Financial Hardship in Cancer Survivors

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The views expressed are those of the speaker and do not necessarily represent the official position of Department of Health and Human Services
Cancer Survivorship in United States

• Increasing prevalence of cancer survivorship
• Cancer survivors can experience lasting effects of disease and its treatment
• Compared to individuals without a cancer history, cancer survivors have greater
  – Risk for additional cancers and chronic conditions
  – Healthcare expenditures, including out-of-pocket spending
  – Limitations in amount or kind of work
  – Forgone or delayed healthcare because of cost
Dramatic Increases in Monthly Price of Cancer Drugs

Figure 1. Monthly and Median Costs of Cancer Drugs at the Time of Approval by the Food and Drug Administration (FDA), from 1965 through 2008.

Shown are costs for 1 month of cancer treatment for a person who weighs 70 kg or has a body-surface area of 1.7 m². The red line indicates median prices during a 5-year period. Prices have been adjusted to 2007 dollars and reflect the total price for the drug at the time of approval, including both the amount of Medicare reimbursement and the amount paid by the patient or by a secondary payer. (For details about the costs of individual drugs, see the Supplementary Appendix, available with the full text of this article at NEJM.org.)

Washington State Cancer Patients Found To Be At Greater Risk For Bankruptcy Than People Without A Cancer Diagnosis


Bankruptcy reform act goes into effect
Bankruptcy reform act signed into law

Cancer patients
Matched controls
Bankruptcy Associated with Increased Mortality Risk

• Among cancer survivors in Western Washington State
  – Bankruptcy associated with increased mortality risk (HR= 1.79 (95% CI: 1.64 to 1.96)) in adjusted analyses
  – Findings robust in sensitivity analyses

• Hypothesized mechanism(s)
  – Lower quality of life/overall wellbeing
  – Increased stress
  – Decreased treatment adherence or access to care


Medical Financial Hardship Framework

- Framework adapted from disparities literature
- Aspects of financial hardship
  - **Material**
  - Trouble paying medical bills
  - Medical debt
  - **Psychological**
  - Worry about medical bills
  - **Behavioral**
  - Delay/forgo care because of cost

National Estimates of Financial Hardship

- Medical Expenditure Panel Survey (MEPS) *Experiences with Cancer* Survey
  - Material and psychological hardship
  - MEPS household survey of cancer survivors (n=1,200)
  - Online survey by LIVESTRONG Foundation (n>6,000)
  - Registry-identified breast, colorectal, lung, melanoma, or prostate cancer survivors by 3 health plans (n=615)

- National Health Interview Survey (NHIS)
  - Behavioral hardship
  - Household survey of cancer survivors and individuals without a cancer history
### Financial Hardship in Cancer Survivors: National Estimates from 2011 MEPS Experiences with Cancer Survey

<table>
<thead>
<tr>
<th>Experience</th>
<th>Weighted % (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had to borrow money or go into debt</td>
<td>7.1 (5.7 - 8.9)</td>
</tr>
<tr>
<td>Filed for bankruptcy</td>
<td>1.7 (1.0 - 2.8)</td>
</tr>
<tr>
<td>Unable to cover share of the costs of medical care</td>
<td>11.9 (9.8 - 14.3)</td>
</tr>
<tr>
<td>Other financial sacrifices</td>
<td>9.4 (7.6 - 11.5)</td>
</tr>
<tr>
<td>Any material financial hardship</td>
<td>20.4 (17.7-23.4)</td>
</tr>
<tr>
<td>Any psychological financial hardship</td>
<td>22.5 (19.6 - 25.7)</td>
</tr>
</tbody>
</table>

Material and Psychological Financial Hardship

Material Financial Hardship varies by Age Group and Type of Health Insurance

Ages 18-64

P<0.001


Ages 65+

P=0.73
Psychological Financial Hardship varies by Age Group and Type of Health Insurance

Material Financial Hardship in Adult Survivors: 2013 *Experiences with Cancer* Survey of Three Health Plans

<table>
<thead>
<tr>
<th></th>
<th>Full sample (%)</th>
<th>Among those with Debt (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material hardship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrow money or go into debt</td>
<td>33.6</td>
<td>-</td>
</tr>
<tr>
<td>Filed for bankruptcy</td>
<td>3.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Other sacrifices</td>
<td>39.7</td>
<td>68.0</td>
</tr>
<tr>
<td><strong>Psychological hardship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worried about medical bills</td>
<td>63.8</td>
<td>86.6</td>
</tr>
</tbody>
</table>

Amount of Debt Incurred Among Cancer Survivors with Debt

Out-of-Pocket Spending among Cancer Survivors who Reported Borrowing Money or Debt

**EXHIBIT 3**

Types Of Out-Of-Pocket Spending Among Working-Age Cancer Survivors Who Reported Borrowing Money Or Going Into Debt Because Of Cancer, 2012

- Medical expenses: 80%
- Transportation: 60%
- Lodging: 20%
- Child care: 10%
- Home/respite care: 5%

**Source:** Authors’ analysis of data from the LIVESTRONG 2012 survey. **Notes:** The percentages presented are those of the 1,583 participants who responded yes to the question, “Have you or has anyone in your family had to borrow money or go into debt because of your cancer, its treatment, or the lasting effects of that treatment?” and who had valid responses to the question, “Because of your cancer, its treatment, or the lasting effects of that treatment, did you have any out-of-pocket costs in the following categories?” Categories are not mutually exclusive. “Medical expenses” include physician copayments, medications, and durable medical equipment.

Cancer History and Behavioral Financial Hardship Ages 18-64: 2011-2014 NHIS Estimates

Predicted marginals from multivariable logistic regressions controlling for the effects of age, race/ethnicity, sex, educational attainment, marital status, number of comorbidity conditions, health insurance coverage, and geographic region

Summary

• Different aspects of financial hardship: material, psychological, behavioral

• Financial hardship relatively common, even many years following cancer diagnosis and treatment

• Out-of-pocket spending for more than medical care

• Risk factors for financial hardship
  – Younger age
  – Uninsured
  – More recent diagnosis
  – Cancer site
Patient Characteristics Associated with Risk of Financial Hardship

- Younger age
- Female
- Minority race and/or ethnicity
- More recent diagnosis and/or treatment
- Lower household income and other measures of socioeconomic status
- Unemployed/Changed employment because of cancer

Comment

• Increasing research to develop evidence base informing interventions to reduce hardship
  – Measure development
  – Primary data collection
  – National surveys - 2016/2017 MEPS Experiences with Cancer

• NCI Physician Data Query (PDQ) financial toxicity summary of evidence

• ASCO value in cancer care initiative

• Coordination resources increasingly available
  – Financial navigators
  – Special programs (e.g., Cancer Care Equity Program)
Thank you!