

Out-of-Pocket Health-Care Expenditures among Older Americans with Cancer

Kenneth M. Langa, MD, PhD,¹⁻⁴ A. Mark Fendrick, MD,^{1,5,6} Michael E. Chernew, PhD,^{1,5,6} Mohammed U. Kabeto, MS,⁵ Kerry L. Paisley, MS,⁷ James A. Hayman, MD, MBA⁷

¹Division of General Medicine Department of Medicine, University of Michigan Medical School, Ann Arbor, MI, USA; ²Department of Veterans Affairs Center for Practice Management and Outcomes Research, Ann Arbor, MI, USA; ³Institute for Social Research, University of Michigan, Ann Arbor, MI, USA; ⁴Patient Safety Enhancement Program, University of Michigan Health System, Ann Arbor, MI, USA; ⁵Consortium for Health Outcomes, Innovation, and Cost-Effectiveness Studies (CHOICES), University of Michigan, Ann Arbor, MI, USA; ⁶Department of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI, USA; ⁷Department of Radiation Oncology, University of Michigan, Ann Arbor, MI, USA

ABSTRACT

Objective: There is currently limited information regarding the out-of-pocket expenditures (OOPE) for medical care made by elderly individuals with cancer. We sought to quantify OOPE for community-dwelling individuals age 70 or older with: 1) no cancer (No CA), 2) a history of cancer, not undergoing current treatment (CA/No Tx), and 3) a history of cancer, undergoing current treatment (CA/Tx).

Methods: We used data from the 1995 Asset and Health Dynamics Study, a nationally representative survey of community-dwelling elderly individuals. Respondents identified their cancer status and reported OOPE for the prior 2 years for: 1) hospital and nursing home stays, 2) outpatient services, 3) home care, and 4) prescription medications. Using a multivariable two-part regression model to control for differences in sociodemographics, living situation, functional limitations, comorbid chronic conditions, and insurance coverage, the additional cancer-related OOPE were estimated.

Results: Of the 6370 respondents, 5382 (84%) reported No CA, 812 (13%) reported CA/No Tx, and 176 (3%) reported CA/Tx. The adjusted mean annual OOPE for the No CA, CA/No Tx, and CA/Tx groups were \$1210, \$1450, and \$1880, respectively ($P < .01$). Prescription medications (\$1120 per year) and home care services (\$250) accounted for most of the additional OOPE associated with cancer treatment. Low-income individuals undergoing cancer treatment spent about 27% of their yearly income on OOPE compared to only 5% of yearly income for high-income individuals with no cancer history ($P < .01$).

Conclusions: Cancer treatment in older individuals results in significant OOPE, mainly for prescription medications and home care services. Economic evaluations and public policies aimed at cancer prevention and treatment should take note of the significant OOPE made by older Americans with cancer.

Keywords: cancer, cost of illness, elderly, health-care expenditures, health economics.

Introduction

Although nearly all individuals age 65 or older in the United States are eligible for health insurance benefits from the federal Medicare program, coverage limitations may result in large additional out-of-pocket expenditures (OOPE) for deductibles, copayments, and uncovered services [1-3]. The

increasing OOPE incurred by Medicare beneficiaries has spurred intense political debate regarding extending Medicare coverage to previously uncovered services such as prescription medications and long-term care [3-5]. Underlying this debate is the concern that large OOPE may result in decreased access to necessary health-care services [6] decreased use of effective medications [7-9] and, ultimately, decreased health status and quality of life for older Americans, especially those with low income [10].

The increasing number of elderly individuals with chronic health conditions [11,12] are at espe-

Address correspondence to: Kenneth M. Langa, Division of General Medicine, University of Michigan Health System, 300 North Ingalls Building, Room 7E01, Box 0429, Ann Arbor, MI 48109-0429, USA. E-mail: klanga@umich.edu

cially high risk of having significant OOPE owing to their greater use of health-care services and medications [3]. Cancer is a common cause of morbidity and mortality among elderly individuals and therefore may lead to significant health-care utilization and OOPE. In fact, cancer is the most common cause of death in older women and is roughly equal to heart disease as the leading cause of death in men [13,14]. Total cancer-related costs in the United States may approach \$100 billion per year [15].

A number of studies have examined the direct medical costs associated with cancer [16–26], but these studies did not identify the OOPE that patients and families incur. Although other studies have focused more closely on OOPE for cancer patients, few have examined expenditures for elderly cancer patients [17,27–34]. In addition, most prior studies have used patient data from small geographically restricted samples and focused on a single cancer type, raising concerns about the generalizability of findings.

Given the growing importance of cancer among elderly individuals and the potential for significant increases in the OOPE related to a cancer diagnosis, we undertook this study to provide valid and generalizable estimates of the OOPE associated with cancer in older Americans. Our aim was to identify the additional OOPE owing to cancer, as opposed to the expenditures for other comorbid conditions. In addition, we chose to examine four important cost categories separately so as to better identify the determinants of OOPE among older individuals, in general, and older individuals with cancer, in particular.

Methods

Data

We used the 1995 Asset and Health Dynamics among the Oldest Old (AHEAD) cohort of the Health and Retirement Study (HRS) for this analysis. The HRS is a nationally representative biennial longitudinal survey conducted by the Institute for Social Research at the University of Michigan with funding from the National Institute on Aging. AHEAD respondents included 7443 men and women 70 years of age or older at the time of the baseline interview in 1993 (i.e., born in 1923 or before). Interviews were conducted in person or over the telephone in English or Spanish. Proxy respondents were interviewed in cases where the selected respondents were unable to answer the survey questions independently. A response rate of 80.4% was achieved [35].

The 1995 AHEAD survey included a sample of 6644 respondents aged 70 or older who were representative of the approximately 23 million elderly individuals in the United States in 1995. For this study, we excluded 264 respondents (4%) who were living in a nursing home at the time of the interview and 10 respondents (0.1%) who had missing data necessary for the analyses. The final study sample of community-dwelling individuals age 70 or older consisted of 6370 respondents.

Determining OOPE

In the AHEAD study, respondents were asked to report the extent of their insurance coverage and their OOPE for four categories of health-care services: 1) hospital and nursing home stays; 2) outpatient services, such as doctor visits, dental visits, and outpatient surgery; 3) home care or other community-based “special services”; and 4) prescription medications. For each of the first three categories, the survey question was phrased, “About how much did you pay out of pocket for [hospital/doctor visit/home care] bills in the last two years?” For prescription medications, the question was phrased, “On the average, about how much have you paid out of pocket per month for prescription medications in the last two years?” Responses were converted to average yearly expenditures for each of the categories, and total average yearly expenditures per individual were calculated by summing the expenditures for each of the four categories.

The AHEAD survey uses an innovative “bracketing” method to collect data that are usually subject to high rates of nonresponse, such as health-care expenditures [36]. When a respondent is unwilling to provide an exact amount in response to one of the expenditure questions, he/she is presented with response brackets such as, “Was it more than \$200?”; “more than \$500?”; “less than \$1000?”; etc. The responses to these bracket questions are then used to impute an expenditure value for these questions that can then more easily be used in data analyses. Imputed responses for bracketed questions were derived for between 2% (home care expenditures) and 19% (doctor visits) of respondents for the individual expenditure categories. The full methodology for this imputation procedure is described elsewhere [37].

Defining Cancer and Cancer Treatment History

All AHEAD respondents were asked, “Has a doctor ever told you that you have cancer or a malignant tumor, excluding minor skin cancers?” All respondents who answered “yes” to this question, were

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات