

## STATISTICAL BRIEF #229

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# National Health Care Expenses in the U.S. Civilian Noninstitutionalized Population, 2006

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### Introduction

This Statistical Brief presents estimates of health care expenses by type of service and distributions by payment sources for the U.S. civilian noninstitutionalized population in 2006. Health care expenses, as reported in this brief, represent payments to hospitals, physicians, and other health care providers based on utilization information collected in the Medical Expenditure Panel Survey (MEPS) Household Component and payment data collected in both the MEPS Household and Medical Provider Components. Expense estimates include amounts paid by individuals, private insurance, Medicare, Medicaid and the State Children's Health Insurance Program (SCHIP), and other payment sources. All differences between estimates discussed in the text are statistically significant at the 0.05 level.

### Findings

In 2006, there was an estimated total of \$1.03 trillion paid for hospital inpatient and outpatient care, emergency room services, office-based medical provider services, dental services, home health care, prescription medicines, and/or other medical services and equipment for about 299.3 million persons in the U.S. civilian noninstitutionalized population (figure 1). Hospital inpatient expenses for both facility and separately billed physician services accounted for 29.7 percent of total expenses, and a similar share of expenses was attributable to combined ambulatory care provided in medical offices (23.7 percent) and hospital outpatient departments (8.7 percent). While prescribed medicines accounted for approximately one-fifth of health expenses (21.6 percent), other health service categories comprised relatively small percentages of the total, ranging from 2.0 percent for other medical services and equipment to 7.4 percent for dental services.

In 2006, 84.6 percent of the U.S. civilian noninstitutionalized population had some expenses for hospital inpatient and outpatient care, emergency room services, office-based medical provider services, dental services, home health care, prescription medicines, and/or other medical services and equipment (figure 2).<sup>1</sup> The

<sup>1</sup> Of the 15.4 percent of the population with no health care expenses, a very small proportion actually received health services for which no direct payments were made.

### Highlights

- Overall, the mean and median expenses of persons with any expenses in 2006 (84.6 percent of the population) were \$4,078 and \$1,185, respectively.
- In 2006, hospital inpatient expenses and office-based/hospital outpatient ambulatory care services each accounted for nearly one-third of total expenses for the U.S. civilian noninstitutionalized population, while prescribed medicines accounted for approximately one-fifth of total expenses.
- Hospital inpatient expenses comprised the largest share of expenses for persons age 65 and over, while expenses for ambulatory care in office and hospital outpatient settings comprised the largest share for persons under age 65.
- In 2006, private insurance covered 41.7 percent of the total expenses; individuals and family members paid 19.0 percent out of pocket, Medicare paid 23.5 percent, and Medicaid/SCHIP paid 8.7 percent. While the proportions paid out of pocket were fairly similar across age groups, shares paid by public and private insurance sources varied considerably by age.
- Mean expenses for persons age 65 and over (\$9,080) were nearly three times that for persons under 65 (\$3,231). Uninsured persons under 65 had the lowest mean expenses while persons 65 and over with Medicare and other supplemental public insurance had the highest mean expenses.

proportion of people with expenses varied widely by type of service, with large proportions having expenses for office-based medical provider visits (71.6 percent) and prescribed medicines (62.6 percent) and much smaller proportions having expenses for hospital inpatient services (7.2 percent) and home health care (2.2 percent).

For persons with an expense for any type of health care service, the mean total expenses per person in 2006 were \$4,078 (figure 3). Among specific health care service categories, the mean expense per person with an expense ranged from highs of \$14,248 for hospital inpatient services and \$5,209 for home health care to lows of \$607 for dental services and \$360 for other medical services and equipment. Because a relatively small proportion of persons account for a large proportion of expenses, median expenses were substantially lower than mean expenses (figure 4). The overall median total expense for persons with expenses was \$1,185, and ranged across service categories from highs of \$7,676 for hospital inpatient services and \$2,469 for home health care to lows of \$218 for dental services and \$206 for other medical services and equipment.

The distribution of expenses by type of service varied substantially by age (figure 5). Hospital inpatient expenses comprised 37.2 percent of expenses for persons age 65 and over compared to 26.8 percent for adults ages 18–64 and 22.7 percent for children under 18. Compared to adults, a substantially smaller share of total expenses for children under 18 was for prescribed medicines (15.4 versus about 22 percent for adults 18 and over). Conversely, a substantially larger share of children’s expenses was for dental services (20.3 percent) than for adults ages 18–64 (7.5 percent) or 65 and over (3.4 percent). Expenses for emergency room care comprised a fairly small share of total expenses in all age groups, ranging from 2.2 percent for those 65 and over to 5.1 percent for those under 18 years of age.

Health care expenses are largely paid by individuals and third-party payers, such as private insurance and public programs. In 2006, private insurance covered 41.7 percent of total expenses; individuals and family members paid 19.0 percent out of pocket, Medicare paid 23.5 percent, and Medicaid/SCHIP paid 8.7 percent (figure 6). While the proportions paid out of pocket were fairly similar across age groups, shares paid by public and private sources varied considerably. For example, private insurance paid for over half of expenses for persons under 65 years of age, but only 14.1 percent of expenses for persons age 65 and over. Conversely, Medicare paid for about three-fifths (60.9 percent) for persons age 65 and over versus only a very small proportion for younger persons. Moreover, Medicaid/SCHIP paid about one-quarter of expenses for children under 18 (23.7 percent), which was over twice the proportion for adults ages 18–64 (9.7 percent) and almost 10 times that for persons age 65 and over (2.4 percent).

As shown in figure 7, average annual health care expenses varied substantially by age and type of health insurance coverage. People under 65 years of age with an expense had a mean total expense of \$3,231 and a median total expense of \$911, while those 65 years and older had a mean total expense of \$9,080 and a median total expense of \$4,215. Mean expenses were lowest for people under age 65 who were uninsured (\$1,679) and were roughly half the level of their privately and publicly insured counterparts. In contrast, persons age 65 and older on Medicare with supplemental other public insurance had the highest mean expenses (\$10,925).

## Data Source

The estimates in this Statistical Brief are based upon data from the 2006 Full Year Consolidated Data File, HC-105.

## Definitions

### *Expenditures*

Expenditures included 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.

The MEPS estimate of total national medical expenses is substantially lower than the estimate from the National Health Expenditure Accounts (NHEA) of the Center for Medicare and Medicaid Services (CMS). However, the NHEA are more expansive than MEPS in the scope of expenses included and also include

expenses for people who are not part of the U.S. civilian noninstitutionalized population. AHRQ and CMS have estimated that nearly 90 percent of the difference in expense estimates between MEPS and the NHEA is attributable to the more extensive range of items and broader population included in the NHEA. The remaining difference likely stems from irreconcilable definition and measurement differences between the two sources, household survey underreporting, and statistical sampling error associated with the estimates.

#### *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). Payments from Medigap plans or TRICARE (Armed Forces—related coverage) are included. Payments from plans that provide coverage for a single service only, such as dental or vision coverage, are not included.
- Medicare: Medicare is a federally financed health insurance plan for the elderly, persons receiving Social Security disability payments, and persons with end-stage renal disease. Medicare Part A, which provides hospital insurance, is automatically given to those who are eligible for Social Security. Medicare Part B provides supplementary medical insurance that pays for medical expenses and can be purchased for a monthly premium.
- 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 the Department of Veterans Affairs (except TRICARE); other 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); Workers' Compensation; 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.

#### *Health insurance status*

Individuals under age 65 were classified in the following three insurance categories, based on household responses to health insurance status questions:

- Any private health insurance: Individuals who, at any time during the year, had insurance that provides coverage for hospital and physician care (other than Medicare, Medicaid/SCHIP, or other public hospital/physician coverage) were classified as having private insurance. Coverage by TRICARE (Armed Forces—related coverage) was also included as private health insurance. Insurance that provides coverage for a single service only, such as dental or vision coverage, was not included.
- Public coverage only: Individuals were considered to have public coverage only if they met both of the following criteria: 1) they were not covered by private insurance at any time during the year, 2) they were covered by any of the following public programs at any point during the year: Medicare, Medicaid/SCHIP, or other public hospital/physician coverage.
- Uninsured: The uninsured were defined as people not covered by private hospital/physician insurance, Medicare, TRICARE, Medicaid/SCHIP, or other public hospital/physician programs at any time during the entire year or period of eligibility for the survey.

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

- Medicare and private insurance: This category includes persons classified as Medicare beneficiaries and covered by Medicare and a supplementary private policy.
- Medicare and other public insurance: This category includes persons classified as Medicare beneficiaries who met both of the following criteria: 1) They were not covered by private insurance at any point during the year, 2) They were covered by one of the following public programs at any point during the year: Medicaid, other public hospital/physician coverage.

- Medicare only: This category includes persons classified as Medicare beneficiaries but not classified as Medicare and private insurance or as Medicare and other public insurance. This group includes persons who were enrolled in Medicare HMOs and persons who had Medicare fee-for-service coverage only.

## About MEPS

MEPS-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.

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

For a detailed description of the MEPS-HC survey design, sample design, and methods used to minimize sources of nonsampling errors, see the following publications:

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

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. HCPR Pub. No. 97-0027. Rockville, MD: Agency for Health Care Policy and Research, 1997. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr2/mr2.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.pdf)

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

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.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.pdf)

Sing, M., Banthin, J., Selden, T., et al.: Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002. *Health Care Financing Review* 28(1):25-40, Fall 2006. Internet Address: <http://www.cms.hhs.gov/HealthCareFinancingReview/downloads/06Fallpg25.pdf> (Accessed 12/2008)

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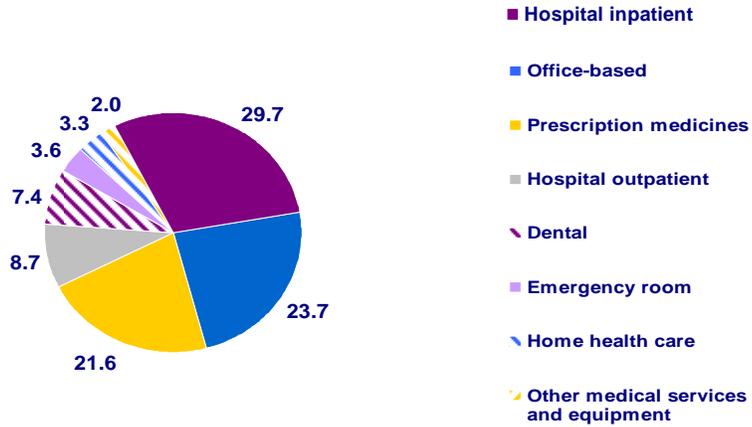
AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools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

Steven B. Cohen, PhD, Director  
Center for Financing, Access, and Cost Trends  
Agency for Healthcare Research and Quality  
540 Gaither Road  
Rockville, MD 20850



**Figure 1. Percentage distribution of health care spending, by type of service, U.S. civilian noninstitutionalized population, 2006**

Total expenses = \$1.03 trillion

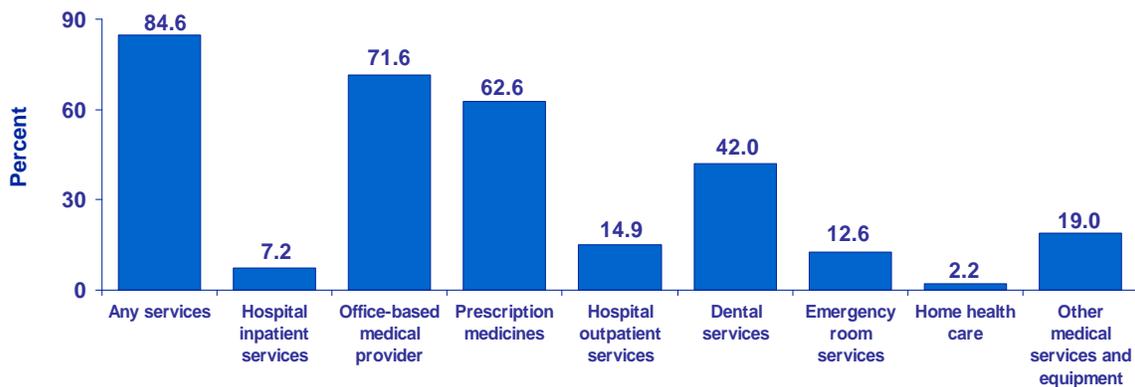


Note: Percentages may not add to exactly 100.0 due to rounding.

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



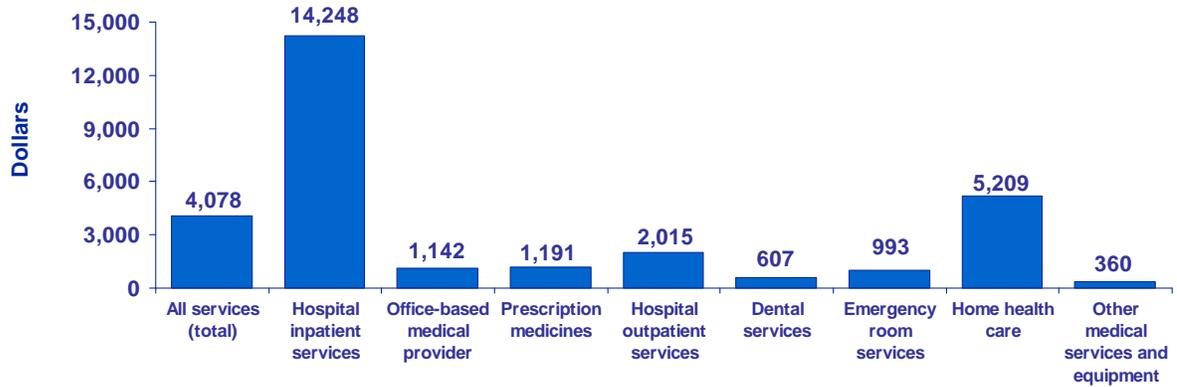
**Figure 2. Percentage of persons with an expense, by type of service, 2006**



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



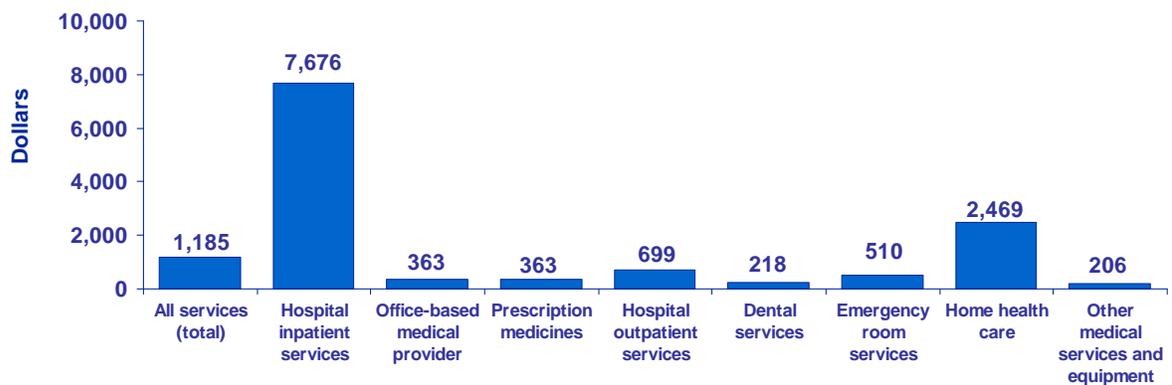
**Figure 3. Mean expense per person with expenses, by type of service, 2006**



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



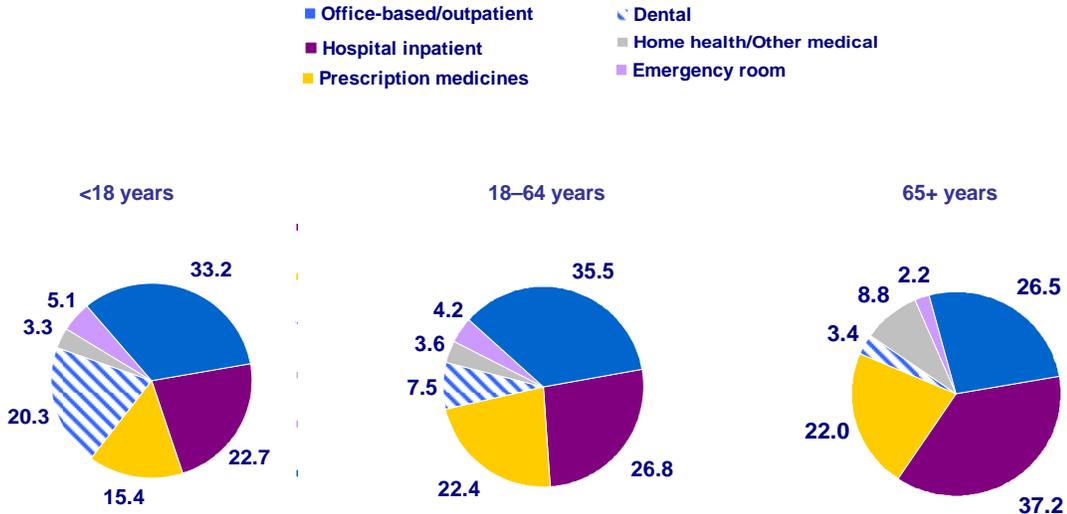
**Figure 4. Median expense per person with expenses, by type of service, 2006**



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



**Figure 5. Type of service distribution for health care spending, by age, 2006**

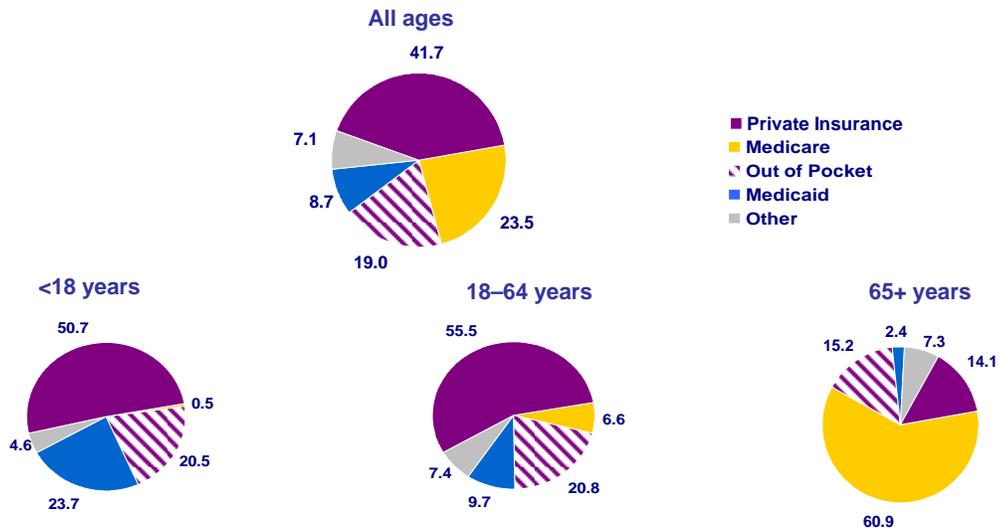


Note: Percentages may not add to exactly 100.0 due to rounding.

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



**Figure 6. Source of payment distribution for health care spending, by age, 2006**

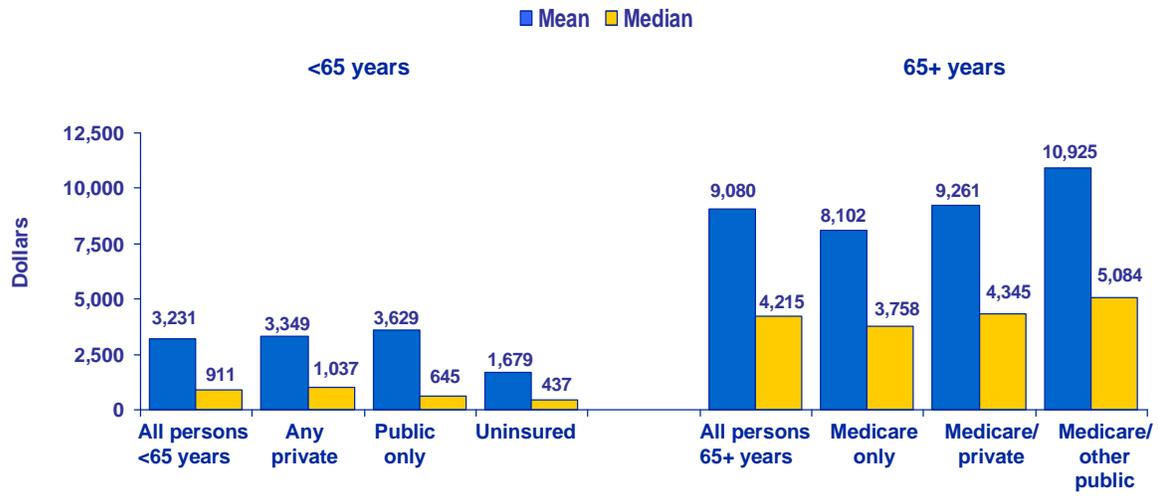


Note: Percentages may not add to exactly 100.0 due to rounding.

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



**Figure 7. Mean and median expenses for persons with expenses, by age and insurance status, 2006**



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