

# Financial Toxicity

## A review of the literature and nursing opportunities

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**BACKGROUND:** Studies have demonstrated the negative effects of the costs of cancer care on the health and well-being of patients with cancer. Nurses require knowledge of the risk factors, experiences, and outcomes associated with financial toxicity prior to designing evidence-based studies and protocols to address financial toxicity.

**OBJECTIVES:** This article summarizes the state of the science in financial toxicity among patients with cancer, with the goal of guiding nurses in leading research and evidence-based practice efforts to decrease the impact of financial toxicity on patient outcomes.

**METHODS:** The authors reviewed published research, theoretical models, and research grants that focus on financial toxicity among patients with cancer. The authors also synthesized study findings and project goals while emphasizing opportunities for nurses to meaningfully engage within this area as researchers and clinicians.

**FINDINGS:** Substantial cross-sectional descriptive work documents the risk factors, experiences, and outcomes of financial toxicity. Future work should address methodologic concerns by using comprehensive, validated measures and applying conceptual models to design and test financial toxicity interventions using prospective, rigorous methodologies. The authors propose a conceptual model to assist researchers and clinicians.

### KEYWORDS

economic burden of care; quality of life; health expenditures; cost of illness

### DIGITAL OBJECT IDENTIFIER

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**PATIENTS DIAGNOSED WITH CANCER EXPERIENCE** a multitude of symptoms and side effects related to the cancer diagnosis and its treatment. In addition to the physical and emotional symptoms assessed and managed by clinical teams, increasing emphasis has been placed on understanding and treating the financial repercussions of cancer to the patient and caregivers. The financial side effects of cancer are directly related to the growing costs of cancer care. Advancements in oncology treatments coincide with mounting costs to patients, including rising pharmaceutical costs, particularly related to immunotherapies and targeted therapies (Glode & May, 2017); market dependence on cost sharing by patients, including higher premiums, deductibles, coinsurance, and co-payments (Kamal, 2017); oncology practices shifting from community-based clinics to hospital-based care, where treatment is more expensive (Community Oncology Alliance, 2018); and limited access to health insurance for cancer survivors (Gonzales, Zheng, & Yabroff, 2018; Park et al., 2017). The Patient Protection and Affordable Care Act contained provisions to improve patients' access to health insurance and reduce costs through tax credits, which primarily benefited patients who were previously uninsured and had low household incomes (Davidoff et al., 2018; Nikpay, Tebbs, & Castellanos, 2018). However, for patients who have insurance and are insured through their employers (the majority of patients in the United States), these provisions had minimal impact in reducing the growing costs of cancer care (Davidoff, Hill, Bernard, & Yabroff, 2015; Nipp et al., 2018).

Financial toxicity is defined as the financial burden and resulting financial distress a patient or caregiver experiences that is associated with cancer and its treatment (Altice, Banegas, Tucker-Seeley, & Yabroff, 2017). The term "financial toxicity" was introduced by Zafar and Abernethy (2013a) as a name for this growing problem to emphasize the toxic and potentially devastating impact that the financial costs of cancer can have on patients and families. By definition, patients' and caregivers' experiences of financial toxicity encompass the objective experience of not being able to afford the costs of care and the subjective impact of those costs (Altice et al., 2017). Although related, the objective and subjective experiences of financial toxicity remain distinct. Objective costs encompass direct (e.g., cancer treatments, hospital visits, laboratory work, imaging, supportive services) and indirect (e.g., travel, parking, caregiving, lost productivity) expenses. Patients capable of affording their cancer care relative to their wealth may still experience distress related to affording current costs, spending down savings and assets, and worrying about their future financial health and that of their family and dependents. A systematic review estimated that the prevalence of financial toxicity varies based on patients' objective (28%–48%) versus subjective (16%–73%)