

## STATISTICAL BRIEF #254

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### Trends in Health Care Expenditures for Adults Ages 18–44: 2006 versus 1996

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#### Introduction

This Statistical Brief compares summary statistics on health care expenditures and expenditure distributions by type of service and source of payment for adults ages 18–44 in 2006 relative to this age group in 1996. The estimates are derived from data collected in the Medical Expenditure Panel Survey Household (MEPS-HC) and Medical Provider Components (MEPS-MPC) on the U.S. civilian noninstitutionalized population. Health care expenses in MEPS represent payments to physicians, hospitals, and other health care providers for services reported by respondents to the MEPS-HC. Estimates for 1996 were adjusted to 2006 dollars based on the GDP Price Index to remove the impact of medical inflation between 1996 and 2006 on comparisons ([http://www.meps.ahrq.gov/mepsweb/about\\_meps/Price\\_Index.shtml](http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml)). All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

#### Findings

##### *Summary expenditure statistics*

The \$230.9 billion in total health care expenses for adults age 18–44 in 2006 was about \$40 billion higher than spending in 1996 (adjusted to 2006 dollars) (figure 1). Although a smaller proportion of this age group had some expenses for health care in 2006 than in 1996 (76.9 vs. 80.5, respectively), the average annual expense among those with an expense was significantly higher in 2006 (\$2,703 vs. \$2,177 in 1996 after adjusting for inflation).

In 2006, the median annual health care expenditure for adults under age 45 was \$463 (figure 2), with about one-quarter of these adults having no expenses or expenses under \$39 (25th percentile), and another one-quarter having expenses over \$1,737 (75th percentile). While the 25th percentile and median levels were not significantly different between 2006 and 1996, the 75th percentile was somewhat higher in 2006 than 1996 (\$1,737 versus \$1,288).

##### *Expenditures by type of service*

The percentage of adults ages 18–44 with expenses was fairly similar in 1996 and 2006 for most types of services (figure 3). Although the proportion with expenses for prescribed medicines in 2006 was lower than in 1996, this estimate fluctuated within this range (54.1–59.6 percent) during this 10-year period (data not shown). The proportion with expenses for dental care was also lower in 2006.

#### Highlights

- A smaller proportion of adults age 18–44 had some expenses for health care in 2006 than in 1996, but the average annual expense among those with an expense was higher in 2006.
- The proportion of adults age 18–44 with expenses for dental care was lower in 2006 than 1996.
- Although the proportion of adults age 18–44 with expenses for prescribed medicines was lower in 2006 than 1996, prescription medications accounted for a larger share of all health care expenses in 2006 than 1996 for this age group.
- The average expense per emergency room visit for adults age 18–44 in 2006 was substantially higher than the inflation-adjusted 1996 average.

Prescription medications accounted for a notably higher share of total expenses for adults ages 18–44 in 2006 than in 1996 (17.6 versus 10.2 percent) while inpatient hospital visits accounted for a lower share (28.5 versus 37.4 percent) (figure 4). In contrast, the proportion with expenses for ambulatory care in office or hospital settings and for dental care did not differ significantly between the two years.

While the average per diem expense for an inpatient hospital stay in 2006 (\$2,470) was not significantly different than the corresponding inflation-adjusted 1996 estimate for adults under age 45, the average expense for a prescription medication purchase was notably higher for this age group in 2006 than in 1996 (\$161 versus \$79). Average expenses for visits to office physicians, emergency rooms, and dental care providers were also significantly higher in 2006 (figure 5).

#### *Expenditures by source of payment*

The distribution of total expenses by source of payment for adults ages 18–44 in 2006 was not significantly different from the distribution for the same age group in 1996. In both years, over half of all expenses were paid by private insurance, about one-fifth were paid out of pocket, and most of the remaining expenses were paid by Medicaid.

### **Data Source**

The estimates in this Statistical Brief are based upon data from the 2006 Full Year Consolidated (HC-105) and Event Level Data Files (HC-102A, B, D, E, and G).

### **Definitions**

#### *Expenditures (expenses)*

Expenditures include the total direct payments from all sources to hospitals, physicians, other health care providers (including dental care), and pharmacies for services reported by respondents in the MEPS-HC. Expenditures for hospital-based services include those for both facility and separately billed physician services. Estimates for 1996 were adjusted to 2006 dollars based on the GDP Price Index ([http://www.meps.ahrq.gov/mepsweb/about\\_meps/Price\\_Index.shtml](http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml)). Health insurance premiums are not included as expenses.

#### *Type of service*

- Office-based: Includes expenses for visits to both physician and non-physician medical providers seen in office settings.
- Hospital inpatient: Includes room and board and all hospital diagnostic and laboratory expenses associated with the basic facility charge, payments for separately billed physician inpatient services, and some emergency room expenses incurred immediately prior to inpatient stays.
- Hospital outpatient: Includes expenses for visits to both physicians and other medical providers seen in hospital outpatient departments, including payments for services covered under the basic facility charge and those for separately billed physician services.
- Emergency room: Includes payments for services covered under the basic facility charge and those for separately billed physician services, but excludes expenses for emergency room services that are included in a hospital inpatient admission.
- Prescribed medicines: Includes expenses for all prescribed medications that were initially purchased or refilled during the year, as well as expenses for diabetic supplies.
- Dental: Includes payments for services to any type of dental care provider, including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists.
- Ambulatory: Combines office-based, hospital outpatient, and emergency room expense categories described above.
- Other: Includes expenses for care in all categories not specified as a separate category, including those for home care and for miscellaneous medical equipment and supplies.

### Sources of payment

- Out of pocket: This category includes expenses paid by the user or other family member.
- Private insurance: This category includes payments made by insurance plans covering hospital and medical care (excluding payments from Medicare, Medicaid, and other public sources), Medigap plans, or TRICARE (Armed Forces-related coverage). Payments from plans that provide coverage for a single service only, such as dental or vision coverage, are not included.
- Medicaid/SCHIP: Medicaid and SCHIP are means-tested government programs jointly financed by Federal and state funds that provide health care to those who are eligible. Medicaid is designed to provide health coverage to families and individuals who are unable to afford necessary medical care while SCHIP provides coverage to additional low income children not eligible for Medicaid. Eligibility criteria for both programs vary significantly by state.
- Other sources: This category includes payments from Medicare, other miscellaneous Federal sources (Indian Health Service, military treatment facilities, and other care provided by the Federal government); various state and local sources (community and neighborhood clinics, state and local health departments, and state programs other than Medicaid/SCHIP); various unclassified sources (e.g., automobile, homeowner's, or other liability insurance, and other miscellaneous or unknown sources); Medicaid/SCHIP payments reported for persons who were not reported as enrolled in the Medicaid or SCHIP programs at any time during the year; and private insurance payments reported for persons without any reported private health insurance coverage during the year.

### About MEPS-HC and MEPS-MPC

The MEPS Household Component (HC) is a nationally representative longitudinal survey that collects detailed information on health care utilization and expenditures, health insurance, and health status, as well as a wide variety of social, demographic, and economic characteristics for the U.S. civilian noninstitutionalized population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

The MEPS Medical Provider Component (MPC) collects information on dates of visit, diagnoses and procedures, and charges and payments from a sample of medical providers who provided care to persons in the survey. The MPC data collected are used generally as the primary source of MEPS expenditure data and are also used to impute expenditure information not reported by household respondents.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301) 427-1406 or visit the MEPS Web site at <http://www.meps.ahrq.gov>.

### References

Cohen, J., Cohen S., and Banthin, J. "The Medical Expenditure Panel Survey: A National Information Resource to Support Healthcare Cost Research and Inform Policy and Practice." *Medical Care* 2009, 47(7), Supplement, pp S44–S50.

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPH Pub. No. 97-0026. Rockville, MD: Agency for Health Care Policy and Research, 1997. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr1/mr1.shtml](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.shtml)

Ezzati-Rice, TM, Rohde, F, Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report No. 22. March 2008. Agency for Healthcare Research and Quality, Rockville, MD. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr22/mr22.shtml](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.shtml)

## Suggested Citation

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools and to share suggestions on how MEPS products might be enhanced to further meet your needs. Please e-mail us at [mepspd@ahrq.gov](mailto:mepspd@ahrq.gov) or send a letter to the address below:

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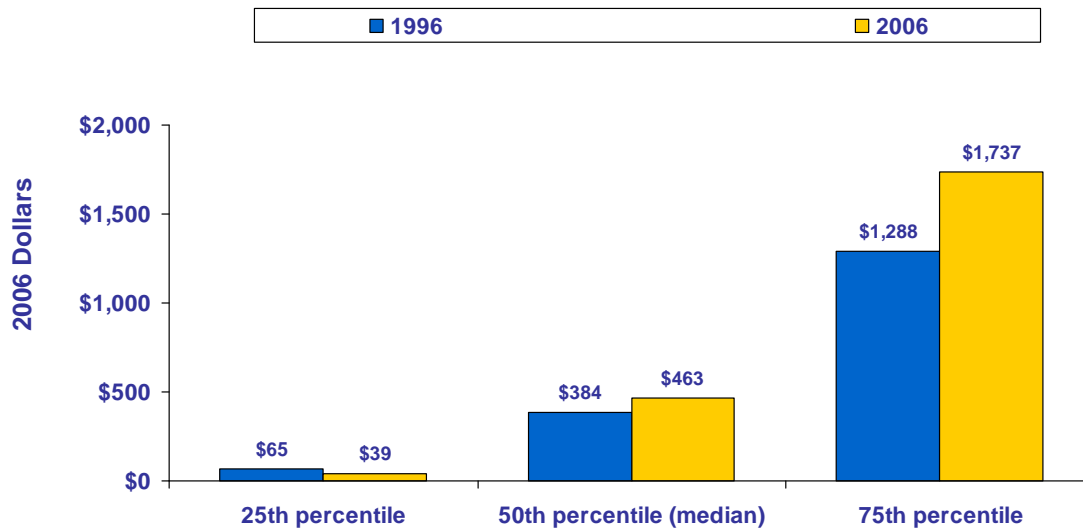
**Figure 1. Selected summary expenditure estimates for adults ages 18–44, 1996 (adjusted to 2006 dollars) and 2006**

Estimate	1996	2006
Number of persons (millions)	109.1	111.1
Total expenses (billions)	\$191.2	\$230.9
Percentage with expenses	80.5%	76.9%
Average annual expenses (for those with expenses)	\$2,177	\$2,703

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



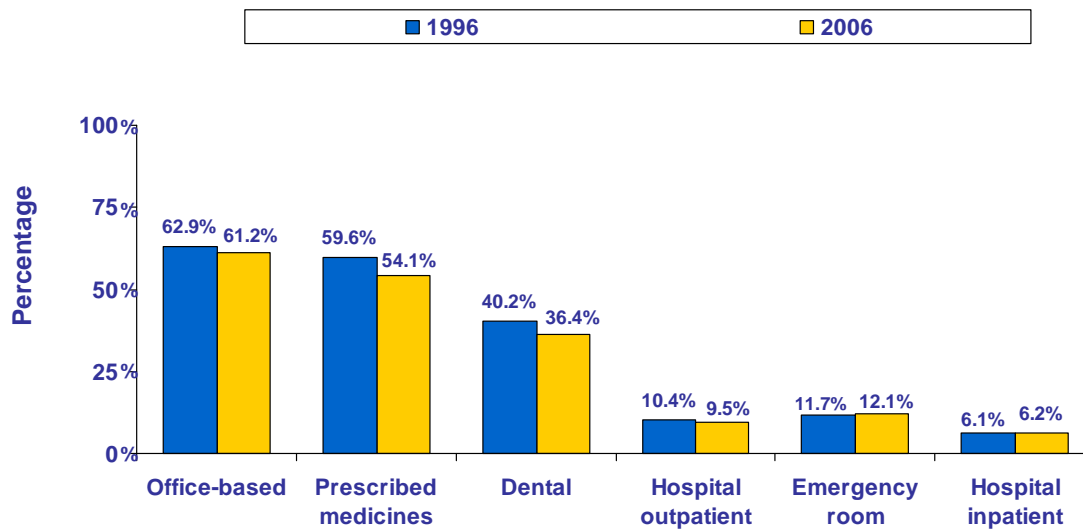
**Figure 2. Total health care expenses by quartile for adults ages 18–44, 1996 (adjusted to 2006 dollars) and 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



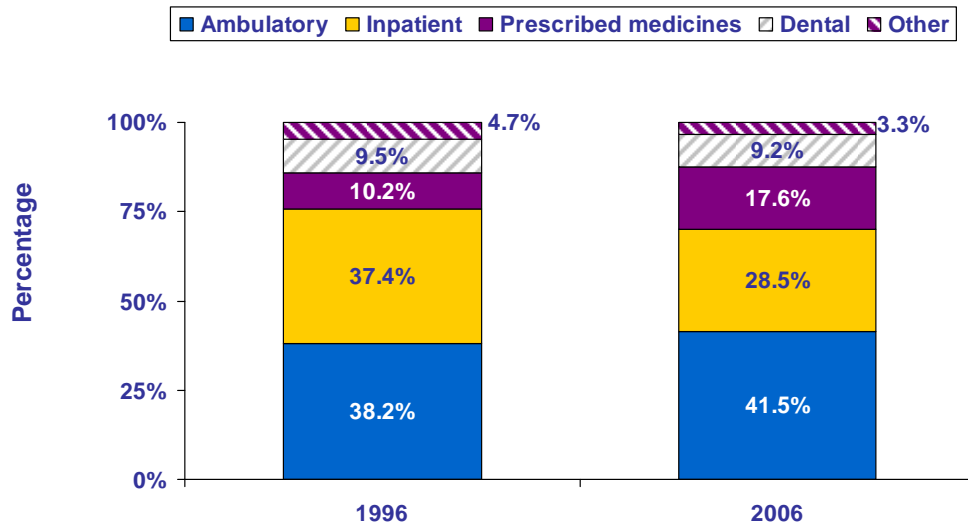
**Figure 3. Percentage of adults ages 18–44 with expenses by type of service, 1996 and 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



**Figure 4. Distribution of total expenses for adults ages 18–44 by type of service, 1996 and 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



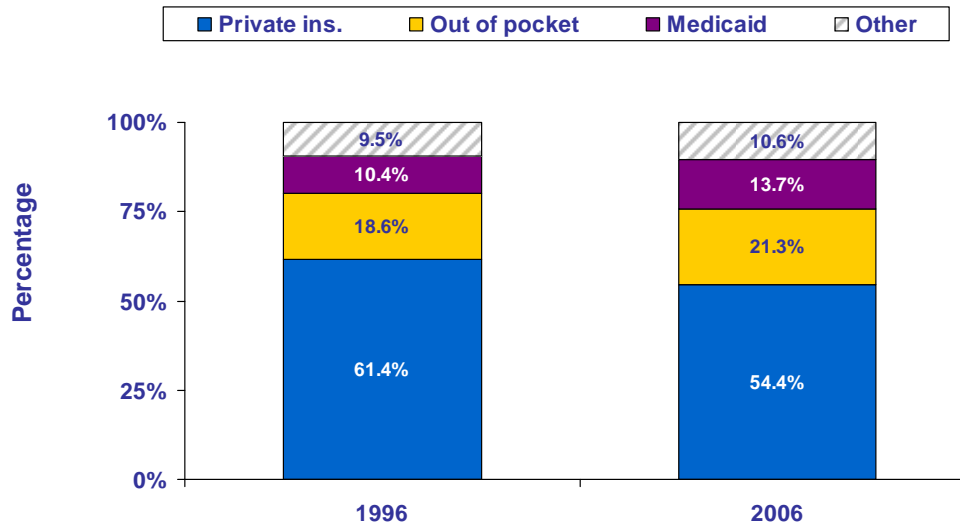
**Figure 5. Average expenses per event for selected event types for adults ages 18–44, 1996 (adjusted to 2006 dollars) and 2006**

Type of visit	1996 (in 2006 dollars)	2006
Office physician visit	\$119	\$180
Inpatient hospital average per diem	\$2,336	\$2,470
Emergency room visit	\$393	\$638
Dental visit	\$181	\$247
Prescription medication purchase	\$79	\$161

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



**Figure 6. Distribution of total expenses for adults ages 18–44 by source of payment, 1996 and 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006