Medical Expenditure Panel Survey

Agency for Healthcare Research and Quality

STATISTICAL BRIEF #443

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Trends in Use and Expenditures for Cancer Treatment among Adults 18 and Older, U.S. Civilian Noninstitutionalized Population, 2001 and 2011

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Introduction

This Statistical Brief presents estimates of health care use and expenditures for treating cancer among the U.S. adult civilian noninstitutionalized population, based on the Household Component of the Medical Expenditure Panel Survey (MEPS-HC) for the years 2001 and 2011. Expenditures are expressed in 2011 dollars. All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

Findings

Percentage of adults treated for cancer, by age

In 2011, 6.7 percent of the U.S. adult population obtained treatment for cancer (figure 1). In 2001, the same was true for 4.8 percent of the population. Among those age 65 and above, there was a more than 50 percent increase from 12.8 percent in 2011 to 19.7 percent in 2011. In addition, in both years, those age 65 and above received treatment for cancer at higher rates than their younger counterparts, i.e. 18–44 and 45–64 (12.8 percent versus 1.5 and 6.0 percent in 2001 and 19.7 percent versus 1.5 and 6.8 percent in 2011).

Total and mean health care expenditures for cancer treatment, by type of service

A total of $88.3 billion was spent on treatment of cancer in 2011, compared to $56.8 billion in 2001 (in 2011 dollars) (figure 2). Ambulatory expenditures on cancer increased from $25.5 billion in 2001 to $43.8 billion in 2011. Retail prescription medicine expenditures on cancer increased five-fold between these years, from $2.0 billion in 2001 to $10.0 billion in 2011. Among persons with any expense for cancer, the average expenditures per person for retail prescription medicines more than tripled between 2001 and 2011, from $201 per person to $634 per person (figure 3).

Distribution of annual health care expenditures for cancer, by source of payment and type of service

In 2011, 11.4 percent of total cancer expenditures were for retail prescription medicines as compared with 3.6 percent in 2001 (figure 4). The proportion spent on inpatient hospital stays declined from 47 percent in 2001 to 35 percent in 2011.

In both years, private insurance was the primary source of payment (48.6 percent in 2011 and 42.4 percent in 2001), followed by Medicare (34.1 percent in 2011 and 40.1 percent in 2001) (figure 5).

Highlights

- In 2011, approximately 15.8 million adults or 6.7 percent of the adult U.S. population received treatment for cancer. This represents an increase from 2001, when 10.2 million adults or 4.8 percent of the population reported receiving treatment for cancer.
- Medical spending to treat cancer increased from $56.8 billion in 2001 (in 2011 dollars) to $88.3 billion in 2011.
- Ambulatory expenditures for care and treatment of cancer increased from $25.5 billion in 2001 to $43.8 billion in 2011.
- Expenditures on retail prescription medications for cancer increased from $2.0 billion in 2001 to $10.0 billion in 2011.
- Mean annual retail prescription drug expenditures for those with an expense related to cancer increased more than three times, from $201 per person in 2001 (in 2011 dollars) to $634 per person in 2011.
- Inpatient hospital expenditures accounted for 47 percent of total spending for cancer treatment in 2001, but fell to 35 percent of the total by 2011.

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2001 and 2011 Full Year Consolidated Files (HC-060 and HC-147), Medical Conditions Files (HC-061 and HC-146), Office-Based Medical Provider Visits Files (HC-059G and HC-144G), Outpatient Visits Files (HC-059F and HC-144F), Hospital Inpatient Stays Files (HC-059D and HC-144D), Home Health Files (HC-059H and 144H), Emergency Room Visits Files (HC-059E and HC-144E), and Prescribed Medicines Files (HC-059A and HC-144A).

Definitions

Cancer
This Statistical Brief analyzes individuals with cancer in connection with reported health care utilization (e.g., a person who reported purchasing a drug was asked what condition the drug was intended to treat). Conditions reported by respondents were recorded by interviewers as verbatim text, and were coded by professional coders to fully specified ICD-9-CM codes. Conditions with CCS codes 11-45 were classified as cancer. For additional information on the crosswalk between ICD-9-CM codes and CCS codes, please visit: http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp.

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 retail purchase of prescribed medications. Sources include direct payments from individuals, private insurance, Medicare, Medicaid, Workers' Compensation, and miscellaneous other sources. Expenditure data for 2001 were adjusted to 2011 dollars using the Consumer Price Index (CPI) and all estimates in this Brief are reported in 2011 dollars. These expenditures do not include any over-the-counter medications.

Sources of payment
Estimates of sources of payment represent the percentage of the total sum of expenditures paid for by each source. Sources of payment are classified as follows:

- *Out-of-pocket*: By user or family.
- *Private insurance*: 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*: A federally financed health insurance plan for the elderly, persons receiving Social Security disability payments, and most 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*: A means-tested government program jointly financed by federal and state funds that provides health care to those who are eligible. Program eligibility criteria vary significantly by state, but the program is designed to provide health coverage to families and individuals who are unable to afford necessary medical care.
- *Other*: Includes payments from the Department of Veterans Affairs (excluding 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); Medicaid payments reported for people who were not enrolled in the Medicaid program at any time during the year; payments from Workers' Compensation; and other unclassified sources (e.g., automobile, homeowner's, or liability insurance, and other miscellaneous or unknown sources).

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.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301-427-1656) 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 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://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://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, T.M., 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

For more information about cancer, see the following publications:

Cancer Basics: http://www.cancer.org

Cancer Overview: http://www.webmd.com/cancer/

Cancer Prevention and Control: http://www.cdc.gov/cancer/dcpc/data/

Cancer: http://www.cancer.gov/

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 email us at MEPSProjectDirector@ahrq.hhs.gov or send a letter to the address below:

Steven B. Cohen, PhD, Director
Center for Financing, Access, and Cost Trends
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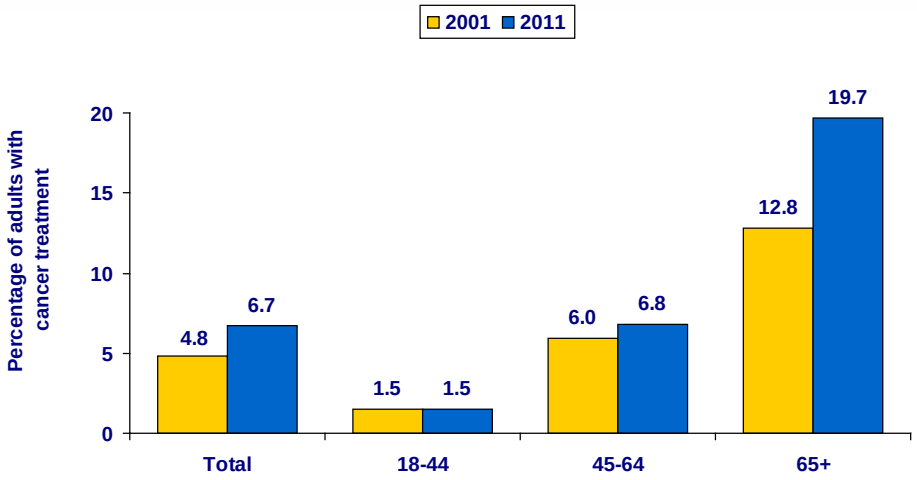
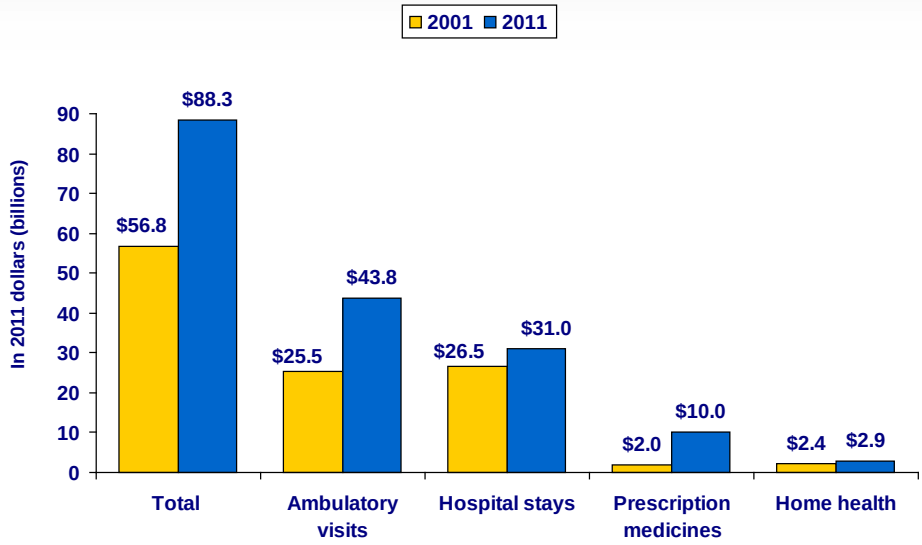
Figure 1. Percentage of adults with cancer treatment by age, 2001 and 2011



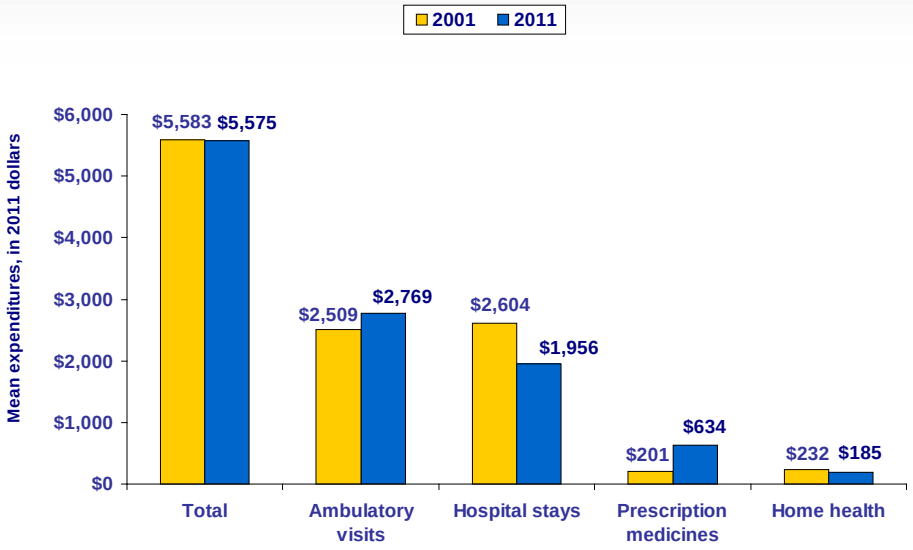
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2001 and 2011

Figure 2. Expenditures on cancer treatment, total and by type of service, 2001 (adjusted to 2011) and 2011



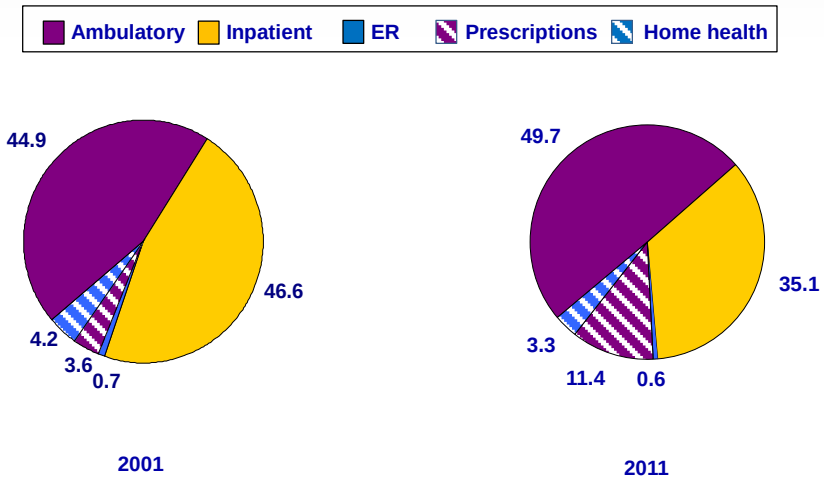
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2001 and 2011

Figure 3. Mean expenditures on cancer treatment per person with expense, by type of service, 2001 (adjusted to 2011) and 2011



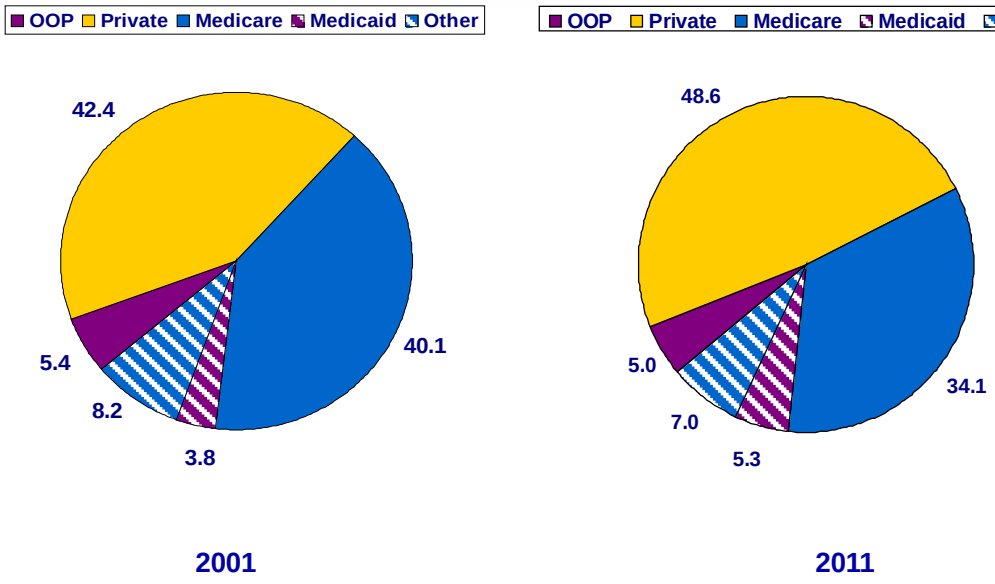
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2001 and 2011

Figure 4. Percentage distribution of expenditures for cancer treatment, by type of service, 2001 and 2011



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2001 and 2011

Figure 5. Percentage distribution of expenditures for cancer treatment, by source of payment, 2001 and 2011



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2001 and 2011