

The Role of Cancer Care on Patient Productivity, Caregiver Burden, and Personal Financial Hardship

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Background

- There were 14.5 million cancer survivors in the U.S. in 2014, and it is estimated that the number will increase to almost 19 million in 2024¹
- Cancer is one of the most costly medical conditions,² and the national cost of cancer care is projected to be \$158 billion by 2020³
- Cancer survivors face financial hardship such as high medical costs, loss of productivity due to limitations in work, and obtaining health insurance coverage⁴

Objective

- To determine the prevalence and sources of financial burden among individuals who have ever been diagnosed with cancer, with a focus on productivity, caregiver burden, and health coverage

Method

- **Data source:** 2011 Medical Expenditure Panel Survey (MEPS), Experiences with Cancer Survivorship Supplement
- **Design:** A cross-sectional analysis
- **Study Sample:** Adult cancer survivors who confirmed a cancer diagnosis, excluding respondents who reported having non-melanoma skin cancer
- Cancer survivors were categorized as: 1) currently treated, 2) treated less than 5 years ago, and 3) not first time treated
- **Statistical Analysis:** Weighted descriptive statistics were estimated using SAS version 9.4

Results

- In 2011, 13.9 million adults were estimated to have ever been diagnosed with cancer in the U.S., and 56% of them were employed at the time of cancer diagnosis

Table 1. Overview of Cancer Survivors in the U.S., 2011

	All Cancer Survivors	
	National Estimates	%
TOTAL	13,890,256	100%
Currently Treated*	2,053,736	15%
Not Currently Treated		
Treated Less than 5 Years Ago	4,254,244	31%
Treated 5 Years to More than 20 Years Ago	6,018,261	43%
Have Not Been Treated	1,023,870	7%

*26% of currently treated survivors were not first time treated.

Effect on Productivity

- About 54% of all cancer survivors who were currently receiving treatment at the time of the survey made changes to their work schedule (N=589,733), and 86% of them made these changes due to cancer, its treatment or its lasting effect

Table 2. Employment Changes due to Cancer and its Treatment

	Cancer Treatment History			
	Currently Treated		Not First Time Treated	
	National Estimate	% of Total	National Estimate	% of Total
TOTAL (Made these work changes because of cancer)	506,850	100%	156,422	100%
Extended paid time off from work	337,049	66%	143,414	92%
Unpaid time off from work	246,201	49%	56,055	36%
Part-time to working full-time	76,687	15%	32,163	21%
Full-time to part-time working	119,104	23%	26,051	17%
Set work schedule to a flexible work schedule	88,028	17%	21,549	14%
Less demanding job	3,217	1%	-	-

Effect on Retirement

- Cancer survivors who were currently being treated were more likely to retire earlier than planned due to their cancer (16%) as compared to those who were treated less than 5 years ago (7%)
- A greater share of survivors aged ≥55 years and receiving treatment, retired earlier than planned (20%) as compared to survivors who were treated less than 5 years ago (9%)

Effect on Caregivers

- Of all caregivers for cancer patients who made changes to their work schedule (N=1,284,309), 32% of them made that change for at least 2 months
- Of those making changes to their work schedule, 23% took unpaid time off from work, and about 90% of these took up to a year of unpaid time off

Results

Figure 1. Amount of **paid** time taken by cancer survivors who took extended paid time off of work.

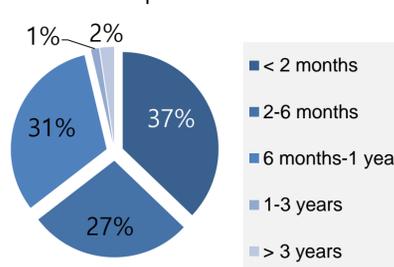


Figure 2. Amount of **unpaid** time taken by cancer survivors who took extended unpaid time off of work.

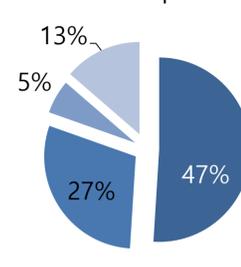
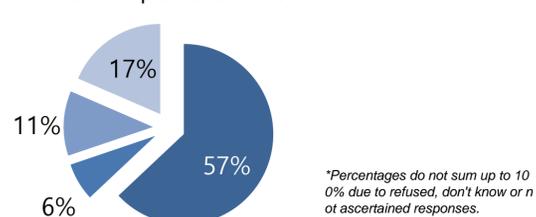


Figure 3. Total amount of time spent working part-time by cancer survivors who changed from full-time to part-time work.



*Percentages do not sum up to 100% due to refused, don't know or not ascertained responses.

Experience with Health Insurance and Bankruptcy

- Of the cancer survivors who borrowed money or went into debt (N=1,003,144), about 80% of them borrowed up to \$25,000, and 17% filed for bankruptcy
- Of the cancer survivors who were ever refused by their health insurance to be covered for a doctor's visit for their cancer (N=357,382), about a third of them borrowed money or were in debt, and 7% filed for bankruptcy
- The average out-of-pocket expenses for those who filed for bankruptcy (\$1,573) and those who ever took unpaid time off from work (\$1,577) were higher than the out-of-pocket expenses for all cancer survivors, overall (\$1,330)

Table 3. Cancer Survivors Experiences with Health Insurance

	All Cancer Survivors	Borrow Money or In Debt	
	National Estimate	National Estimate	% of Row Total
TOTAL	13,890,256	1,003,144	7%
Health insurance refused to cover a visit for their cancer to the doctor or facility of their choice	357,382	120,539	34%
Health insurance refused to cover a second opinion about their cancer	64,333	33,193	52%
Ever denied health insurance coverage because of their cancer	673,406	146,116	22%

Discussion

- As the population of cancer survivors and costs of cancer treatment continues to increase, the loss of productivity and financial hardship for cancer patients and their families may continue to grow
- Understanding the sources of economic burden that are not solely related to medical spending may help curtail these costs better, as well as help to inform policymakers
- The results of this analysis suggest that there is a need to develop and evaluate health and employment intervention programs to reduce disruptions in work and improve outcomes for cancer survivors and their families

Limitations

- Only the U.S. population and non-institutionalized individuals are sampled, which may result in the exclusion of high-cost populations in long-term care
- Because survey data are self-reported they are subject to recall bias and misclassification as diagnosis cannot be confirmed
- The small sample size of survivors with certain cancers prevents the reporting of results by cancer site

Conclusion

- In 2011, more than half of the estimated cancer patients being treated were of working age and employed
- A majority of those who were employed experienced employment changes in terms of reducing their work hours, taking paid or unpaid time off or retiring earlier than planned
- Currently treated patients were more likely to experience financial hardship than those who were treated less recently

References

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4. Ekwueme DU, Yabroff KR, Guy GP Jr, et al. Medical costs and productivity losses of cancer survivors--United States, 2008-2011. MMWR Morb Mortal Wkly Rep. 2014 Jun 13;63(23):505-10.