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Health Care Expenditures for Non-Melanoma Skin Cancer among Adults, 2005-2008 (Average Annual)

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Introduction

Skin cancer is the most common type of cancer diagnosed in the United States. There are three major types of skin cancer: basal cell, squamous cell, and melanoma (<http://www.cancer.gov/cancertopics/types/skin>). This Statistical Brief presents descriptive statistics on non-melanoma skin cancers (basal cell, squamous cell, and other more rare forms of non-melanoma skin cancer), which are much more common but generally less serious than melanoma skin cancers.

The descriptive statistics presented in this Brief reflect treated prevalence and health care expenditures for non-melanoma skin cancer among adults 18 years and older in the U.S. civilian noninstitutionalized population. The estimates are based on 4 years of data (2005–08) from the Household Component of Medical Expenditure Panel Survey (MEPS-HC). Multiple years of MEPS data were combined to improve the statistical precision of the estimates. Health care expenses in MEPS represent payments from all sources (e.g., out-of-pocket, private insurance, Medicare, Medicaid, etc.) for health care services reported in the survey. Expenditure estimates are expressed in 2008 dollars with data for 2005–2007 inflated based on the Personal Health Care Expenditure Price Index (PHCE) (http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml). All differences between estimates described in the text are statistically significant at the 0.05 level.

Findings

An average of about 3.72 million adults were treated for non-melanoma skin cancer each year from 2005–08, a notably larger number of persons than were treated for other common but generally more serious cancers such as breast, prostate, colon, and lung (figure 1). In contrast, the average annual per person expense of \$788 to treat non-melanoma skin cancer was substantially lower than the annual average for other common cancers (figure 2). In the aggregate, non-melanoma skin cancer accounted for about \$2.9 billion of the \$75.7 billion in average annual expenditures on cancer conditions among adults from 2005–08 (not shown).

Overall, about 1.6 percent of adults were treated for non-melanoma skin cancer each year during 2005–08, but this percentage increased substantially with age (figure 3). Elderly adults age 65 and older were by far the most likely to be treated for non-melanoma skin cancer (annual average of 6.0 percent) followed by middle aged adults ages 45–64 (1.6 percent). Very few adults ages 18–44 were treated for the condition (annual average of only 0.2 percent). In addition, the percentage treated for non-melanoma skin cancer varied by sex among persons age 65 and over, with elderly males much more likely than elderly females to be treated for non-melanoma skin cancer conditions (7.9 versus 4.5 percent) (figure 4).

During the period from 2005–08, an average of 89 percent of annual health care expenses for non-melanoma skin cancer were attributable to ambulatory care visits

Highlights

- On average, 1.6 percent of adults were treated for non-melanoma skin cancer per year during 2005-08 with average annual expenditures per person of \$788 (in 2008 dollars).
- Elderly adults age 65 and older were substantially more likely to be treated for non-melanoma skin cancer than younger adults; elderly males were more likely to be treated than their female counterparts.
- Only about 4 percent of expenditures for non-melanoma skin cancer care were attributable to hospital inpatient stays compared to about 39 percent for all cancers combined.
- The proportion of expenses for treatment of non-melanoma skin cancer care paid out-of-pocket was about twice the proportion for all cancers combined.

(75.4 attributable to office-based visits and 13.6 percent to care received in hospital outpatient departments) (figure 5). In contrast, only about half of expenditures for all cancers combined were for ambulatory care visits (32.3 percent for office-based visits and 17.0 percent for visits to hospital outpatient departments). Only 4.2 percent of expenditures for non-melanoma skin cancer care were attributable to hospital inpatient stays compared to 39.2 percent for all cancers combined.

On average, private insurance paid for just over one-third (35.5 percent) of expenses for treatment of non-melanoma skin cancer conditions versus about half (49.1 percent) for all other types of cancer combined during 2005–08 (figure 6). While Medicare paid for similar proportions of non-melanoma skin cancer and all other cancer expenses (38.7 and 32.6 percent, respectively), the proportion paid out-of-pocket for non-melanoma skin cancer care was about twice the proportion for all cancers combined (14.6 versus 7.1 percent).

Data Source

The estimates in this Statistical Brief are based on person-level data from the 2005–08 MEPS Full Year Consolidated Data files (HC-097, HC-105, HC-113, and HC-121 respectively) and data from 2005–08 MEPS Event Level files (HC-094, HC-102, HC-110, and HC-118 respectively) that were associated with cancer conditions in MEPS Medical Conditions files (HC-096, HC-104, HC-112, and HC-120 respectively).

MEPS expenditure data are derived from both the Medical Provider Component (MPC) and Household Component (HC). MPC data are generally used for hospital-based events (e.g., inpatient stays, emergency room visits, and outpatient department visits), prescribed medicine purchases, and home health agency care. Office-based physician care estimates use a mix of HC and MPC data while estimates for non-physician office visits, dental and vision services, other medical equipment and services, and independent provider home health care services are based on HC provided data. Details on the estimation process can be found at http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr19/mr19.pdf.

Definitions

Non-melanoma skin cancer: Clinical Classification Software (CCS)

The Clinical Classification Software (CCS) category indicating treatment for non-epithelial cancer of the skin (code 23) on medical event files were used to develop treated prevalence and expenditure estimates for non-melanoma skin cancer conditions while CCS categories 11–45 were used for estimates of all cancer conditions. More information on the Clinical Classification System is available at <http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp> while more information on non-melanoma skin cancer conditions is available at <http://www.cancer.org/Cancer/CancerCauses/SunandUVExposure/skin-cancer-facts>.

Treated prevalence

MEPS sample adults were classified as being treated for non-melanoma skin cancer if there were any ambulatory visits (office-based, hospital outpatient, and/or emergency room), inpatient stays, home health visits, or prescribed medicine purchases associated with a CCS code indicating treatment for non-melanoma skin cancer.

Expenditures

Expenditures in this Brief are defined as payments from all sources for ambulatory care provided in offices and hospital outpatient departments, care provided in emergency departments, hospital inpatient care, home health care, and prescribed medicine purchases. All expenditures for medical events with a CCS code indicating a non-melanoma skin cancer condition (23) were included; in some instances this may include expenses for other conditions treated during the same medical event. Sources of payment include direct payments from individuals (i.e., out-of-pocket), private insurance, Medicare, Medicaid, and miscellaneous other sources. Expenditure data for 2005, 2006, and 2007 were adjusted to 2008 dollars using the Personal Health Care Expenditure Price Index (PHCE) produced by the Office of the Actuary, Centers for Medicare & Medicaid Services (http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml).

About MEPS-HC

The 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 co-sponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). For more information about MEPS, call the MEPS information coordinator at AHRQ at (301) 427-1406 or visit the MEPS Web site at <http://www.meps.ahrq.gov>.

References

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 Healthcare Policy and Research, 1997. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.pdf

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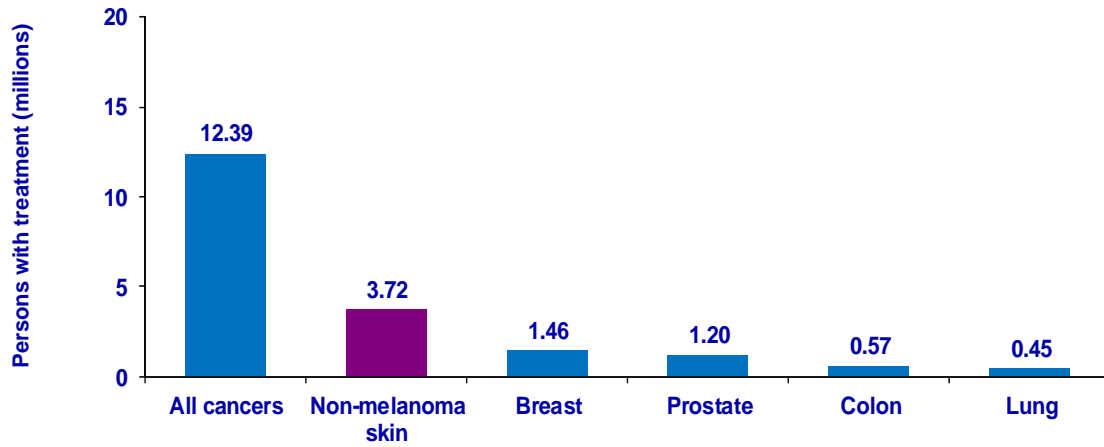
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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 mepsdpd@ahrq.gov or send a letter to the address below:

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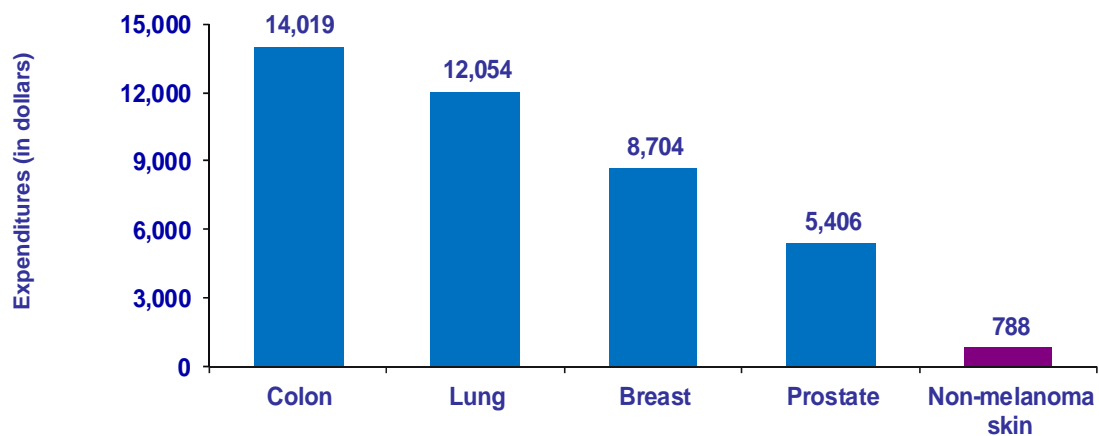
Figure 1. Average annual number of persons with treatment (in millions) for selected cancer types, adults age 18 and older, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08



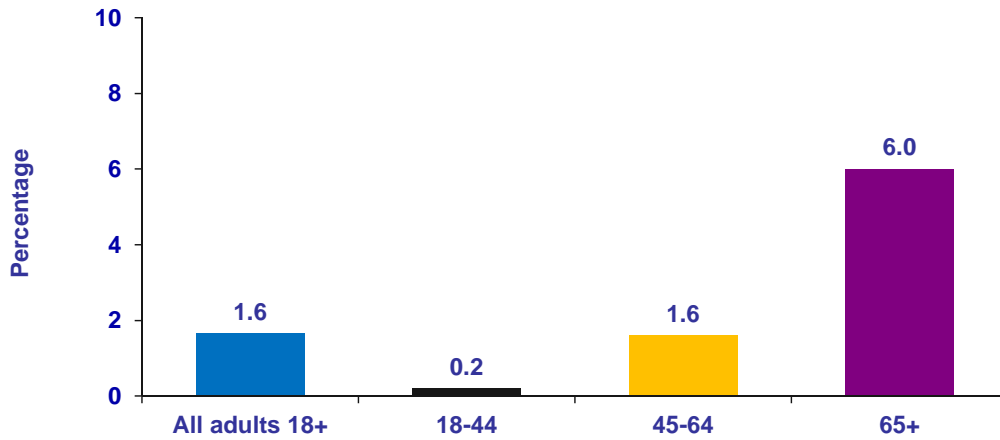
Figure 2. Average annual expenditures per person for treatment of selected cancer types, adults age 18 and older, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08



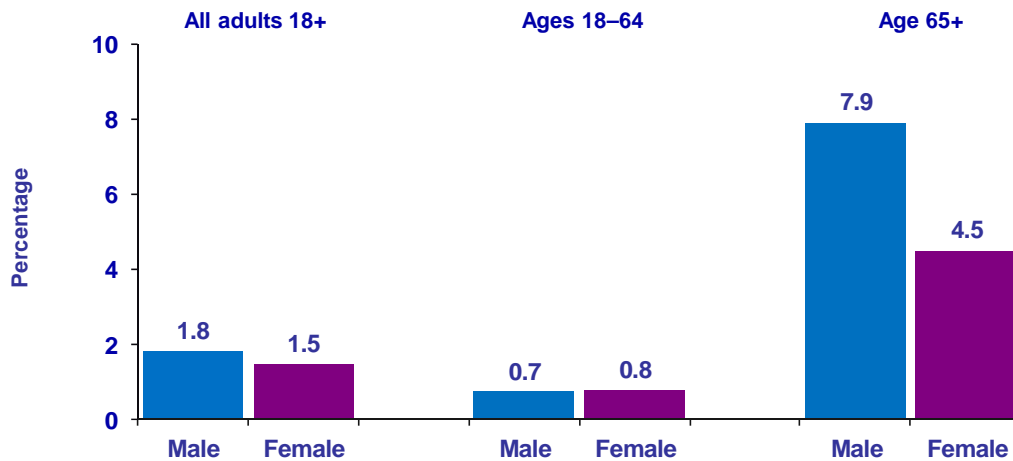
Figure 3. Average annual percentage of adults with treatment for non-melanoma skin cancer by age, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08



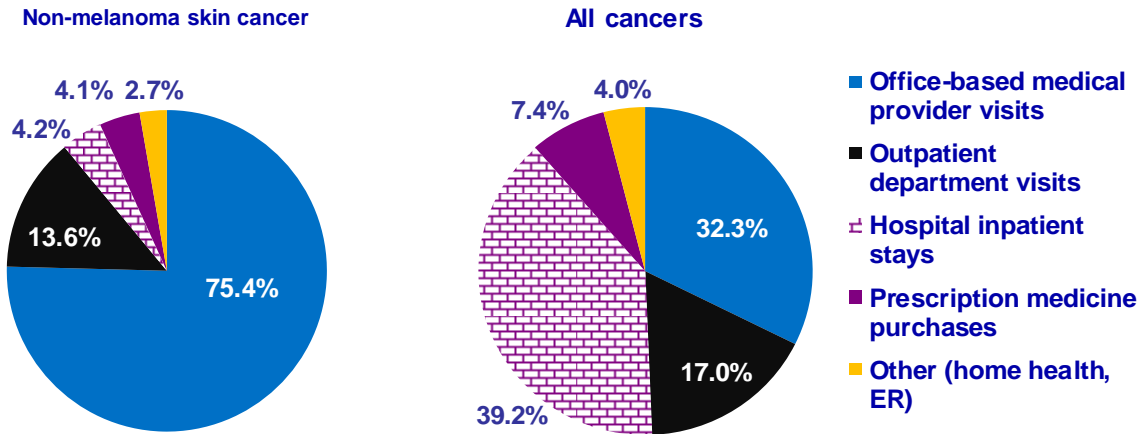
Figure 4. Average annual percentage of adults with treatment for non-melanoma skin cancer by age and sex, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08



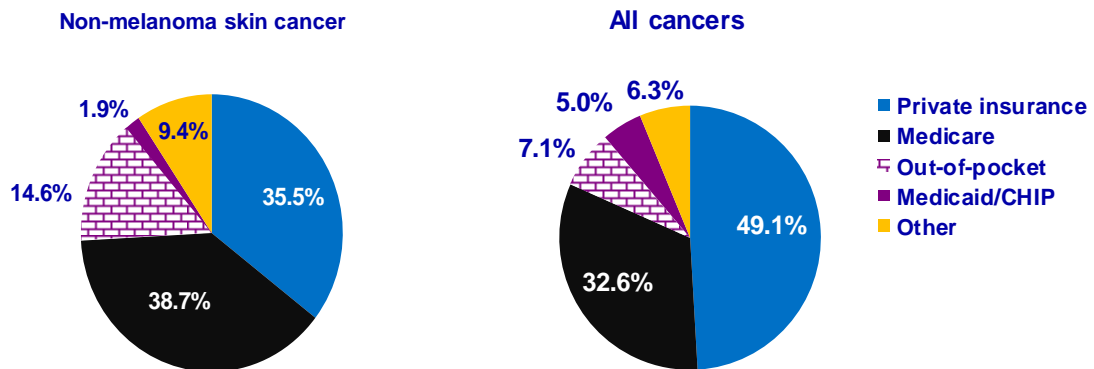
Figure 5. Distribution of expenditures by type of service for non-melanoma skin cancer versus all cancers, adults age 18 and older, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08



Figure 6. Distribution of expenditures by source of payment for non-melanoma skin cancer versus all cancers, adults age 18 and older, 2005–2008



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey 2005–08