Medical Expenditure Panel Survey

Agency for Healthcare Research and Quality

STATISTICAL BRIEF #327

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Top Five Most Costly Conditions among the Elderly, Age 65 and Older, 2008: Estimates for the U.S. Civilian Noninstitutionalized Adult Population

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Highlights

- For those over 65 years of age, heart conditions, cancer, osteoarthritis, hypertension, and trauma-related disorders ranked highest in terms of direct medical spending in 2008.
- The highest total expense ($48.4 billion) was on heart conditions.
- The highest average per person expense ($4,028) was on cancer.
- Medicare paid between 55 and 78 percent of the total expenditures for these top five conditions.

Introduction

Health care expenditures for the treatment of conditions among the elderly have been on the rise in the U.S. Typically, medical expenditures have been concentrated in the treatment of certain types of highly prevalent conditions or those for which treatment often entails high cost services.

This Statistical Brief presents data from the MEPS-HC regarding medical expenditures associated with the five most costly conditions for the elderly age 65 and older in 2008. The five most costly conditions among the elderly (heart conditions, cancer, arthritis, hypertension, and trauma) were determined by totaling and ranking the expenses by condition for all medical care provided in 2008. Only differences between estimates that are statistically significant at the 0.05 level are discussed in the text.

Findings

In 2008, almost one-third ($368.1 billion) of total health care expenditures was spent on care and treatment of the elderly. The top five conditions among the elderly in terms of expenditures were heart conditions, cancer, osteoarthritis and non-traumatic joint disorders, hypertension, and trauma-related disorders.

The highest expenditures among the elderly were for care and treatment of heart conditions (figure 1). A total of $48.4 billion was spent to treat heart conditions among those age 65 and above. Treatment of cancer ranked second ($32.2 billion), followed by osteoarthritis and other non-traumatic joint disorders ($24.8 billion), hypertension ($23.8 billion), and trauma-related disorders ($20.5 billion).

Among the 40 million noninstitutionalized elderly in the U.S., 34 million (86.0 percent) were treated for at least one of the five most costly conditions in 2008. Hypertension (23.8 million) was the most widely reported condition associated with expenses among those 65 and above (figure 2).

The second most common among the top five conditions was osteoarthritis and non-traumatic joint disorders with 13.4 million elderly incurring expenses for treatment. Expenses for treatment of heart conditions were reported by 12.7 million adults age 65 and older. The number of adults over 65 incurring expenses for cancer and trauma totaled 8.0 million and 5.5 million, respectively.

In 2008, among those aged 65 and older with expenditures, the average expenditure per person was highest for cancer ($4,028) (figure 3). The average expenditure for heart conditions was $3,820 per person and an average of $3,742 per person was spent on treatment of trauma and related disorders. Of the most costly five conditions, hypertension had the lowest average per-person expenditure ($1,002).

The largest share of expenditures for all of the top five most costly conditions of the elderly was paid by Medicare. Medicare paid more than three-quarters (78.2 percent) of the cost of treating trauma and related disorders which was the highest share paid among the top five most expensive conditions (figure 4). For the other top conditions, Medicare paid 67.5 percent for heart conditions, 63.5 percent for cancer, 60.0 percent for osteoarthritis, and 55.2 percent for the treatment of hypertension. The out-of-pocket payments

for hypertension (16.7 percent) amounted to the highest share of expenses among the top five most costly conditions followed by osteoarthritis at 10.7 percent, cancer at 6.0 percent and heart disease at 5.8 percent. Trauma-related disorders had the lowest share paid by out of pocket payments at 4.3 percent.

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2008 Full Year Consolidated Data File (HC-121), Medical Conditions File (HC-120), Office-Based Medical Provider Visits File (HC-118G), Outpatient Visits File (HC-118F), Hospital Inpatient Stays File (HC-118D), Home Health File (HC-118H), Emergency Room Visits File (HC-118E), and Prescribed Medicines File (HC-118A).

Definitions

Condition data were collected from household respondents during each round as verbatim text and coded by professional coders using the International Classification of Diseases, Ninth Revision (ICD-9). ICD-9-CM condition codes were then aggregated into clinically meaningful categories that group similar conditions using the Clinical Classification System (CCS) software. Categories were collapsed when appropriate. The reported ICD-9-CM condition code values were mapped to the appropriate clinical classification category prior to being collapsed to 3-digit ICD-9-CM condition codes. The result is that every record which has an ICD-9-CM diagnosis code also has a clinical classification code.

Expenditures

Expenditures in MEPS are defined as payments from all sources for hospital inpatient care, ambulatory care provided in offices and hospital outpatient departments, care provided in emergency departments, paid care provided in the patient's home (home health) and the purchase of prescribed medications. Sources include direct payments from individuals, private insurance, Medicare, Medicaid, Workers' Compensation, and miscellaneous other sources. Payments for over-the-counter drugs are not included in MEPS total expenditures. Indirect payments not related to specific medical events, such as Medicaid Disproportionate Share and Medicare Direct Medical Education subsidies, are also excluded.

Expenditures were classified as being associated with a condition if a visit, stay, or medication purchase was cited as being related to the specific condition. Expenditures may be associated with more than one condition and are not unduplicated in the condition totals; summing over conditions would double-count some expenses. Total spending does not include amounts for other medical expenses, such as durable and nondurable supplies, medical equipment, eyeglasses, ambulance services, and dental expenses, because these items could not be linked to specific conditions.

Sources of payment

- *Private insurance*: This category includes payments made by insurance plans covering hospital and other medical care (excluding payments from Medicare, Medicaid, and other public sources), Medigap plans, and TRICARE (Armed Forces-related coverage).
- *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. Medicare Part D, which started in 2006, covers prescription drug expenses.
- *Medicaid/CHIP*: This category includes payments made by the Medicaid and CHIP programs which are means-tested government programs financed jointly 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 CHIP provides coverage to additional low income children not eligible for Medicaid. Eligibility criteria for both programs vary significantly by state.
- *Out of pocket*: This category includes expenses paid by the user or other family member.
- *Other sources*: This category includes payments from other federal sources such as 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/CHIP); various unclassified sources (e.g., automobile, homeowner's, or other liability insurance, and other miscellaneous or unknown sources); Medicaid/ CHIP payments reported for persons who were not reported as enrolled in the Medicaid or CHIP 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

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.

References

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

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR 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.pdf

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR 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

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

Cohen, J. and Krauss, N. *Spending and Service Use among People with the Fifteen Most Costly Medical Conditions, 1997*. Health Affairs; 22(2):129–138, 2003.

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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.hhs.gov or send a letter to the address below:

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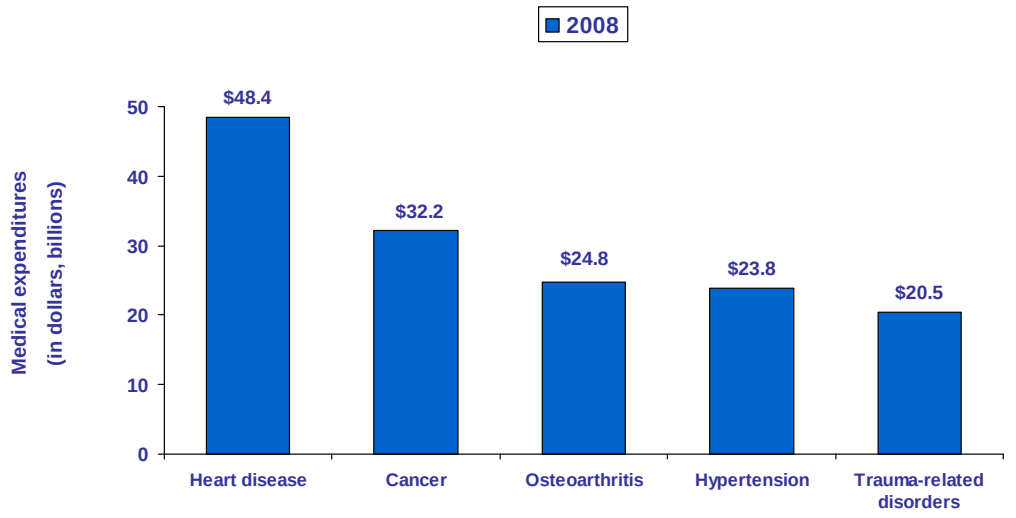
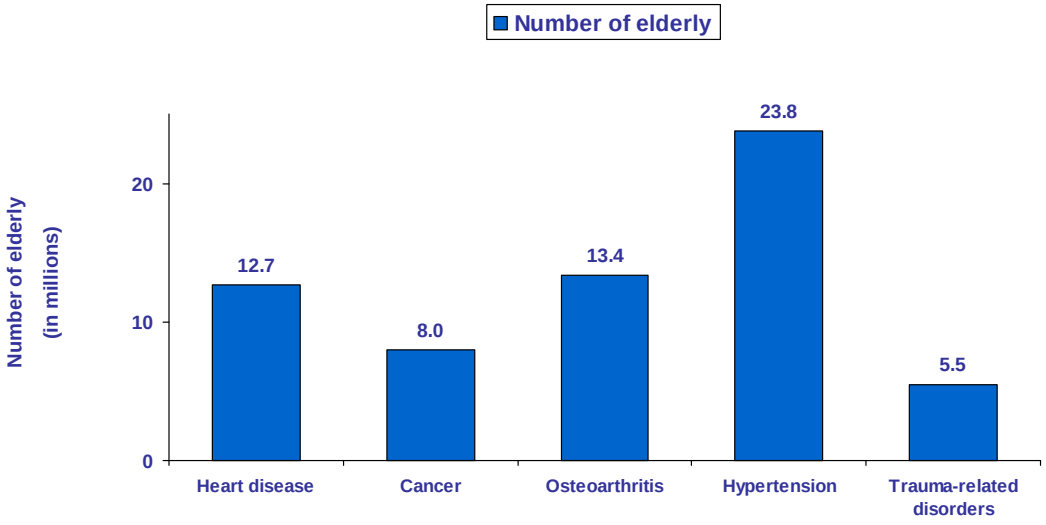
Figure 1. Expenditures for the five most costly conditions in the elderly, age 65 and older, 2008



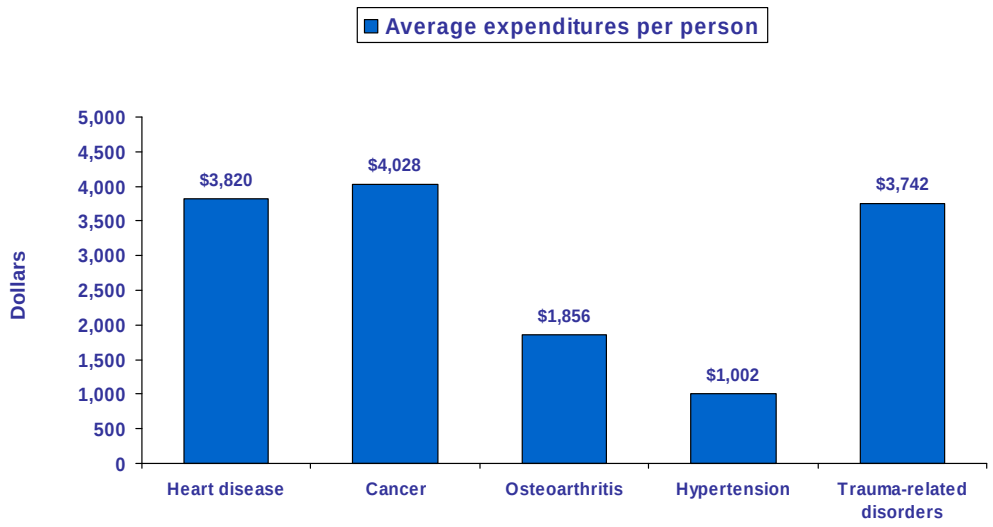
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2008

Figure 2. Number of elderly with expenses for the top five most costly conditions, 2008



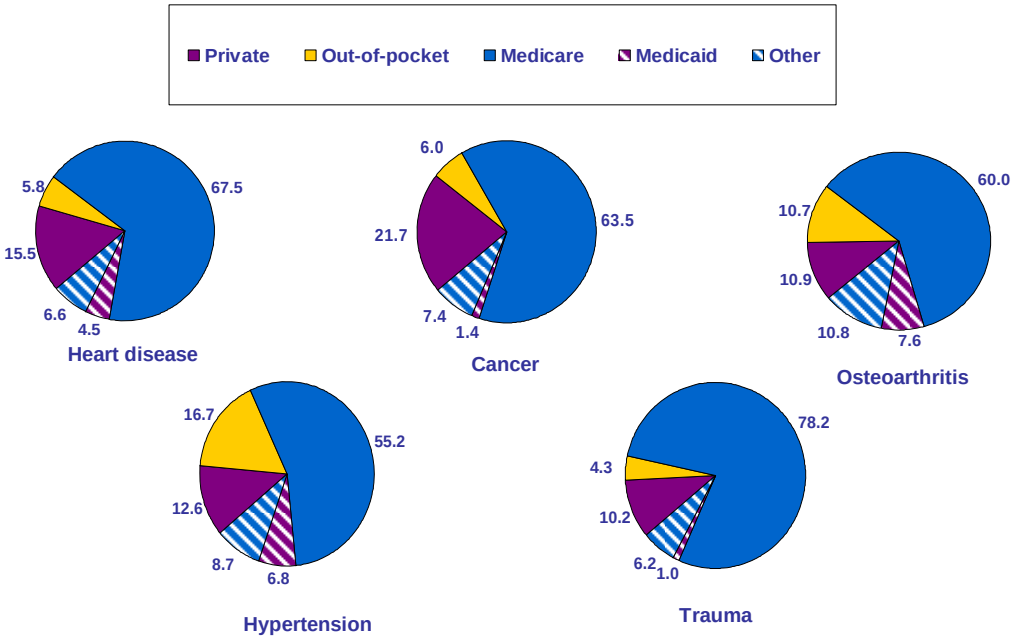
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2008

Figure 3. Average expenditures per person with expenses for the top five most costly conditions, age 65 and older, 2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2008

Figure 4. Percentage distribution of annual expenditures for five most costly conditions in adults age 65 and older, by source of payment, 2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2008