

# Mitigating the Morbidity of Financial Toxicity in Cancer Care

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Presenter's disclosure of conflicts of interest is found at the end of this article.

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## Abstract

At JADPRO Live Virtual 2020, Veena Shankaran, MD, MS, reviewed data around the prevalence and risk factors for financial toxicity, discussed potential downstream consequences of financial toxicity in cancer care, and outlined four key strategies to mitigate it.

**F**inancial toxicity among cancer patients is a growing and complex problem, affecting people across all socioeconomic strata with various types of insurance.

During JADPRO Live Virtual 2020, Veena Shankaran, MD, MS, of the University of Washington, Seattle Cancer Care Alliance, and Fred Hutchinson Cancer Research Center, in Seattle, Washington, reviewed data around prevalence and risk factors, discussed potential downstream consequences of financial toxicity in cancer care, and shared key strategies to mitigate financial toxicity, focusing on the state of current research and practice.

## US HEALTHCARE SPENDING

Over the past five decades, US health-care costs have increased at a faster rate than most other goods and services such that common affordable food and household items would be virtually unaffordable if they had increased by the same pro-

portion. At the same time, this increase in spending has not necessarily translated into better outcomes.

“We do not have more widespread access to health care for our citizens than most other developed countries, the quality of care we provide is arguably no better, and we do not provide more consistent or equitable care,” said Dr. Shankaran. “In fact, there is tremendous variability in care across practice types and geographically within the US, and people are not necessarily living longer.”

What is known for certain, however, is that these rising health-care costs are being increasingly offloaded to patients by way of rising premiums and out-of-pocket costs. There has also been a sharp rise in the number of prescription drug plans with tiered formularies, where expensive specialty drugs typically fall into the highest “tier” in which patients are often responsible for a percentage of the total cost of the drug as opposed to a fixed copayment.

According to Dr. Shankaran, this is particularly important in oncology, where there has been a dramatic shift towards the use of oral therapeutics. Many of these drugs cost in excess of \$10,000 per month and are covered through the outpatient prescription part of the health insurance plan. In cases where a patient has a tiered formulary that requires a 20% coinsurance for a \$10,000 oral cancer drug, the out-of-pocket cost could approach \$2,000 per month.

## FINANCIAL TOXICITY

The end result of tenuous pre-diagnosis financial status combined with high out-of-pocket medical and nonmedical costs as well as the impact of cancer diagnosis on employment and income leads to financial toxicity. As Dr. Shankaran explained, financial toxicity has been categorized into three different domains: material aspects, such as debt and bankruptcy; psychological aspects, such as worrying about paying for treatment; and behavioral aspects, such as avoiding care or skipping doses of medications to save money.

Dr. Shankaran reported that the prevalence of financial toxicity is estimated to be between 20% and 40% of all patients with cancer (Yabroff et al., 2016). Younger age, lower income, and nonwhite race tend to be the risk factors most closely associated with financial hardship.

Growing awareness of financial toxicity has led to increased understanding about its downstream consequences, which are unfortunately many, said Dr. Shankaran. These consequences include poorer patient quality of life, poorer survival, increased caregiver burden, higher emergency room (ER) and hospital use, particularly at end of life, and lower clinical trial enrollment. Researchers have also identified a significant association between bankruptcy and mortality (Ramsey et al., 2016). Compared to patients with cancer who did not file for bankruptcy, those who did were 79% more likely to die.

“[The association between bankruptcy and mortality] is truly startling,” commented Dr. Shankaran. “This finding really has spurred the community towards action and thinking more about why this association exists and what we can do about it.”

## FOUR STRATEGIES TO ADDRESS FINANCIAL TOXICITY

### Normalize Collection of Financial Information

According to Dr. Shankaran, no studies have longitudinally assessed the financial impact of cancer diagnosis using self-reported and objective financial measures. A collaboration between SWOG and the NCI Community Oncology Research Program, S1417CD is the first national cooperative group-led prospective cohort study to measure the financial impact of cancer diagnosis and treatment on patients.

The study's primary endpoint is to estimate the cumulative incidence of self-reported major financial hardship at 12 months. This includes one or more of the following: new debt accumulation; selling/refinancing home; income decline ( $\geq 20\%$ ); borrowing money/loans to pay for cancer treatment.

Eligible patients within the specified windows from diagnosis and treatment were administered a comprehensive financial and quality of life questionnaire at baseline and every 3 months thereafter for up to 1 year. Credit reports were pulled on registered patients at baseline, 6 months, and 12 months.

A total of 380 patients were enrolled, of whom 40% had a caregiver concurrently enroll. Of the 380 enrolled patients, 368 had baseline survey data and were considered eligible, and 73% of these patients were alive at 12 months.

Results of the study showed that cumulative incidence of major financial hardship increased steadily over time, reaching approximately 71% by 12 months. The largest component of major financial hardship was accrual of debt, followed by loans and 20% or greater decline in income. Selling or refinancing one's home as a result of cancer costs was also very uncommon in this population, said Dr. Shankaran, who noted that 41% of patients reported two or more of these components of financial hardship.

“One obvious conclusion from our experience is that, despite doubts, patients are more than willing to participate in research that tries to address their financial concerns,” said Dr. Shankaran. “We can leverage this fact to collect information in the clinical setting and normalize discussions with patients about cost of care.”

In addition, said Dr. Shankaran, these findings suggest that financial hardships tend to accumu-

late over time such that a single assessment is not adequate. Health insurance also does not shield people from financial hardship.

“We need to address patients’ financial concerns early and often,” said Dr. Shankaran. “Clinical and policy interventions are also desperately needed to protect cancer patients from financial devastation during and after treatment.”

### **Provide Financial Navigation as a Part of Cancer Care**

Patient navigation is a concept that has been around for a long time and is defined as individual assistance to patients, families, and caregivers to overcome health-care system barriers and improve timely access to medical and psychosocial care through all phases of the cancer experience. In oncology, patient navigation has been shown to lead to decreased emergency department/hospital use, improved uptake of cancer screening, and increased and timelier treatment, particularly in underserved populations.

Financial navigation, like patient navigation, seeks to facilitate timely access to quality care by helping patients and families overcome the financial barriers to care. The barriers that traditionally fall under the scope of financial navigation include high copayments, challenges in enrolling with a health plan or finding the optimal health plan, and addressing the nonmedical costs associated with care.

“The idea is that navigators can help to align patients and families with resources that exist through foundations and pharmaceutical companies,” said Dr. Shankaran, who noted that a recent study showed that trained oncology financial navigators produced savings of \$39,000,000 for just over 11,000 patients through optimizing insurance coverage, copay assistance, and community assistance for nonmedical costs (Yezefski et al., 2018).

A large randomized study being conducted through the NCI Community Oncology Research Program (NCORP) is looking to assess the impact of financial navigation on a number of patient and caregiver outcomes, including household financial burden, financial worry, quality of life, caregiver burden, treatment adherence, and health-care utilization.

“If we can show that financial navigation clearly improves meaningful health outcomes,

then there will be no question as to the return on investment,” said Dr. Shankaran. “At the same time, the fact that financial navigation is so important and needed underscores that we as a society are too financially fragile and underinsured such that a health shock like cancer could result in financial devastation and bankruptcy—and that our patients, families, and all of us deserve better.”

### **Eliminate Low-Value Prescribing Practices**

According to Dr. Shankaran, much of what providers do in medicine is unnecessary and does not improve the patient’s quality/quantity of life.

“The reality is that we are the gatekeepers to some extent of health care, and when we order a test, the patient pays either through deductible, coinsurance, or indirect costs,” she said.

The American Board of Internal Medicine (ABIM) Choosing Wisely Campaign has identified common things that providers can do to avoid unnecessary and futile care with the goal of improving quality and decreasing costs. The American Society of Clinical Oncology has also developed a Choosing Wisely Top 10 list of things that providers should question (Table 1).

“If you ask providers whether they practice in this way, most would say no,” Dr. Shankaran acknowledged.

Dr. Shankaran and colleagues are thus using cancer registry data linked to administrative claims to determine how adherent clinics are to these metrics.

“Sadly, we as a state are guilty of all of these low-value practices,” she said. “We use a lot of advanced imaging in settings that do not warrant it, and we use very aggressive care at end of life. The first step in shifting practice is transparency—understanding the care we provide so that we can improve it.”

### **Restructure Insurance Plan Cost-Sharing Scheme**

Finally, Dr. Shankaran introduced the concept of value-based formularies or value-based insurance design, a “relatively simple concept that could have significant applicability to oncology.”

Dr. Shankaran used oral imatinib (Gleevec), a tyrosine kinase inhibitor (TKI) that is used to treat chronic myeloid leukemia (CML), as an example.

**Table 1. 10 Things Providers and Patients Should Question**

- 1 Don't use cancer-directed therapy for solid tumor patients with the following characteristics: low performance status (3 or 4), no benefit from prior evidence-based interventions, not eligible for a clinical trial, and no strong evidence supporting the clinical value of further anti-cancer treatment.
- 2 Don't perform PET, CT, and radionuclide bone scans in the staging of early prostate cancer at low risk for metastasis.
- 3 Don't perform PET, CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis.
- 4 Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.
- 5 Don't use white cell stimulating factors for primary prevention of febrile neutropenia for patients with less than 20% risk for this complication.
- 6 Don't give patients starting on a chemotherapy regimen that has a low or moderate risk of causing nausea and vomiting antiemetic drugs intended for use with a regimen that has a high risk of causing nausea and vomiting.
- 7 Don't use combination chemotherapy (multiple drugs) instead of chemotherapy with one drug when treating an individual for metastatic breast cancer unless the patient needs a rapid response to relieve tumor-related symptoms.
- 8 Avoid using PET or PET-CT scanning as part of routine follow-up care to monitor for a cancer recurrence in asymptomatic patients who have finished initial treatment to eliminate the cancer unless there is high-level evidence that such imaging will change the outcome.
- 9 Don't perform PSA testing for prostate cancer screening in men with no symptoms of the disease when they are expected to live less than 10 years.
- 10 Don't use a targeted therapy intended for use against a specific genetic aberration unless a patient's tumor cells have a specific biomarker that predicts an effective response to the targeted therapy.

Note. Information from Choosing Wisely (2019).

Imatinib is a life-saving medication that every patient with CML should be on consistently, said Dr. Shankaran, yet data from a study of 1,500 CML patients showed that those with higher copayments had a greater chance of discontinuing or not even filling their TKI prescription than those with lower copayments (Dusetzina et al., 2014).

“The problem here is that a medication with tremendous evidence and tremendous benefit is also expensive, and thus for many, these drugs fall into a higher prescription tier and drive up out-of-pocket costs,” Dr. Shankaran explained. “Never mind that keeping people on these medications decreases costs ultimately due to effective disease control.”

The concept of a value-based formulary is to align cost sharing or copayments with evidence such that drugs like imatinib with high evidence are virtually free to the patient, while drugs with low or no evidence may be associated with more out-of-pocket costs.

“We have yet to see many broad changes to formularies, but many smaller pilot projects with insurance companies have been very promising and successful,” Dr. Shankaran concluded. ●

## Disclosure

Dr. Shankaran had no conflicts of interest to disclose.

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