-year uninsured estimates provide similar assessments of groups at risk of lacking coverage (such as young adults, racial/ethnic minorities, those in fair/poor health, and people with low income). This suggests that the time period studied is not likely to bias conclusions regarding the *characteristics* of the uninsured population. However, full-year estimates of the number of people *ever uninsured* may be more appropriate than point-in-time estimates for assessing the program costs required to provide coverage for the uninsured.

Next, the data point to the importance of public coverage as a means through which many disadvantaged Americans are able to acquire health insurance. At the same time, the data reveal that the population's experience with health insurance depends crucially on the type of coverage held. While public health insurance does provide stable coverage for certain disadvantaged groups (e.g., those in fair/poor health), privately insured people, on average, have far greater stability in their health insurance status. These differences suggest that institutional and administrative rules and procedures designed to allocate scarce resources to targeted populations may threaten the continuity of public coverage when changes in assets or income jeopardize eligibility. This is an especially relevant issue because people who lose public coverage frequently become

uninsured, suggesting that they lack access to or are unable to afford alternative private coverage.

The data also point to existing inequities in the health insurance experience of some population groups, especially with regard to their full-year insurance status, their ability to maintain continuous coverage, and their ability to acquire coverage when uninsured. Young adults, racial and ethnic minorities, people in fair or poor health, and those in low-income households were especially at risk of lacking coverage for all or part of 1996. In addition, young adults, people employed for part of the year, and people with poor, near-poor, or low family incomes were the most likely to experience instability in their private health insurance in 1996, suggesting that the affordability of such coverage may be an issue for many lower income households. Public coverage was most stable for the poor, those not employed, and those in fair or poor health.

Finally, only a relatively small proportion of people (30.0 percent) who were uninsured at the beginning of 1996 acquired coverage, with most obtaining private insurance. The relatively small likelihood that the uninsured will acquire coverage suggests that a variety of factors may hinder the transition from uninsured to insured status. Such factors include lack of available information on eligibility for public programs and unwillingness of potentially eligible people to apply for coverage, limited access to sources of private coverage, and difficulties in affording such coverage when it is made available. Understanding how these potential barriers prevent the uninsured from obtaining coverage and whether steps can be taken to eliminate these impediments constitute an important challenge to public policy.

References

- Berman S, Bondy J, Lezotte D, et al. The influence of having an assigned Medicaid primary care physician on utilization of otitis media-related services. *Pediatrics* 1999 Nov; 104(5):1192-7.
- 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.
- Congressional Research Service. Health insurance and the uninsured: background data and analysis. Washington: U.S. Government Printing Office; 1988.
- Lewis K, Ellwood M, Czajka JL. Counting the uninsured: a review of the literature. Washington: Mathematica Policy Research and the Urban Institute, Assessing the New Federalism; 1998. Occasional Paper Number 8.
- Monheit AC. Underinsured Americans: a review. *Annual Review of Public Health* 1994; 15:461-85.
- Monheit AC, Vistnes J. Race/ethnicity and health insurance status: 1987-1996. *Medical Care Research and Review* 2000; 57 Suppl:11-35.
- Short P. Estimates of the uninsured population, calendar year 1987. Rockville (MD): Agency for Health Care Policy and Research; 1990. National Medical Expenditure Survey Data Summary 2. DHHS Pub. No. (PHS) 90-3469.
- Swartz K. Interpreting the estimates from four national surveys of the number of people without health insurance. *Journal of Economic and Social Measurement* 1986; 14:233-56.
- Swartz K, Purcell PJ. Counting uninsured Americans. *Health Affairs* 1989; 8:193-7.
- Vistnes J, Monheit AC. Health insurance status of the civilian noninstitutionalized population: 1996. Rockville (MD): Agency for Health Care Policy and Research; 1997. MEPS Research Findings No. 1. AHCPR Pub. No. 97-0030.
- Walden DC, Wilensky DR, Kasper JA. Changes in health insurance status: full-year and part-year coverage. National Center for Health Services Research and Health Care Technology Assessment; 1985. Data Preview 21, National Health Care Expenditure Study. DHHS Pub. No. (PHS) 85-337.

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 Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). The MEPS HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments for those services, access to care, health insurance coverage, income, and employment of the U.S. civilian noninstitutionalized population. In other components of MEPS, data are collected on the use, charges, and payments reported by providers (Medical Provider Component), residents of licensed or certified nursing homes (Nursing Home Component), and the supply side of the insurance market (Insurance Component).

Survey Design

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 2½ 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 data are collected in each household and captured using computer-assisted personal interviewing (CAPI).

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. While the reference period for Round 3 was from the date of the second interview (August-December 1996) to the date of the third interview (February-July 1997), only data from the 1996 portion of the Round 3 interview are included in the estimates contained in this report.

Health Insurance Status

Individuals under age 65 were classified into the following insurance categories based on household responses to health insurance status questions administered during Rounds 1-3 of the MEPS HC.

- *Insured all year*—Individuals who were insured by private and/or public coverage during all of calendar year 1996.
- *Insured part year*—Individuals who were without coverage for at least 1 month but not all 12 months of the 1996 calendar year.
- *Uninsured all year*—Individuals who did not have any coverage during the entire 1996 calendar year.
- *Obtained private insurance*—Individuals who were uninsured in January 1996 but obtained private health insurance at some point during calendar year 1996.
- *Obtained public insurance*—Individuals who were uninsured in January 1996 but obtained public coverage only at some point during calendar year 1996.
- *Private coverage all year*—Persons with a full 12 months of private insurance coverage during calendar year 1996.
- *Public coverage all year*—Persons with only public coverage in January 1996 who retained such coverage throughout the year.
- *Ever public coverage*—Individuals who began the year with private coverage and switched to only public coverage at some point during calendar year 1996.
- *Ever private coverage*—Individuals who began the year with only public coverage and obtained private coverage at some point during calendar year 1996.
- *Ever uninsured*—Individuals who had health insurance coverage in January 1996 and became uninsured at some point during 1996.

Public Coverage

For this report, individuals were 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 public programs discussed below.

Medicare

Medicare is a federally financed health insurance plan for the elderly, persons receiving Social Security disability payments, and most persons with end-stage renal disease. Medicare Part A, which provides hospital insurance, is automatically given to those who are eligible for Social Security. Medicare Part B provides supplementary medical insurance that pays for medical expenses and may be purchased for a monthly premium.

Medicaid

Medicaid is a means-tested government program jointly financed by Federal and State funds that provides health care to those who are eligible. Program eligibility criteria vary significantly by State, but the program is designed to provide health coverage to families and individuals who are unable to afford necessary medical care.

Other Public Hospital/Physician Coverage

Respondents who did not report Medicaid coverage were asked if they were covered by any other public hospital/physician coverage. These questions were asked in an attempt to identify Medicaid recipients who might not have recognized their coverage as Medicaid. In this report, all coverage reported in this manner is considered public coverage.

Private Health Insurance

Private health insurance was 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, was not counted. For the purpose of this analysis, CHAMPUS/CHAMPVA (now known as TRICARE) coverage is combined with private coverage.

CHAMPUS covers retired members of the Uniformed Services and the spouses and children of

active-duty, retired, and deceased members. CHAMPVA covers spouses and children of veterans who died from a service-connected disability or are permanently disabled and not eligible for CHAMPUS or Medicare.

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. In this report, age is based on the sample person's age as of December 31, 1996.

Race/Ethnicity

Classification by race and ethnicity was based on information reported for each household 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, were classified as Hispanic. Since the Hispanic grouping can include black Hispanic, white Hispanic, and other Hispanic, the race categories of black, white, and other do not include Hispanic.

Marital Status

Full-year marital status was constructed from information available at three points in time during 1996: the interview dates for the first two rounds of MEPS and December 31, 1996.

If there were discrepancies between the marital status of two individuals within a family, other person-level variables were reviewed to determine the edited marital status for each individual. Thus, when one spouse was reported as married and the other spouse reported as widowed, the data were reviewed to determine if one partner should be coded as widowed in the specific round.

Perceived Health Status

Full-year health status was constructed from information available at three points in time during 1996: the interview dates for the first two rounds of MEPS and December 31, 1996.

The MEPS respondent was asked to rate the health of each person in the family at the time of the interview according to the following categories: excellent, very good, good, fair, and poor. In the tables in this report, the health status categories were collapsed into the following three broad categories: (1) excellent, very good, or good health all year, (2) fair or poor health all year, and (3) ever in fair or poor health during the year.

Employment Status

Full-year employment status was constructed from information available at three points in time during 1996: the interview dates for the first two rounds of MEPS and December 31, 1996. At each point in time, persons were considered to be employed if they were age 16 and over, had a job for pay, owned a business, or worked without pay in a family business at the time of the interview.

Income

Each sample person was classified according to the total 1996 income of his or her family. Within a household, all individuals related by blood, marriage, or adoption were considered to be a family. Personal income from all family members was summed to create family income. Possible sources of income included annual earnings from wages, salaries, bonuses, tips, and commissions; business and farm gains and losses; unemployment and Worker's Compensation; interest and dividends; alimony, child support, and other private cash transfers; private pensions, individual retirement account (IRA) withdrawals, Social Security, and Department of Veterans Affairs payments; Supplemental Security Income and cash welfare payments from public assistance, Aid to Families with Dependent Children, and Aid to Dependent Children; gains or losses from estates, trusts, partnerships, S corporations, rent, and royalties; and a small amount of "other" income.

Poverty status is the ratio of family income to the 1996 Federal poverty thresholds, which control for

family size and age of the head of family. Income categories are defined as follows:

- *Poor*—Includes persons in families with income less than or equal to the poverty line and those who reported negative income.
- *Near-poor*—Includes persons in families with income over the poverty line through 125 percent of the poverty line.
- *Low income*—Includes persons in families with income over 125 percent through 200 percent of the poverty line.
- *Middle income*—Includes persons in families with income over 200 percent through 400 percent of the poverty line.
- *High income*—Includes persons in families with income over 400 percent of the poverty line.

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 Census Bureau estimated population distributions as of December 1996. The person-level poststratification incorporated the following variables: income, marital

status, race/ethnicity, sex, and age. The weighting process also included poststratification to population totals obtained from the 1996 Medicare Current Beneficiary Survey (MCBS) for the number of deaths among Medicare beneficiaries in 1996.

Overall, the weighted population estimate for the civilian noninstitutionalized population as of December 31, 1996, is 265,439,511. The inclusion of people 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 (not included in this report), brings the estimated total number of people represented by MEPS respondents over the course of the year up to 268,905,490.

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, presented in Tables A-E, were rounded to the nearest 0.01. Population estimates in Tables 1-5 were rounded to the nearest thousand. Therefore, some of the estimates presented in the tables for population totals of subgroups will not add exactly to the overall estimated population total.

Table A. Standard errors for alternative estimates of the uninsured population under age 65 from the 1996 Medical Expenditure Panel Survey
Corresponds to Table 1

Definition	Percent of non-elderly population
	Standard error
Without coverage on December 31, 1996	0.54
Without coverage throughout the first half of 1996 (first round of interview)	0.58
Without coverage the entire year	0.49
Without coverage for part of the year only (1 to 11 months)	0.45

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

Table B. Standard errors for full-year health insurance status of the population under age 65: United States, 1996
Corresponds to Table 2

Population characteristic	Insured all year	Insured part year	Uninsured all year
	Standard error		
Total^a	0.69	0.45	0.49
Age in years			
Less than 7	1.29	1.16	0.90
7-17	1.15	0.87	0.82
18-24	1.54	1.28	1.47
25-34	1.26	0.95	0.86
35-54	0.83	0.53	0.59
55-64	1.13	0.87	0.83
Race/ethnicity			
Total Hispanic	1.61	0.97	1.59
Total black	1.69	1.66	1.27
Total white	0.76	0.52	0.48
Total other	3.14	1.76	2.36
Hispanic male	1.75	1.07	1.87
Black male	2.12	1.82	1.81
White male	0.88	0.63	0.60
Hispanic female	1.82	1.23	1.61
Black female	2.05	2.08	1.29
White female	0.84	0.59	0.53
Marital status^b			
Married all year	0.82	0.59	0.54
Widowed all year	3.45	2.12	2.91
Divorced all year	1.67	1.39	1.42
Separated all year	3.25	2.77	2.89
Never married all year	1.12	0.85	0.95
Changed marital status	1.75	1.26	1.48
Perceived health status			
Excellent, very good, or good all year	0.70	0.46	0.51
Fair or poor all year	1.91	1.48	1.41
Ever fair or poor during year	1.33	0.94	1.00
Employment status^b			
Employed all year	0.68	0.45	0.48
Employed part year	1.50	1.21	1.21
Not employed all year	1.27	0.82	0.96
Income^c			
Poor	1.75	1.38	1.40
Near-poor	2.78	2.73	2.92
Low income	1.70	1.32	1.41
Middle income	0.91	0.67	0.62
High income	0.73	0.59	0.43

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

Table C. Standard errors for full-year health insurance status of persons under age 65 who were uninsured in January 1996: United States
Corresponds to Table 3

Population characteristic	Obtained insurance		
	Total	Private	Public
	Standard error		
Total^a	1.17	1.19	0.68
Age in years			
Less than 7	3.54	2.84	3.27
7-17	2.90	2.65	1.59
18-24	2.41	2.18	1.29
25-34	2.08	2.07	1.21
35-54	1.71	1.57	0.76
55-64	3.63	2.47	2.36
Race/ethnicity			
Total Hispanic	1.83	1.64	1.26
Total black	3.32	3.16	2.00
Total white	1.59	1.73	0.88
Total other	3.98	3.67	1.56
Hispanic male	2.07	1.72	1.32
Black male	3.94	3.68	2.01
White male	1.84	1.87	0.92
Hispanic female	2.27	2.13	1.93
Black female	3.88	3.44	2.97
White female	2.09	2.17	1.17
Marital status^b			
Married all year	2.02	2.04	0.84
Widowed, divorced, or separated all year	2.60	2.19	2.04
Never married all year	1.75	1.72	0.86
Changed marital status	2.85	2.81	1.63
Perceived health status			
Excellent, very good, or good all year	1.31	1.33	0.70
Fair or poor all year	3.97	2.93	3.54
Ever fair or poor during year	2.24	1.71	1.73
Employment status^b			
Employed all year	1.48	1.45	0.54
Employed part year	2.08	1.96	1.25
Not employed all year	2.20	1.47	1.86
Income^c			
Poor	2.11	1.92	1.51
Near-poor	4.43	3.38	3.47
Low income	2.53	2.50	1.14
Middle income	2.02	1.95	1.07
High income	3.10	3.06	1.36

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

Table D. Standard errors for full-year health insurance status of persons under age 65 who were privately insured in January 1996: United States
Corresponds to Table 4

Population characteristic	Private all year	Ever uninsured	Ever public coverage
	Standard error		
Total^a	0.40	0.39	0.11
Age in years			
Less than 7	1.17	1.07	0.39
7-17	0.87	0.87	0.23
18-24	1.55	1.54	0.60
25-34	1.05	1.03	0.16
35-54	0.43	0.43	0.08
55-64	0.82	0.80	0.26
Race/ethnicity			
Total Hispanic	1.25	1.17	0.51
Total black	1.50	1.42	0.68
Total white	0.43	0.43	0.11
Total other	1.86	1.86	0.04
Marital status^b			
Married all year	0.48	0.48	0.08
Widowed all year	1.30	1.29	0.16
Divorced all year	1.56	1.55	0.48
Separated all year	2.90	2.89	0.73
Never married all year	0.91	0.90	0.29
Changed marital status	1.58	1.57	0.56
Perceived health status			
Excellent, very good, or good all year	0.40	0.40	0.09
Fair or poor all year	1.56	1.44	0.77
Ever fair or poor during year	1.06	0.99	0.69
Employment status^b			
Employed all year	0.35	0.35	0.03
Employed part year	1.60	1.59	0.56
Not employed all year	1.05	0.96	0.65
Income^c			
Poor	3.24	2.96	1.67
Near-poor	4.96	4.80	1.42
Low income	1.50	1.46	0.52
Middle income	0.66	0.65	0.16
High income	0.48	0.49	0.03

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

Table E. Standard errors for full-year health insurance status of persons under age 65 who were publicly insured in January 1996: United States
Corresponds to Table 5

Population characteristic	Public all year	Ever uninsured	Ever private coverage
	Standard error		
Total^a	1.82	1.54	1.15
Age in years			
Less than 7	2.88	2.57	1.53
7-17	2.91	2.35	2.05
18-24	4.23	4.28	1.83
25-34	3.07	2.97	2.35
35-54	3.04	2.65	1.86
55-64	4.52	4.38	1.67
Race/ethnicity			
Total Hispanic	2.53	2.37	0.73
Total black	3.97	3.55	1.51
Total white	2.81	2.24	2.28
Total other	4.41	4.41	0.00
Hispanic male	3.22	3.19	1.04
Black male	3.92	3.86	1.06
White male	3.27	2.63	2.40
Hispanic female	2.86	2.75	0.77
Black female	4.53	3.90	2.19
White female	3.28	2.66	2.72
Marital status^b			
Married all year	3.83	3.68	2.11
Widowed or separated all year	5.26	5.01	2.96
Divorced all year	3.17	2.93	1.68
Never married all year	2.51	2.47	1.02
Changed marital status	5.67	5.16	3.76
Perceived health status			
Excellent, very good, or good all year	2.13	1.76	1.49
Fair or poor all year	1.81	1.65	1.01
Ever fair or poor during year	1.90	1.82	0.88
Employment status^b			
Employed all year	4.96	4.35	4.04
Employed part year	3.44	3.46	1.71
Not employed	1.38	1.30	0.63
Income^c			
Poor	1.93	1.89	0.67
Near-poor	5.80	5.52	3.42
Low income	4.36	3.67	4.61
Middle income	5.14	4.22	3.47
High income	6.19	5.57	3.68

^aIncludes persons with unknown marital status, health status, employment status, and income.

^bFor individuals ages 16 and over.

^cPoor refers to incomes below the Federal poverty line; near-poor, over the poverty line through 125 percent of the poverty line; low income, over 125 percent through 200 percent of the poverty line; middle income, over 200 percent to 400 percent of the poverty line; and high income, over 400 percent of the poverty line.

Note: The estimates in this table cover the civilian noninstitutionalized population under age 65 who were resident for the entire year.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1996.

U.S. Department of Health and Human Services

Tommy G. Thompson, *Secretary*

Office of Public Health and Science

David Satcher, M.D., Ph.D., *Surgeon General of the United States*

Agency for Healthcare Research and Quality

John M. Eisenberg, M.D., M.B.A., *Director*

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

Official Business
Penalty for Private Use \$300

PRSR STD
POSTAGE & FEES PAID
PHS/AHRQ
Permit No. G-282



AHRQ Pub. No. 02-0006
December 2001

ISBN 1-58763-061-3
ISSN 1531-5665