Patterns of Ambulatory Care Use: Changes From 1987 to 1996

MEPS

Research #16 Findings

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Abstract

This report from the Agency for Healthcare Research and Quality (AHRQ) presents trends in the use of ambulatory care services by the U.S. population from 1987 to 1996. The authors examine the frequency with which people visit health care providers by the setting of care (office, hospital outpatient, or emergency room) and the reasons for visits (prevention, diagnosis or treatment, or emergency), paying special attention to differences between 1987 and 1996. They also examine variation in trends across several variables, including age, race, sex, urban versus rural residence, region, income, insurance status, and health status. Data come from AHRQ's 1987 National Medical Expenditure Survey (NMES) and 1996 Medical Expenditure Panel Survey (MEPS). From 1987 to 1996, the percentage of visits that took place in outpatient hospital settings and emergency rooms decreased, with a commensurate increase in the percentage of total visits that took place in office-based settings. The percentage of ambulatory care visits that were for preventive reasons increased while the percentages for all other types of visits decreased.

The estimates in this report are based on the most recent data available from MEPS 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.

Suggested citation

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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) 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 two 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:

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

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Patterns of Ambulatory Care Use: Changes From 1987 to 1996

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Introduction

This report examines trends in the use of ambulatory care services by the U.S. civilian noninstitutionalized population from 1987 to 1996. In addition to the frequency with which people visit health care providers, we also examine whether there have been significant shifts over the 9-year period in the setting of care (office, hospital outpatient, or emergency room) and the reasons for visits (prevention, diagnosis or treatment, or emergency). We examine variation in trends across several variables, including age, race, sex, urban versus rural residence, region, income, insurance status, and health status. Our data come from the 1987 National Medical Expenditure Survey (NMES) and the 1996 Medical Expenditure Panel Survey (MEPS). Each provides information on one full year of health care use for the U.S. civilian noninstitutionalized population.

Only differences that were statistically significant at the 0.05 level are discussed in the text. A technical appendix provides tables of standard errors, detailed information on MEPS and NMES (including data collection methods, data editing, and variable creation), and definitions of the terms used in this report.

Frequency of Visits

Table 1 presents the frequency of provider visits by different population characteristics. Overall, there was no substantial change from 1987 to 1996 in the percentage of people who had at least one ambulatory care visit. In both years, about three-quarters of the population had at least one visit. Furthermore, among those who had at least one ambulatory visit, there is little change in the average number of visits per person from 1987 to 1996: about seven in both years.

Overall ambulatory care use changed little from 1987 to 1996. However, there were some noteworthy changes for people age 65 and over who were covered by Medicare only: 77 percent of them had at least one ambulatory care visit in 1987, but by 1996, this figure had risen to 86 percent. In 1987, elderly people covered exclusively by Medicare were substantially less likely to have a visit than the elderly who had Medicare plus some other health insurance, public or private. In contrast, by 1996, those covered exclusively by Medicare were nearly as likely as others to have an ambulatory visit.

Visit Setting

Another important component of health care service use is the setting in which care is provided. Table 2 displays national estimates of the proportion of ambulatory care visits that take place in three settings: a health care provider's office, a hospital outpatient department, and a hospital emergency department. From 1987 to 1996, the percentage of visits that took place in outpatient hospital settings and emergency rooms decreased, with a commensurate increase in the percentage of total visits that took place in office-based settings. This change is apparent within all sociodemographic groups examined in this report. The most pronounced changes, however, are for blacks, the poor, and the publicly insured.

From 1987 to 1996, the percent of visits that took place in office-based settings increased.

In 1987, nearly 20 percent of all visits among blacks took place in outpatient hospital settings; in 1996, the corresponding figure was only 11 percent. Blacks also showed a more marked decline than whites and Hispanics in the percentage of visits that took place in emergency rooms. As a portion of all ambulatory care visits by blacks, emergency rooms visits fell from 8 percent in 1987 to 5 percent in 1996.

The percentage of ambulatory care visits occurring in hospital outpatient departments and emergency rooms decreased more from 1987 to 1996 for people with lower incomes than for those with higher incomes. In 1987, over 15 percent of all ambulatory care visits by people in the poorest income category were in

outpatient hospital settings, but by 1996 this figure declined to 10 percent. In comparison, among those in the wealthiest income group, the percentage of ambulatory care visits that took place in outpatient hospital settings did not change significantly from 1987 to 1996. The percentage of ambulatory care visits that took place in emergency rooms also declined more for poor people from 1987 to 1996 than for wealthier people. In 1987, 7 percent of all ambulatory care visits by people in the lowest income category were to emergency rooms; in 1996, only 5 percent of ambulatory care visits among the poor were in emergency rooms. Although the proportion of ambulatory care visits that took place in emergency rooms declined for other income groups as well, the declines were smaller and some groups showed no change across the period.

With respect to insurance status, the increase in the proportion of ambulatory care visits in office-based settings and decrease in the proportion of visits in hospital outpatient and emergency departments are most pronounced for those with public insurance. In 1987, 18 percent of ambulatory care visits for people under age 65 who were insured exclusively by a public plan (mostly Medicaid) were in hospital outpatient settings. By 1996, however, this percentage had declined by nearly half, to 9 percent. Similarly, there was a very large decrease from 1987 to 1996 in the proportion of ambulatory care visits that took place in outpatient hospital settings among people age 65 and over who were insured exclusively by Medicare or had Medicare plus supplemental public insurance. This decline was particularly pronounced for the group with Medicare only, which experienced a 50-percent reduction in the proportion of ambulatory care visits that took place in outpatient hospital settings. In contrast, the proportion of ambulatory visits to outpatient departments remained fairly constant for both the non-elderly and elderly with private health insurance.

As with outpatient departments, the percentage of ambulatory care visits that took place in hospital emergency rooms declined substantially for those with public insurance. In 1987, people under 65 with only public insurance had 8 percent of their ambulatory care visits in emergency rooms. By 1996, this figure had declined to 5 percent. Among the elderly with Medicare plus supplemental public insurance, the proportion of ambulatory visits to emergency rooms declined from 5 percent to 3 percent. Although not as large, there was also a significant decline in the percentage of visits that took place in emergency rooms for both elderly and non-elderly people with private insurance. It should be noted, however, that the proportion of ambulatory care visits to emergency rooms was much lower for privately insured individuals than for other groups at both time points. The proportion of visits that took place in emergency rooms did not change significantly from 1987 to 1996 among the uninsured.

Reason for Visit

The final aspect of health care use that we examine in this report is the reason for visits to health care providers. Table 3 displays the distribution of ambulatory care visits across four broad categories: visits for a general checkups or other preventive services, visits for the diagnosis or treatment of specific ailments, emergencies, and a residual category. One general trend is evident from Table 3; the percentage of ambulatory care visits that were for preventive reasons increased from 1987 to 1996 while the percentages for all other types of visits decreased. In 1987, 17 percent of all ambulatory care visits were for preventive purposes; but by 1996, 23 percent of all visits were preventive in nature.

The percent of ambulatory care visits that were for preventive reasons increased from 1987 to 1996.

Although preventive visits as a proportion of all ambulatory care visits have increased across most sociodemographic groups examined, the trend is particularly pronounced among individuals in higher income groups. In 1987, only 16 percent of ambulatory care visits among individuals in the wealthiest income category were for preventive purposes, but by 1996, this figure had jumped to 22 percent. For individuals in the poorest income groups, the change was not significant.

The trend toward more preventive service use is also more pronounced for children ages 6-17 than for people in other age groups. In 1987, only 10.5 percent of ambulatory care visits by children ages 6-17 were for preventive reasons, but by 1996, this figure had doubled to 21 percent.

Adults age 65 and over who were insured exclusively by Medicare had a dramatic increase in the proportion of ambulatory care visits that were for

preventive reasons. In 1987, 20 percent of ambulatory care visits for people age 65 and over who had Medicare and no supplemental insurance were for preventive reasons; by 1996, 31 percent of their visits were for preventive reasons.

Summary and Conclusions

This report explored changes in ambulatory care use from 1987 to 1996 in the civilian noninstitutionalized population. Three aspects of health care use were examined: the frequency with which individuals have ambulatory care visits, the settings in which visits take place, and the reasons for visits. We found that about three-quarters of the population had at least one ambulatory care visit during the year in both 1987 and 1996. However, other aspects of use changed. Among the most notable changes are the following:

- Among people age 65 and over who were covered exclusively by Medicare, the proportion with at least one ambulatory care visit increased substantially from 1987 to 1996.
- During this time period, the proportion of ambulatory care visits taking place in office-based settings increased while the proportion of visits taking place in hospital outpatient departments or emergency rooms decreased. This trend was most evident for blacks, people in lower income categories, and people with public health insurance.
- The proportion of ambulatory care visits that were for preventive reasons increased, especially among the higher income categories, children ages 6-17, and elderly people insured exclusively by Medicare.

The findings discussed in this report suggest that efforts on the part of health care organizations and insurance companies during the late 1980s and 1990s to discourage the use of hospital-based care and to encourage the use of preventive care may have had some effect. It should be noted, however, that these findings do not reflect changes in the pattern of health care utilization that occurred after 1996.

References

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Schappert SM. Ambulatory care visits to physician offices, hospital outpatient departments, and emergency departments: United States, 1996. National Center for Health Statistics; 1998. Vital Health Stat 13(134).

Table 1. Ambulatory services[a]—Total population, percent with any visit, and average number of visits per person with visit: United States, 1987 and 1996

Population characteristic	1987				1996			
	Total population (in thousands)	Percent of U.S. population	Percent with any visit	Average number of visits for those with any	Total population (in thousands)	Percent of U.S. population	Percent with any visit	Average number of visits for those with any
Total	239,393	100.0	75.6	6.9	268,905	100.0	74.9	7.1
Age in years								
Under 6	22,133	9.3	85.8	5.3	23,861	8.9	85.0	4.5
6-17	41,616	17.4	70.0	4.8	47,634	17.7	68.6	4.0
18-44	102,117	42.7	70.7	6.6	109,149	40.6	68.6	6.7
45-64	45,232	18.9	78.9	8.1	54,212	20.2	79.1	8.9
65 and over	28,295	11.8	88.3	9.7	34,050	12.7	89.5	10.5
Race/ethnicity								
White	183,396	76.6	78.7	7.2	193,708	72.0	78.8	7.5
Black	28,567	11.9	66.6	5.9	33,668	12.5	65.3	5.7
Hispanic	19,186	8.0	64.6	5.2	29,979	11.2	63.3	6.0
Other	8,244	3.4	63.0	5.5	11,550	4.3	66.3	5.2
Sex								
Male	115,861	48.4	70.1	6.3	131,527	48.9	69.2	6.4
Female	123,532	51.6	80.7	7.4	137,379	51.1	80.3	7.6
Metropolitan statistical area (MSA)[b]								
MSA	181,264	75.7	75.8	7.1	213,820	80.3	75.1	7.1
Non-MSA	58,129	24.3	75.0	6.4	52,443	19.7	74.1	7.0
Census Region								
Northeast	47,539	19.9	77.4	7.4	51,965	19.3	77.4	7.7
Midwest	60,498	25.3	77.6	7.1	62,673	23.3	77.8	6.9
South	83,958	35.1	72.4	6.2	93,901	34.9	73.5	6.7
West	47,398	19.8	76.9	7.4	60,366	22.5	71.7	7.3
Income[c]								
Poor	31,187	13.1	70.6	6.6	38,298	14.2	70.8	7.6
Near-poor	10,882	4.6	72.8	6.8	12,946	4.8	71.4	7.1
Low income	33,290	14.0	72.7	7.0	40,460	15.1	70.2	6.7
Middle income	83,518	35.1	76.5	6.8	88,262	32.8	74.8	6.7
High income	79,267	33.3	78.4	7.1	88,939	33.1	79.2	7.3
Health insurance status[b,d]								
Under 65 years								
Any private	164,232	68.8	76.7	6.5	174,231	64.8	76.3	6.4
Public only	22,738	9.5	75.7	7.7	27,845	10.4	76.1	8.0
Uninsured	24,128	10.1	53.1	4.8	32,780	12.2	51.1	4.9
65 years and over								
Medicare only	3,137	1.3	76.7	7.5	7,535	2.8	86.3	8.8
Medicare and private	21,379	9.0	90.4	9.9	22,811	8.5	91.3	11.2
Medicare and other public	2,946	1.2	91.6	10.8	3,555	1.3	88.2	10.2
Perceived health status[b]								
Excellent, very good, or good	174,918	82.9	74.0	6.1	239,088	89.5	73.3	6.2
Fair or poor	36,043	17.1	85.8	10.9	28,125	10.5	89.8	13.6

[a]Ambulatory services are visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals. Events reported as hospital admissions without an overnight stay are included.

[b]Numbers of persons do not add to overall total because data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS or CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

Note: Restricted to civilian noninstitutionalized population. Percents may not add to 100 because of rounding.
Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

Table 2. Ambulatory services[a]—Total number of visits and percent distribution by setting: United States, 1987 and 1996

Population characteristic	1987				1996			
	Total visits (in millions)	Office-based	Outpatient department	Emergency room	Total visits (in millions)	Office-based	Outpatient department	Emergency room
		Percent distribution				Percent distribution		
Total	1,250.7	84.9	10.8	4.3	1,423.6	87.8	8.9	3.3
Age in years								
Under 6	101.0	85.4	7.7	6.8	91.1	90.2	4.5	5.3
6-17	140.7	87.0	7.0	5.9	131.2	90.0	4.6	5.4
18-44	475.9	86.0	9.4	4.6	498.4	89.1	7.0	3.9
45-64	290.0	84.1	12.9	3.0	381.5	86.7	11.1	2.1
65 and over	243.1	82.4	14.5	3.1	321.4	85.6	12.4	2.1
Race/ethnicity								
White	1,046.4	86.3	9.9	3.8	1,146.4	88.0	9.1	3.0
Black	111.7	72.4	19.6	8.0	124.7	84.4	11.1	4.5
Hispanic	64.0	85.2	9.3	5.5	113.0	88.7	6.7	4.6
Other	28.7	82.4	12.4	5.2	39.6	91.6	5.0	3.5
Sex								
Male	512.6	83.6	11.4	5.0	580.7	86.8	9.4	3.8
Female	738.1	85.8	10.4	3.8	842.9	88.5	8.6	2.9
Metropolitan statistical area (MSA)[b]								
MSA	973.6	84.9	11.1	4.0	1,139.9	88.6	8.3	3.0
Non-MSA	277.1	85.0	9.9	5.2	272.3	84.7	11.3	4.0
Census Region								
Northeast	272.7	84.6	11.0	4.4	311.0	87.3	9.8	2.9
Midwest	333.1	84.9	11.3	3.9	334.6	84.7	11.3	4.0
South	376.2	84.0	10.9	5.1	462.3	88.8	7.8	3.4
West	268.8	86.6	9.9	3.5	315.7	90.1	7.3	2.6
Income[c]								
Poor	149.8	78.4	14.5	7.1	206.5	85.2	10.1	4.7
Near-poor	54.1	79.2	14.0	6.8	66.0	83.2	12.2	4.7
Low income	169.1	83.1	11.6	5.3	191.5	86.3	9.4	4.3
Middle income	434.7	85.5	10.7	3.8	441.9	88.2	8.5	3.2
High income	443.1	88.0	9.0	3.0	517.7	89.6	8.3	2.1
Health insurance status[b, d]								
Under 65 years								
Any private	814.2	87.6	8.5	3.9	849.8	89.2	7.8	3.0
Public only	131.9	74.5	17.8	7.7	169.8	85.8	8.8	5.3
Uninsured	61.6	81.0	12.3	6.7	82.7	86.4	7.6	6.0
65 years and over								
Medicare only	18.1	71.0	25.2	3.8	57.2	85.1	12.6	2.3
Medicare and private	191.6	84.1	13.1	2.8	232.3	85.4	12.6	1.9
Medicare and other public	29.2	79.3	15.6	5.1	31.8	87.4	9.8	2.8
Perceived health status[b]								
Excellent, very good, or good	788.6	87.0	9.0	4.0	1,077.8	88.8	8.0	3.2
Fair or poor	338.0	80.7	14.9	4.4	343.3	84.9	11.8	3.3

[a]Frequencies and percentages regarding visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals, as well as expenses for events reported as hospital admissions without an overnight stay, are included.

[b]Numbers of visits do not add to overall total because data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS or CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

Note: Restricted to civilian noninstitutionalized population. Percents may not add to 100 because of rounding.
Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

Table 3. Ambulatory services[a]—Total number of visits and percent distribution by reason for visit: United States, 1987 and 1996

Population characteristic	1987					1996				
	Total visits (in millions)	Preventive services	Diagnosis and/or treatment	Emergency	Other	Total visits (in millions)	Preventive services	Diagnosis and/or treatment	Emergency	Other
		Percent distribution					Percent distribution			
Total	1,250.7	17.4	70.8	4.3	7.5	1,423.6	22.6	67.4	3.3	6.8
Age in years										
Under 6	101.0	28.9	60.6	6.8	3.7	91.1	34.6	58.4	5.3	1.8
6-17	140.7	10.5	75.2	5.9	8.4	131.2	21.1	66.4	5.4	7.2
18-44	475.9	17.6	70.9	4.6	6.9	498.4	20.8	69.1	3.9	6.1
45-64	290.0	14.2	73.8	3.0	9.0	381.5	18.9	71.8	2.1	7.2
65 and over	243.1	20.2	69.0	3.1	7.8	321.4	27.0	62.4	2.1	8.5
Race/ethnicity										
White	1,046.4	17.0	71.7	3.8	7.6	1,146.4	21.9	68.1	3.0	7.0
Black	111.7	20.8	64.9	8.0	6.4	124.7	25.5	63.5	4.5	6.4
Hispanic	64.0	19.6	68.4	5.5	6.6	113.0	25.3	65.2	4.6	4.8
Other	28.7	15.7	68.3	5.2	10.8	39.6	26.2	64.6	3.5	5.8
Sex										
Male	512.6	13.7	73.1	5.0	8.2	580.7	19.7	69.8	3.8	6.7
Female	738.1	20.0	69.3	3.8	7.0	842.9	24.6	65.7	2.9	6.8
Metropolitan statistical area (MSA)[b]										
MSA	973.6	17.8	70.8	4.0	7.4	1,139.9	23.0	67.4	3.0	6.6
Non-MSA	277.1	16.2	70.9	5.2	7.8	272.3	21.3	67.1	4.0	7.6
Census Region										
Northeast	272.7	20.9	67.1	4.4	7.6	311.0	24.7	65.4	2.9	7.1
Midwest	333.1	15.9	73.5	3.9	6.7	334.6	23.0	67.0	4.0	6.1
South	376.2	18.1	68.6	5.1	8.2	462.3	22.6	67.9	3.4	6.1
West	268.8	14.9	74.3	3.5	7.3	315.7	20.1	69.0	2.7	8.2
Income[c]										
Poor	149.8	20.5	65.5	7.1	6.9	206.5	22.1	67.4	4.7	5.8
Near-poor	54.1	19.3	67.3	6.8	6.6	66.0	22.6	64.7	4.7	8.1
Low income	169.1	17.6	69.6	5.3	7.5	191.5	26.6	62.2	4.3	6.9
Middle income	434.7	17.1	72.2	3.8	7.0	441.9	21.8	68.4	3.2	6.5
High income	443.1	16.4	72.3	3.0	8.3	517.7	22.0	68.7	2.1	7.2
Health insurance status[b,d]										
Under 65 years										
Any private	814.2	16.6	71.8	3.9	7.7	849.8	21.4	69.4	3.0	6.2
Public only	131.9	18.7	68.7	7.7	5.0	169.8	23.2	65.6	5.3	5.8
Uninsured	61.6	14.6	70.0	6.7	8.7	82.7	16.7	69.8	6.0	7.5
65 years and over										
Medicare only	18.1	19.7	69.3	3.8	7.2	57.2	31.4	57.8	2.3	8.5
Medicare and private	191.6	20.0	69.5	2.8	7.7	232.3	25.5	63.5	1.9	9.1
Medicare and other public	29.2	21.3	65.1	5.1	8.5	31.8	30.4	62.6	2.8	4.2
Perceived health status[b]										
Excellent, very good, or good	788.6	17.6	70.5	4.0	8.0	1,077.8	23.3	66.6	3.2	7.0
Fair or poor	338.0	14.8	73.6	4.4	7.1	343.3	20.5	70.0	3.3	6.2

[a]Frequencies and percentages regarding visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals, as well as expenses for events reported as hospital admissions without an overnight stay, are included.

[b]Numbers of visits do not add to overall total because data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS or CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

Note: Restricted to civilian noninstitutionalized population. Percents may not add to 100 because of rounding.
Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

Technical Appendix

The data in this report were obtained in the first three rounds of interviews for the Household Component (HC) of the 1996 Medical Expenditure Panel Survey (MEPS) and the Household Survey of the 1987 National Medical Expenditure Survey (NMES). MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). NMES was sponsored by AHRQ's predecessor, the National Center for Health Services Research. Both are nationally representative surveys of the U.S. civilian noninstitutionalized population that collect medical expenditure data at both the person and household levels. The focus of the MEPS HC and the NMES Household Survey 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.

Survey Design

1996 MEPS

The sample for the 1996 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 noninstitutionalizied 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 produce continuous and current estimates of health care expenditures. This report uses Rounds 1-3 of the first MEPS panel to create utilization estimates for calendar year 1996.

1987 NMES

The 1987 NMES was designed to provide estimates of insurance coverage, use of services, expenditures, and sources of payment for the period from January 1, 1987, through December 31, 1987. The entire Household Survey was conducted in four interview rounds at approximately 4-month intervals, with a fifth short telephone interview at the end. Items related to health status, access to health care, and income were collected in special supplements that were administered over the course of the calendar year. For more information on the survey instruments and data collection methods for NMES, see Edwards and Berlin (1989).

Utilization Variables

The utilization variables used to derive estimates for this report are based on the number of ambulatory visits for health care that were reported as occurring in calendar years 1987 (from NMES) and 1996 (from MEPS).

Visit Setting

For both 1987 and 1996 estimates, ambulatory care events include visits to physician and nonphysician providers. Dental visits, home health visits, and telephone contact with office-based providers, regardless of provider type, are excluded from our estimates. Examples of nonphysician providers include chiropractors, physical and occupational therapists, nurses and nurse practitioners, podiatrists, technicians, and receptionists, clerks, or secretaries. All events are classified by the setting in which they took place as follows: office visits, outpatient hospital visits, and emergency room visits. Same-day hospital discharges (hospital stays classified as inpatient that did not result in an overnight stay) are treated as outpatient hospital visits.

It should be noted that estimates of the number and proportion of visits taking place in emergency rooms based on MEPS are significantly lower than those based on the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS). MEPS is a household survey of the civilian noninstitutionalized population, while NAMCS and NHAMCS are provider-based surveys of doctors' offices and hospitals, respectively. These surveys use different methodologies

in counting and classifying ambulatory visits. For estimates based on NAMCS and NHAMCS, see Schappert (1998).

Reason for Visit

Both the NMES and MEPS questionnaires asked respondents to report the main reason for visiting their health care provider. Based on the responses, visits were classified as follows:

- *Preventive visits*—For both 1987 and 1996, office visits and outpatient hospital visits were categorized as being for preventive purposes if respondents said the visits were for a general checkup, maternity care, well-child exam, or immunizations.
- *Diagnosis or treatment*—Because questions were not identical in 1987 and 1996, edits were made to ensure the greatest possible comparability. For 1987, office visits and outpatient hospital visits were categorized as being for diagnosis or treatment if respondents reported that the main reason for the visit was diagnosis or treatment, psychotherapy, reproductive services, foot care, physical or speech therapy, or any diagnostic test (e.g., diagnostic imaging or lab tests). For 1996, office visits and outpatient hospital visits were categorized as being for diagnosis or treatment of a specific ailment if respondents reported going to their provider for diagnosis or treatment, psychotherapy, or postoperative services. In addition, office visits and outpatient hospital visits were categorized as being for diagnostic or treatment purposes if a respondent indicated that one or more of the following services were received: physical therapy, speech therapy, chemotherapy, radiation therapy, kidney dialysis, intravenous therapy, drug treatment, psychotherapy, or diagnostic imaging.
- *Emergency*—Only emergency room visits were categorized as being in the emergency category. Although MEPS respondents could identify a visit as being for emergency purposes regardless of the setting, NMES did not allow this. To make the data from the two surveys comparable, we considered all 1996 ambulatory care visits that did not take place in an emergency room as non-emergencies and assigned them to one of the other categories, as described above.
- *Other*—This residual category is made up of visits for which no reason was ascertained, including responses of "don't know" or "other" and refusals.

Population Characteristics

Race/Ethnicity

Classification by race and ethnicity is based on information reported for each household member. In both MEPS and NMES, respondents were asked if their race was best described as American Indian, Alaska Native, Asian or Pacific Islander, black, white, or other. In this report, American Indians, Alaska Natives, Asians, and Pacific Islanders are included in the "other" category. Respondents in both surveys also were asked if each family member's main national origin or ancestry was Puerto Rican; Cuban, Mexican, Mexicano, Mexican American, or Chicano; other Latin American; or other Spanish. All persons whose main national origin or ancestry was reported in one of these Hispanic groups, regardless of racial background, were classified as Hispanic. Since the Hispanic grouping can include black Hispanic, white Hispanic, and other Hispanic, the race categories of white, black, and other do not include Hispanic persons.

Income

Each sample person was classified according to the total 1987 or 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, corporations, rent, and royalties; and a small amount of "other" income.

Poverty status is the ratio of family income to the 1987 or 1996 Federal poverty thresholds, which control for family size and age of the head of family. Categories are defined as follows:

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

Health Insurance Status

Individuals under age 65 were classified into the following three insurance categories:

- *Any private health insurance*—Individuals who, at any time during the year (1987 or 1996), had insurance that provides coverage for hospital and physician care (other than Medicare, Medicaid, or other public hospital/physician coverage) are classified as having private insurance. Coverage by CHAMPUS/CHAMPVA (Armed-Forces-related coverage) is also included as private health insurance. Insurance that provides coverage for a single service only, such as dental or vision coverage, is not included.
- *Public coverage only*—Individuals are considered to have public coverage only if they met both of the following criteria:
  - They were not covered by private insurance at any time during the year.
  - They were covered by one of the following public programs at any point during the year: Medicare, Medicaid, or other public hospital/physician coverage.
- *Uninsured*—The uninsured are defined as people not covered by Medicare, CHAMPUS/CHAMPVA, Medicaid, other public hospital/physician programs, or private hospital/physician insurance at any time during the entire year or period of eligibility for the survey. 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.

Individuals age 65 and over were classified into the following three insurance categories:

- *Medicare only.*
- *Medicare and private.*
- *Medicare and other public.*

Perceived Health Status

The NMES questionnaire asked respondents to rate the health of each person in the family according to the following four categories: excellent, good, fair, and poor. The MEPS questionnaire asked respondents to rate the health of each person in the family according to the following five categories: excellent, very good, good, fair, and poor. For the tables in this report, these categories were collapsed into the following two broad categories: (1) excellent, very good, or good health and (2) fair or poor health.

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, which applied 1990 standards using population counts from the 1990 U.S. census. An MSA is a large population nucleus combined with adjacent communities that have a high degree of economic and social integration with the nucleus. Each MSA has one or more central counties containing the area's main population concentration. In New England, metropolitan areas consist of cities and towns rather than whole counties. MSA data are based on MSA status as of December 31, 1996. If MSA status as of December 31 was not known, then MSA status at the time of the Round 3 interview was used.

Region

Each MEPS sample person was classified as living in one of the following four regions as defined by the Bureau of the Census:

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

Rounding

Estimates presented in the tables were rounded to the nearest 0.1 percent. Standard errors, presented in tables A-C, were rounded to the nearest 0.01. Therefore, some of the estimates for population totals of subgroups presented in the tables will not add exactly to the overall estimated population total.

Table A. Standard errors for ambulatory services[a]—Total population, percent with any visit, and average number of visits per person with visit: United States, 1987 and 1996

Population characteristic	1987				1996			
	Total population (in thousands)	Percent of U.S. population	Percent with any visit	Average number of visits for those with any	Total population (in thousands)	Percent of U.S. population	Percent with any visit	Average number of visits for those with any
Total	†	—	0.4	0.1	†	—	0.4	0.1
Age in years								
Under 6	†	0.2	0.8	0.2	†	0.3	1.1	0.1
6-17	†	0.3	0.9	0.2	†	0.4	1.0	0.1
18-44	†	0.4	0.4	0.1	†	0.5	0.6	0.2
45-64	†	0.3	0.6	0.2	†	0.4	0.7	0.3
65 and over	†	0.3	0.5	0.2	†	0.4	0.7	0.3
Race/ethnicity								
White	†	1.1	0.4	0.1	†	0.8	0.4	0.1
Black	†	0.7	1.0	0.2	†	0.7	1.2	0.3
Hispanic	†	0.8	1.1	0.2	†	0.6	1.1	0.6
Other	†	0.5	2.0	0.4	†	0.4	2.4	0.5
Sex								
Male	†	0.3	0.5	0.1	†	0.3	0.6	0.2
Female	†	0.3	0.4	0.1	†	0.3	0.5	0.2
Metropolitan statistical area (MSA)[b]								
MSA	†	1.5	0.4	0.1	†	1.0	0.5	0.1
Non-MSA	†	1.5	0.9	0.1	†	1.0	1.0	0.3
Census Region								
Northeast	†	0.8	0.7	0.2	†	0.8	1.0	0.3
Midwest	†	0.8	0.7	0.2	†	1.0	0.7	0.2
South	†	0.8	0.6	0.1	†	1.2	0.7	0.2
West	†	0.9	0.7	0.3	†	0.8	1.0	0.4
Income[c]								
Poor	†	0.6	1.1	0.2	†	0.5	1.0	0.5
Near-poor	†	0.3	1.4	0.3	†	0.3	1.8	0.7
Low income	†	0.4	0.9	0.2	†	0.5	1.1	0.2
Middle income	†	0.6	0.6	0.2	†	0.7	0.7	0.2
High income	†	0.7	0.5	0.2	†	0.9	0.7	0.2
Health insurance status[b,d]								
Under 65 years								
Any private	2,760	0.8	0.4	0.1	4,618	0.8	0.5	0.1
Public only	1,286	0.5	1.0	0.1	1,401	0.5	1.1	0.7
Uninsured	1,045	0.4	1.1	0.4	1,394	0.4	1.3	0.3
65 years and over								
Medicare only	165	0.1	1.7	0.7	480	0.2	1.7	0.6
Medicare and private	748	0.3	0.5	0.3	906	0.3	0.8	0.4
Medicare and other public	244	0.1	1.3	0.6	271	0.1	2.0	1.0
Perceived health status[b]								
Excellent, very good, or good	2,428	0.4	0.4	0.1	5,371	0.3	0.4	0.1
Fair or poor	970	0.4	0.7	0.3	978	0.3	0.8	0.6

[a]Ambulatory services are visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals. Events reported as hospital admissions without an overnight stay are included.

[b]Data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS and CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

† Standard error approximately zero because of poststratification to Census Bureau population control tables.

Note: Restricted to civilian noninstitutionalized population.

Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

Table B. Standard errors for ambulatory services[a]—Total number of visits and percent distribution by setting: United States, 1987 and 1996

Population characteristic	1987				1996			
	Total visits (in millions)	Office-based	Outpatient department	Emergency room	Total visits (in millions)	Office-based	Outpatient department	Emergency room
Total	23.4	0.5	0.4	0.1	39.7	0.4	0.4	0.1
Age in years								
Under 6	5.0	1.2	0.9	0.4	4.6	0.6	0.5	0.3
6-17	6.7	0.8	0.7	0.3	6.3	0.7	0.6	0.3
18-44	13.1	0.6	0.5	0.2	23.2	0.6	0.5	0.2
45-64	9.7	0.9	0.9	0.1	16.1	0.8	0.8	0.1
65 and over	9.0	1.0	0.9	0.1	15.1	1.0	1.0	0.1
Race/ethnicity								
White	23.6	0.5	0.4	0.1	34.1	0.4	0.4	0.1
Black	7.5	1.8	1.8	0.5	10.2	1.7	1.8	0.4
Hispanic	6.0	1.2	1.0	0.4	11.9	1.3	1.0	0.5
Other	4.7	2.4	2.4	0.7	5.6	1.5	1.0	0.7
Sex								
Male	13.3	0.6	0.6	0.2	21.2	0.6	0.6	0.2
Female	15.3	0.6	0.5	0.1	24.5	0.5	0.5	0.1
Metropolitan statistical area (MSA)[b]								
MSA	30.2	0.6	0.5	0.1	33.8	0.4	0.4	0.1
Non-MSA	15.8	0.9	0.8	0.3	21.6	1.4	1.3	0.3
Census Region								
Northeast	16.1	0.8	0.7	0.2	15.7	0.7	0.6	0.2
Midwest	11.6	0.8	0.7	0.2	18.1	0.9	0.9	0.2
South	11.7	1.0	1.0	0.2	24.0	0.7	0.7	0.2
West	15.7	1.0	1.0	0.2	21.2	0.9	0.8	0.2
Income[c]								
Poor	8.3	1.4	1.2	0.5	16.3	1.4	1.3	0.4
Near-poor	3.8	1.7	1.5	0.6	6.9	3.1	3.2	0.7
Low income	8.2	0.9	0.9	0.3	10.1	1.0	1.0	0.3
Middle income	13.9	0.6	0.6	0.1	17.2	0.5	0.5	0.2
High income	13.9	0.5	0.5	0.1	21.8	0.6	0.5	0.1
Health insurance status[b,d]								
Under 65 years								
Any private	21.5	0.4	0.4	0.1	28.2	0.4	0.4	0.1
Public only	8.8	1.9	1.7	0.5	16.9	1.4	1.1	0.6
Uninsured	4.0	1.6	1.5	0.5	6.4	1.4	1.2	0.6
65 years and over								
Medicare only	2.0	5.8	6.1	0.5	5.3	3.4	3.5	0.3
Medicare and private	8.2	0.9	0.9	0.1	13.0	1.1	1.1	0.2
Medicare and other public	2.9	2.5	2.5	0.4	4.0	2.4	2.4	0.5
Perceived health status[b]								
Excellent, very good, or good	18.5	0.5	0.4	0.1	30.4	0.4	0.4	0.1
Fair or poor	11.5	0.9	0.9	0.2	18.9	1.0	1.0	0.2

[a]Frequencies and percentages regarding visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals, as well as expenses for events reported as hospital admissions without an overnight stay, are included.

[b]Data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS or CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

† Standard error approximately zero because of poststratification to Census Bureau population control tables.

Note: Restricted to civilian noninstitutionalized population.
Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

Table C. Standard errors for ambulatory services[a]—Total number of visits and percent distribution by reason for visit: United States, 1987 and 1996

Population characteristic	1987					1996				
	Total visits (in millions)	Preventive services	Diagnosis and/ or treatment	Emergency	Other	Total visits (in millions)	Preventive services	Diagnosis and/ or treatment	Emergency	Other
Total	23.4	0.4	0.5	0.1	0.3	39.7	0.5	0.6	0.1	0.4
Age in years										
Under 6	5.0	1.2	1.3	0.4	0.8	4.6	1.1	1.2	0.3	0.2
6-17	6.7	0.6	1.1	0.3	1.2	6.3	1.1	1.4	0.3	1.0
18-44	13.1	0.5	0.7	0.2	0.4	23.2	0.9	1.1	0.2	0.5
45-64	9.7	0.6	0.7	0.1	0.6	16.1	0.7	1.0	0.1	0.9
65 and over	9.0	0.7	0.8	0.1	0.5	15.1	0.8	1.0	0.1	0.5
Race/ethnicity										
White	23.6	0.4	0.5	0.1	0.4	34.1	0.5	0.7	0.1	0.4
Black	7.5	1.0	1.4	0.5	0.6	10.2	1.4	1.8	0.4	1.5
Hispanic	6.0	1.3	1.5	0.4	0.9	11.9	2.4	3.2	0.5	0.6
Other	4.7	1.7	1.7	0.7	1.5	5.6	2.8	3.5	0.7	0.9
Sex										
Male	13.3	0.4	0.7	0.2	0.6	21.2	0.7	0.9	0.2	0.4
Female	15.3	0.4	0.5	0.1	0.3	24.5	0.6	0.7	0.1	0.5
Metropolitan statistical area (MSA)[b]										
MSA	30.2	0.4	0.6	0.1	0.4	33.8	0.5	0.7	0.1	0.4
Non-MSA	15.8	0.8	0.9	0.3	0.5	21.6	1.3	1.5	0.3	0.6
Census Region										
Northeast	16.1	1.0	1.5	0.2	1.0	15.7	1.0	1.5	0.2	1.3
Midwest	11.6	0.7	0.7	0.2	0.4	18.1	0.9	1.0	0.2	0.4
South	11.7	0.6	0.8	0.2	0.6	24.0	0.7	0.9	0.2	0.4
West	15.7	0.6	0.5	0.2	0.5	21.2	1.2	1.5	0.2	0.8
Income[c]										
Poor	8.3	1.0	1.4	0.5	0.8	16.3	1.7	2.4	0.4	1.7
Near-poor	3.8	1.4	1.8	0.6	1.2	6.9	2.2	3.2	0.7	1.7
Low income	8.2	0.8	1.0	0.3	0.9	10.1	1.1	1.3	0.3	0.7
Middle income	13.9	0.5	0.6	0.1	0.4	17.2	0.7	0.9	0.2	0.5
High income	13.9	0.6	0.7	0.1	0.4	21.8	0.7	0.8	0.1	0.5
Health insurance status[b,d]										
Under 65 years										
Any private	21.5	0.5	0.6	0.1	0.4	28.2	0.5	0.6	0.1	0.4
Public only	8.8	1.2	1.6	0.5	0.5	16.9	2.2	3.1	0.6	2.0
Uninsured	4.0	1.2	1.8	0.5	1.4	6.4	1.2	1.8	0.6	1.2
65 years and over										
Medicare only	2.0	2.2	2.9	0.5	1.4	5.3	1.7	1.9	0.3	1.0
Medicare and private	8.2	0.7	0.8	0.1	0.4	13.0	0.9	1.2	0.2	0.7
Medicare and other public	2.9	1.8	2.6	0.5	2.3	4.0	3.4	4.0	0.5	0.7
Perceived health status[b]										
Excellent, very good, or good	18.5	0.4	0.6	0.1	0.4	30.4	0.5	0.6	0.1	0.3
Fair or poor	11.5	0.6	0.7	0.2	0.5	18.9	1.0	1.5	0.2	1.1

[a]Frequencies and percentages regarding visits to medical providers seen in office-based settings or clinics, hospital outpatient departments, emergency rooms (except visits resulting in an overnight hospital stay), and clinics owned and operated by hospitals, as well as expenses for events reported as hospital admissions without an overnight stay, are included.

[b]Data on this variable were not available for some sample persons.

[c]Poor 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.

[d]Uninsured refers to persons uninsured during the entire year. Public and private health insurance categories refer to individuals with public or private insurance at any time during the period; individuals with both public and private insurance and those with CHAMPUS or CHAMPVA (Armed-Forces-related coverage) are classified as having private insurance.

Note: Restricted to civilian noninstitutionalized population.
Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality: National Medical Expenditure Survey, 1987, and Medical Expenditure Panel Survey, 1996.

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