

Characteristics and Medical Expenses of Adults 18 to 64 Years-Old with Functional Limitations,
Combined Years 1997-2002
Deborah D. Dougherty, Ph.D., Westat and Gary Olin, Ph.D., AHRQ
February 2005

ABSTRACT

This report provides information on the characteristics and medical expenses of adults with functional limitations in the US civilian noninstitutionalized population. It uses data from the Medical Expenditure Panel Survey (MEPS) for the period 1997–2002 to categorize adults by age group and degree of activity and functional limitation. Although only 8 percent of all adults have a functional limitation, the prevalence of disability is much higher among some segments of the population. The publicly insured, the poor, the unemployed, and divorced or separated adults, for example, have relatively large proportions of persons with functional limitations. Adults with severe disabilities tend to have much higher health care expenses than do individuals with no limitations.

Gary Olin, Ph.D.
Center for Financing, Access, and Cost Trends
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850
E-mail: golin@ahrq.gov

Deborah D. Dougherty, Ph.D.
Westat
1650 Research Blvd.
Rockville, MD 20850
E-mail: DOUGHED@WESTAT.com

Introduction

The household component of the Medical Expenditure Panel Survey (MEPS) contains a series of questions about the health status of persons in the sample. Responses to these questions can be used to identify persons who needed help performing activities related to personal care or living independently, as well as those who had limitations in work, housework, or school. This research finding contains information on the number and characteristics of adults in the civilian noninstitutionalized population who had activity and functional limitations. It also provides detail on their health insurance coverage and health care expenditures.

The data are for adults who were in the civilian noninstitutionalized population and between 18 and 64 years of age during the period 1997-2002. Six years of data were combined to provide larger samples needed to make more precise estimates of the number and characteristics of adults with disabilities. As a result, the statistics discussed in the following sections are annual averages for the period 1997-2002. In addition, health care expenditures have been adjusted to 2002 dollars by using the Consumer Price Index for Medical Services to account for change in health care prices over the years 1997-2002.

Tests of statistical significance were used to determine whether differences between sample statistics exist at specified levels of confidence or whether they occur 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. The technical appendix provides details concerning the sample design and the definitions of measures used in this report.

Functional Limitations Defined

Individuals ages 18 to 64 were assigned to one of four mutually exclusive hierarchical groups based on the severity of an individual's disability. The group with the highest level of functional disability contains persons who received help or supervision in performing personal care tasks, such as bathing, dressing, or getting around the house. Individuals were included in this group if they had any activity of daily living (ADL) limitation, regardless of other limitations. The second group consists of persons having an instrumental activity of daily living (IADL) limitation but no ADL limitation. Anyone who needed assistance with activities such as using the telephone, paying bills, taking medications, preparing light meals, doing laundry, or going shopping was included in this category. The third group includes persons with physical limitations but no ADL or IADL limitations. Anyone limited in mobility, as measured by having difficulty walking or by having a work, housework, or school limitation, was included in this category. The fourth group includes all other adults in the sample.

Prevalence of Functional Limitations

Table 1 shows the average number of adults, stratified by degree of disability and socioeconomic characteristics, for the years 1997-2002. While a large portion of the population (92%) had no functional limitation, 6 percent had a physical limitation only, and 2 percent had an ADL and/or IADL limitation. The prevalence of disability varied, however, with age, race, education, and marital status. Older adults were significantly more likely than their younger

counterparts to have some type of activity or functional limitation (16.2 percent vs. 6.0 percent), and almost 3 times as likely to have a physical limitation only (12.7 percent vs. 4.5 percent). Hispanics (5.9 percent) and other races (6.0 percent) were less likely than whites (8.8 percent) or blacks (10.3 percent) to have an activity or functional limitation. Physical limitations were more common among individuals with low educational attainment compared to those with 12 or more years of education. Ten percent of individuals with less than a high school education had a physical limitation compared to 5.8 percent who had 12 or more years of education. Physical limitations also varied by marital status, with divorced/separated person having the highest prevalence of activity and functional limitations (15.7 percent). About 12 percent of the divorced/separated group had a physical limitation, as opposed to only 5.9 percent of married/widowed and 4.8 percent of never married people.

The largest differences in the prevalence of disability were observed for adults stratified by employment and insurance status. Over twenty-seven percent of the unemployed had an activity or physical limitation compared to 5 percent of those with full or part-year employment. The likelihood of having a functional limitation was notably higher among adults with public insurance (38.8 percent), compared to those with private or no insurance (5.4 percent and 7.1 percent, respectively). In addition, the prevalence of disability among poor/near-poor (18.6 percent) and low income (11.6 percent) individuals is higher compared to those with middle/high-incomes (6.1 percent).

Functional Limitations, Insurance Status, and Age

Table 2 shows the disability and insurance status of adults with functional limitations by age group. Insurance categories in the table include (1) private insurance, (2) public insurance, and (3) no insurance during the year. The predominant type of insurance coverage among all adults in the sample varied with the level of disability. Adults with any type of ADL limitation or an IADL limitation but no ADL limitation were about twice as likely to have public insurance (58.8 percent and 59.5 percent, respectively) than they were to have private insurance (32.9 percent and 31.3 percent, respectively). Adults with physical limitations only, on the other hand, were more likely to have private insurance (53.2 percent) than public insurance (33.0 percent).

Functional Limitations and Health Care Expenditures

Table 3 shows, by age group and level of disability, annual average health care expenditures in 2002 dollars and the distribution of payments by source for the period 1997-2002. The annual average health care expenditure for persons with at least one medical event was significantly less for individuals without a limitation than it was for persons with a limitation, regardless of age group. In the 50 to 64 year-old age group, for example, the average expenditure per person receiving medical care ranged from \$3,819 for those with no limitations to \$9,729 for those with a physical limitation only to \$23,292 for those with an ADL limitation. Expenditures in the 18 to 49 year-old group also rose with the level of disability, although average expenditures per person receiving medical care were lower than those in the older group.

The distribution of payments by source reflects, to a degree, the insurance coverage shown in Table 2 for persons in the 18 to 49 year-old group. Medicaid paid the largest share of expenses for persons with ADL limitations (39.0 percent), while private insurance paid the largest share for persons with a physical limitation (37.3 percent) or no limitations (58.3 percent). Persons with an IADL limitation but no ADL limitation were equally reliant on Medicaid (31.2 percent) and private insurance (25.5 percent) to pay the largest shares of their expenses.

In the 50 to 64 year-old group, private insurance paid the largest share of expenses regardless of level of disability. The share paid by private insurance ranged from 30.2 percent for persons with ADL limitations to 59.8 percent for persons without a limitation. In addition, Medicare became a more important payer for persons with an ADL limitation, while Medicaid was the third most important payer in the physical limitation and IADL categories.

Persons with ADL limitations paid the smallest share of their health care expenditures out-of-pocket, 9.2 percent in the 18 to 49 year-old group and 13.5 percent in the 50 to 64 year-old group. At the other extreme, persons without a limitation paid the highest share out of pocket—25.5 percent in the 18 to 49 year-old group and 27.3 percent in the 50 to 64 year-old group. However, older persons in the ADL limitation group had the largest out of pocket payments per person receiving medical care because their average health care expenditure was high compared to other groups. For example, 50 to 64 year-olds with an ADL paid \$3,144 out of pocket while those with no limitations paid \$1,043 out of pocket.

Conclusions

This report provides information on the average number and characteristics of civilian noninstitutionalized adults with functional limitations during the period 1997-2002. Although a relatively small proportion (8 percent) these adults has a functional limitation, the prevalence of functional disability varies significantly among some segments of the population. It was high among individuals who were not employed during the year (27.3 percent), less educated (14.0 percent), or in the lowest income bracket (18.6 percent). Persons who were divorced/separated were more likely to have a limitation (15.7 percent) than those who were married/widowed (7.3 percent) or never married (7.1 percent). More blacks (10.3 percent) and whites (8.8 percent) reported functional limitations than Hispanics (5.9 percent) or other racial groups (6.0 percent).

Public insurance was the most common type of coverage for persons with an ADL (58.8 percent) or IADL (59.5 percent) limitation, while private insurance was most common among individuals with a physical limitation (53.2 percent) or no limitations (79.0 percent). In addition, insurance coverage sometimes varied by age group rather than degree of functional limitation.

The annual average health care expenditure per person receiving medical care increased significantly with the level of disability in both age groups. For older adults, the average jumped from \$3,819 for persons with no limitations to \$23,292 for persons with ADL limitations. For younger adults, the average jumped from \$2,153 for persons with no limitations to \$17,121 for persons with ADL limitations. Moreover, adults with severe functional limitations in both age groups had large out-of-pocket payments even though their out-of-pocket share of total expenses was relatively small (9.2 percent for the 18 to 49 year-olds and 13.5 percent for the 50 to 64 year-olds).

References

Adler M. The disabled: their health care and health insurance. Washington, DC: The Office of Disability, Aging and Long-Term Care Policy. August 1990. <http://aspe.hhs.gov/daltcp/reports/disabled.htm>.

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.

Cohen S. Design strategies and innovations in the Medical Expenditure Panel Survey. *Medical Care* 2003; 41(7): 5-12.

NBER Website. Friday, February 25, 2005. "Public Disability Insurance and Private Health Insurance." <<http://www.nber.org/digest/jan03/w9148.html>>.

Rhoades JA. The uninsured in America—2002. Rockville (MD): Agency for Healthcare Research and Policy; 2002. MEPS Statistical Brief No. 19. AHRQ Pub. No. 19.

Stapleton DC and Burkhauser RV. 2003. The Decline in Employment of People with Disabilities: A Policy Puzzle. Kalamazoo (MI): W.E. Upjohn Institute for Employment Research.

Table 1 Distribution of U.S. civilian noninstitutionalized adults by disability status and selected characteristics: MEPS, 1997-2002

Characteristic	Population (in 1,000s)	Limitation distribution ^a			
		No limits	Physical limits	IADL limits	Any ADL limits
Total^b	170,805	156,380	11,060	1,885	1,480
Age in years		Prevalence of disability			
18 to 49	128,906	94.0	4.5	.9	.6
50 to 64	41,899	83.8	12.7	1.9	1.6
Ethnicity/Race					
White, single race	121,679	91.2	6.8	1.1	.9
Black, single race	20,498	89.7	7.7	1.4	1.2
Hispanic	20,501	94.0	4.4	.8	.7
All other	8,126	94.0	4.3	.9	.8
Gender					
Male	83,884	92.3	5.9	1.0	.8
Female	86,921	90.8	7.0	1.2	.9
Education^c					
Less than 12 years	27,090	86.0	10.0	2.3	1.7
12 or more years	142,986	92.6	5.8	.9	.7
Marital status^c					
Married/Widowed	99,818	92.6	5.9	.7	.7
Divorced/Separated	23,494	84.3	12.2	2.2	1.3
Never married	47,492	92.9	4.8	1.4	.9
Income^d					
Poor/Near-poor	23,549	81.4	13.4	3.1	2.1
Low income	19,898	88.4	8.3	2.0	1.4
Middle/High-income	127,358	93.9	4.9	.6	.6
Region					
South	60,186	90.9	7.1	1.1	.9
Midwest/Northeast	71,754	92.3	5.8	1.1	.8
West	38,864	91.3	6.8	1.1	.9
Employment^c					
Full/Part year	144,099	95.0	4.2	.4	.3
Not employed	26,666	72.8	18.7	4.7	3.9
Type of insurance^e					
Private	130,501	94.6	4.5	.5	.4
Public	14,556	61.2	25.1	7.7	6.0
No insurance	25,747	92.9	5.9	.7	.5

^a Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL: Having instrumental activity of daily living limitations but no ADLs. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

^b Individuals with a missing on limitation were not included in the population count (n=257).

^c Total does not add to population; missings were not included in the count.

^d 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.

^e See Technical Appendix for definitions of insurance coverage, including treatment of individuals with private and public insurance.

Note: Percents may not add to 100 due to rounding.

Source: Center for Financing, Access, and Cost Trends (CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.

Table 2 Disability and insurance status of adults with functional limitations in the U.S. civilian noninstitutionalized population: MEPS, 1997-2002

Characteristic	Population (in 1,000s)	Age group	
		18 to 49	50 to 64
Total^a	170,805	128,906	41,899
Limitation^b/Insurance^c			
Number with no limitation	156,380	121,286	35,095
Percent private ins.	79.0	77.3	84.8
Percent public ins.	5.7	6.0	4.5
Percent no insurance	15.3	16.7	10.7
Number with physical limitation	11,060	5,730	5,330
Percent private ins.	53.2	52.7	53.8
Percent public ins.	33.0	31.9	34.2
Percent no insurance	13.8	15.5	12.0
Number with IADL	1,885	1,093	792
Percent private ins.	31.3	32.4	29.9
Percent public ins.	59.5	57.5	62.3
Percent no insurance	9.1	—	—
Number with any ADL	1,480	798	682
Percent private ins.	32.9	33.3	32.6
Percent public ins.	58.8	60.3	57.1
Percent no insurance	8.3	—	—

^a Individuals with a missing on limitation were not included in the population count (n=257).

^b Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL: Having instrumental activity of daily living limitations but no ADLs. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

^c See Technical Appendix for definitions of insurance categories, including treatment of individuals with private and public insurance.

Note: Percents may not add to 100 due to rounding.

— Less than 100 sample cases.

Source: Center for Financing, Access, and Cost Trends (CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.

Table 3 Expenditures and sources of payment by disability status and age group for adults with functional limitations in the U.S. civilian noninstitutionalized population: MEPS, 1997-2002

	Population (in 1,000s)	Total expense (\$ in millions)	Per Person with an Event		Percent distribution of total expenses by source of payment				
			Median	Mean	Self	Medicare	Medicaid	Private	Other
Total^a	139,683	46,3721	1146	3320	23.5	4.8	10.1	52.0	9.6
Age in Years/Limitation^b									
All 18 to 49 year-olds	102,059	268,196	883	2,628	23.2	3.5	11.8	52.0	9.5
No limits	94,909	204,343	816	2,153	25.5	.8	7.1	58.3	8.4
Physical limits	5,329	37,963	3,115	7,124	18.4	11.1	21.4	37.3	11.9
IADL only	1,041	12,535	4,779	12,036	14.8	10.2	31.2	25.5	18.4
Any ADL	780	13,355	6,407	17,121	9.2	15.7	39.0	23.2	12.9
All 50 to 64 year-olds	37,623	195,525	2,198	5,197	24.0	6.7	7.7	52.0	9.6
No limits	31,037	118,518	1,834	3,819	27.3	2.0	3.0	59.8	7.9
Physical limits	5,148	50,083	5,293	9,729	20.6	10.5	13.4	44.7	10.8
IADL only	763	11,182	7,489	14,659	19.4	16.4	19.1	33.9	11.2
Any ADL	675	15,742	12,248	23,292	13.5	22.4	16.9	30.2	17.0

^a Only individuals who had a medical event were included in the total. Individuals who had eyeglass expenditures were not included in this table.

^b Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL only: Having only instrumental activity of daily living limitations. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

Note: Percents may not add to 100 due to rounding.

Source: Center for Financing, Access, and Cost Trends (CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.

Technical Appendix

The data in this report were obtained from the full-year consolidated PUF's of the 1997-2002 MEPS-HC (HC-020, HC-028, HC-038, HC-050, HC-060, and HC-070). 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) and the supply side of the insurance market (Insurance Component).

Survey Design

The sample for each year of the MEPS HC was selected from respondents to the prior year's National Health Interview Survey (NHIS), which was conducted by NCHS. NHIS provides a nationally representative sample of the U.S. civilian noninstitutionalized population and reflects an oversampling of Hispanics and blacks. The MEPS HC collects data through an overlapping panel design. In this design, data are collected through a precontact interview that is followed by a series of five rounds of interviews over 2 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 continuous and current estimates of health care expenditures.

Health Insurance Status

Individuals between the ages of 18 and 64 (inclusive) were classified into the following insurance categories based on household responses to health insurance status questions administered during all rounds of the MEPS HC. The household responses were for each month, thus a record of a respondent's insurance coverage across 12 months was established. If a respondent was covered by two types of insurance during the year, the most likely primary payer was used to determine the insurance category. For example, individuals having Medicare and private insurance were placed in the public insurance group because Medicare is typically the primary payer in these cases. The categories are mutually exclusive.

- Private Insurance—Individuals who were insured by private coverage at some point during the calendar year. Private health insurance was defined 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. If a person had both Medicaid and private health insurance, he or she was included in the private insurance group. For the purpose of this analysis, TRICARE/CHAMPVA coverage is combined with private coverage.
 - TRICARE 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.
- Public Insurance—Individuals who were insured by public coverage at some point during the calendar year. Individuals were considered to have public coverage if they were covered only by Medicaid, Medicare, or some other public hospital/physician coverage or if they were covered by both Medicare and private insurance.

- **No Insurance**—No insurance includes those individuals who were not insured during all of the calendar year; single service or specific program plans are not classified as insurance for purposes of this report.

Functional Limitations

Four mutually exclusive categories of functional limitation were used in this research findings: Any ADL, having a need for help with any activity of daily living, regardless of other limitations (ADLHLP); IADL, having an instrumental activity of daily living limitation (IADLHP), but no ADL; Physical Limitation, having only a limitation in mobility, measured by having difficulty walking or having any activity limitations, such as going to school or work (WLKLIM and ACTLIM); No Limitation, having no activity or mobility limitations.

ADLs

Limitations in the ability to perform activities of daily living were assessed by asking whether anyone in the family received help or supervision with personal care, such as bathing, dressing, or getting around the house. Individuals were included in this category if they had an ADL, regardless of whether or not they had an IADL or physical limitation.

IADLs

Limitations in the ability to perform instrumental activities of daily living were assessed by asking whether anyone in the family received help or supervision using the telephone, paying bills, taking medications, preparing light meals, doing laundry, or going shopping. If the respondent indicated that someone in the household received help with any of these activities, a followup question was asked to

determine which household member received help. Individuals were included in this category if they had an IADL; members of this category did not have an ADL but could have a physical limitation.

Population Characteristics

Age

The respondent was asked to report the age of each family member as of the date of the interview. The age as of December 31 of the data year, or the last known age if this value was invalid, was used for the analysis.

Race/Ethnicity

Classification by race and ethnicity was based on information reported for each household member. Respondents were asked if the race of the sample person was best described as American Indian, Alaska Native, Asian or Pacific Islander, black, white, or other. Respondents were also asked if the sample person's main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexicano, Mexican American, or Chicano; other Latin American; or other Spanish. All persons 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. For 2002, the other category includes some mixed race.

Marital Status

Marital status was constructed from information available at three points in time during the data year: the interview dates for the first two rounds of the data year and December 31 of the applicable data

year. The marital status as of December 31 of the data year, or the last known marital status if this value was invalid, was used for the analysis.

Employment Status

Employment status was constructed from information available at three points in time during the data year: the interview dates for the round of MEPS and December 31 of each data year. This variable summarizes the rounds to determine a full year work status. For example, if someone was employed in rounds 1 and 2 but not employed in Round 3, they were coded as “2=part year”. A person was considered employed if he or she was currently working, had a job to return to, or a job during the round.

Income

Each sample person was classified according to the total data year income of his or her family. Within a household, all individuals related by blood, marriage, or adoption were considered to be family. Personal income from all family members was summed to create family income. Income included possible 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, Temporary Aid to Needy Families, and Aid to Dependent Children; gains or losses from estates, trusts, partnerships, S corporations, rent, and royalties; and small amount of “other” income.\

Poverty status is the ratio of family income to the data year’s Federal poverty thresholds, which control for family size and age of the head of family. Income categories are defined as follows:

- Poor—Incomes less than or equal to the poverty line.
- Near poor—Incomes over the poverty line through 125 percent of the poverty line.
- Low income—Incomes over 125 percent through 200 percent of the poverty line.

- Middle income—Incomes over 200 percent through 400 percent of the poverty line.
- High income—Incomes over 400 percent of the poverty line.

Education

Respondents were asked to report the highest grade or year of schooling ever completed as of the date of the Round 1 or first interview that person was in the survey.

Sample Design and Accuracy of Estimates

The sample selected for each data year of MEPS, a subsample of the prior year NHIS, was designed to produce national estimates that are representative of the civilian noninstitutionalized population of the United States.

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 Current Population Surveys (CPS) to reflect Census Bureau estimated population distributions as of December of the data year. 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 for the data year of the Medicare Current Beneficiary Survey (MCBS) for the number of deaths among Medicare beneficiaries in the data year.

SUDAAN was used to estimate standard errors because MEPS has a complex survey design. 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, present in Tables A to C, were rounded to the nearest 0.01. Population estimates in Tables 1 to 3 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.

Pooling Data Years

The “MEPS 1996–2002 Pooled Estimation Linkage File” (HC-036) was used to perform the pooling of data years 1997 through 2002. This file contains pooled variance stratum (STRA9602) and PSU (PSU9602) variables that were used in lieu of the variance variables contained on the annual files. Using the year-specific “Full Year Consolidated Data Files” for 1997–2002, a separate analytic file was created for each data year. The concatenated files were sorted by DUPERSID and merged with the linkage file. The final person weights contained on the annual files were used for the weighted analysis and the outcomes divided by 6, the total number of years being pooled. Further documentation about pooling data years can be found on the MEPS web site (www.ahrq.meps.gov).

Comparisons with Other Data Sources

Because of methodological differences, caution should be used when comparing these data with data from other sources. Particularly with questions about limitations in activities, a range of results is frequently found among surveys based on question wording, the sequencing of questions, the placement of questions, and whether or not the respondent was a proxy for the person with the limitation.

Benchmarking activities indicate that the proportions with ADLs and IADLs are very similar to those reported in the NHIS. However, the estimates of limitations in work, school, or housework activities are more conservative than those found in NHIS.

Table A: Standard errors for the distribution of U.S. civilian noninstitutionalized adults by disability status and selected characteristics: MEPS, 1997-2002
(corresponds to Table 1)

Characteristic	Population (in 1,000s)	Limitation distribution ^a			
		No limits	Physical limits	IADL limits	Any ADL limits
Total^b	170,805	156,380	11,060	1,885	1,480
Age in years					
		Standard errors			
18 to 49		.2	.2	.1	.0
50 to 64		.4	.3	.1	.1
Ethnicity/Race					
White, single race		.2	.2	.1	.0
Black, single race		.5	.4	.1	.1
Hispanic		.3	.3	.1	.1
All other		.5	.4	.2	.2
Gender					
Male		.2	.2	.1	.1
Female		.2	.2	.1	.1
Education^c					
Less than 12 years		.5	.4	.2	.1
12 or more years		.2	.2	.0	.0
Marital Status^c					
Married/Widowed		.2	.2	.0	.0
Divorced/Separated		.5	.4	.2	.1
Never married		.3	.2	.1	.1
Income^d					
Poor/Near-Poor		.6	.5	.2	.2
Low Income		.4	.3	.2	.1
Middle/High-income		.2	.1	.0	.0
Region					
South		.4	.3	.1	.1
Midwest/Northeast		.3	.2	.1	.1
West		.4	.4	.1	.1
Employment^c					
Full/Part year		.1	.1	.0	.0
Not employed		.7	.5	.2	.2
Type of insurance^e					
Private		.1	.1	.0	.0
Public		.9	.7	.4	.4
No insurance		.3	.3	.1	.1

^a Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL: Having instrumental activity of daily living limitations but no ADLs. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

^b Individuals with a missing on limitation were not included in the population count (n=257).

^c Total does not add to population; missings were not included in the count.

^d 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.

^e See Technical Appendix for definitions of insurance categories, including treatment of individuals with private and public insurance.

Source: Center for Financing, Access, and Cost Trends (CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.

Table B Standard errors for the disability and insurance status of adults with functional limitations in the U.S. civilian noninstitutionalized population: MEPS, 1997-2002
(corresponds to Table 2)

Characteristic	Population (in 1,000s)	Age group	
		18 to 49	50 to 64
Total^a	170,805	128,906	41,899
Limitation^b/Insurance^c			
Number with no limitation			
Percent private ins.	.5	.5	.5
Percent public ins.	.2	.2	.2
Percent no insurance	.4	.4	.4
Number with physical limitation			
Percent private ins.	1.0	1.4	1.2
Percent public ins.	.9	1.3	1.1
Percent no insurance	.6	.9	.7
Number with IADL			
Percent private ins.	1.8	2.3	2.6
Percent public ins.	1.9	2.6	2.7
Percent no insurance	1.1	—	—
Number with any ADL			
Percent private ins.	1.8	2.6	2.6
Percent public ins.	2.0	2.8	2.9
Percent no insurance	1.1	—	—

^a Individuals with a missing on limitation were not included in the population count (n=257).

^b Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL: Having instrumental activity of daily living limitations but no ADLs. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

^c No insurance refers to individuals who were uninsured the entire year.

— Less than 100 sample cases.

Source: Center for Financing, Access, and Cost Trends (CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.

**Table C Standard errors of expenditures and sources of payment by disability status and age group for adults with functional limitations in the U.S. civilian noninstitutionalized population: MEPS, 1997-2002
(corresponds to Table 3)**

	Population (in 1,000s)	Total expense (\$ in millions)	Per Person with an event		Percent distribution of total expenses by source of payment				
			Median	Mean	Self	Medicare	Medicaid	Private	Other
Total ^a	6,580	2,1451	15	42	.3	.3	.4	.6	.4
Age in years/Limitation ^b									
All 18 to 49 year-olds	4,887	12,979	12	40	.4	.5	.6	.7	.5
No limits	4,546	9,587	10	31	.4	.2	.3	.7	.5
Physical limits	312	2,611	137	260	6.9	1.6	1.4	2.0	1.2
IADL only	79	1,520	515	1,100	1.3	2.7	4.5	4.1	4.5
Any ADL	65	1,547	960	1,646	1.3	4.5	4.3	3.6	2.5
All 50 to 64 year-olds	1,768	9,285	36	94	.4	.4	.4	.9	.7
No limits	1,500	5,760	31	69	.5	.3	.3	.9	.8
Physical limits	252	3,026	171	401	.9	.9	1.0	1.6	1.2
IADL only	58	1,117	545	1,087	1.8	2.4	2.6	3.9	2.7
Any ADL	49	1,568	1,113	1,678	1.4	3.2	2.1	4.4	3.7

^a Only individuals who had a medical event were included in the total. Individuals who had only eyeglass expenditures were not included in this table.

^b Any ADL: Having activity of daily living limitations, regardless of other limitations. IADL only: Having only instrumental activity of daily living limitations. Physical limitation: Having no ADL or IADL limitations; mobility limitations only. No limitation: Having no activity or mobility limitations.

Source: Center for Financing, Access, and Cost Trends(CFACT), Agency for Healthcare Research and Quality: Medical Expenditure Panel Survey, 1997 to 2002.