

Financial Toxicity: An Overlooked Driver of Heart Failure Risk in the USA

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FINANCIAL BURDEN OF HEART FAILURE

Heart failure is responsible not only for high morbidity and mortality, but also for significant out-of-pocket expenses for patients, which are increasingly being identified as an important determinant of health.¹ In 2018, one in seven families in the USA who had a member with heart failure spent over 20% of their income on care, with low-income families facing an even greater burden.² These costs, which include insurance premiums and medication expenses, contribute to what is known as "financial toxicity," which has several medical consequences due to financial distress. This can result in delayed care, medication non-adherence, and psychological strain on patients, with impacts on overall health. Financial toxicity in the care of heart failure is emerging as a concern, as high costs related to treatment, medications, and hospital stays are placing a burden on patients and their families. The economic cost of heart failure has likely increased since 2018 because of inflation in healthcare expenses, new treatment guidelines, and the financial effects of the COVID-19 pandemic.³ All these factors have disproportionately impacted those with lower socioeconomic status, further widening the gap in access to care and

outcomes. A study of 3,386 patients with acute decompensated heart failure found that those with severe perceived economic burden had significantly higher mortality rates and a poorer heart failurespecific health status than those with little perceived economic burden; this refers to the subjective financial strain experienced by patients, often influenced by out-ofpocket expenses relative to their household income.⁴ Patients with heart failure can face enormous financial burdens due to high medication costs, particularly with newer treatments that include sacubitril/ valsartan, dapagliflozin, and empagliflozin. The investigators from China suggested that perceived economic burden might be useful in assessing risk and guiding guality improvement efforts in heart failure care.⁴

Both the USA and China may have considerable difficulties with out-of-pocket expenses for chronic illnesses such as heart failure, leading to non-adherence to treatment and poorer health outcomes, especially for low-income groups. Yet there are also profound differences: in China, healthcare access is largely based on geographic location, with the countryside frequently lacking any access to specialist care, whereas in the USA, it is largely based on the type of insurance one possesses, with Medicare and Medicaid recipients experiencing different obstacles than the privately insured.⁴ In addition, China's drug pricing policy is centralised and generally leads to lower-priced drugs, while market-based USA pricing leads to greater variability of affordability. Such structural differences highlight the need for countrylevel studies to tackle the distinctive problem of financial toxicity among USA patients with heart failure.^{4,5}

Another study examined the financial toxicities associated with newer cardiovascular therapies, particularly angiotensin receptor-neprilysin inhibitors, exploring how high, out-of-pocket costs impede medication adherence despite superior therapeutic benefits. The researchers have stressed the need for honest patient-provider discussions about cost, and systemic reforms in healthcare that would reduce financial obstacles and improve access to care.⁶ Low-income families were disproportionately affected, with a fourfold increase in risk of high financial burden, and a fourteenfold increase in risk of catastrophic financial burden when compared to middle/high-income families.7 As such, patients with heart failure, and their families, frequently incur substantial out-of-pocket healthcare expenses, leading to significant financial strain. Additionally, Sukumar S et al.⁸ stated that, in caring for family members with heart failure, 14% of families reported a high financial burden, and 5% reported a catastrophic financial burden, both of which were driven primarily by medication costs and health insurance premiums. Financial toxicity in heart failure care is notably affected by regional disparities in the USA. Medicaid expansion under the Affordable Care Act has exacerbated disparities, with patients in expansion states experiencing improved access to financial support and medications, while those in non-expansion states face increased outof-pocket expenses. In the USA, states that expanded Medicaid experienced a far smaller increase in cardiovascular death rates among middle-aged adults, illustrating the potential for Medicaid expansion to reduce health disparities, especially in rural communities where limited access to healthcare and economic pressure further compound disparities in care.9

It has been reported in the literature that such interventions can reduce outof-pocket expenses and save money for hospital systems.^{8,10} There are pharmaceutical company copay assistance programs, but many are limited by factors such as insurance type and income thresholds. For example, the savings program for empagliflozin requires that patients have commercial insurance, while assistance for sacubitril/valsartan is subject to household income limits.

MITIGATING FINANCIAL TOXICITY IN HEART FAILURE CARE

Addressing financial toxicity in heart failure care is crucial for improving patient outcomes. Strategies include policy reforms to reduce financial strain, improvements in shared decision-making, and physician endorsement of transparent cost discussions with patients. These measures can reduce financial toxicity, improve access to guideline-directed medical treatment, and improve adherence and outcomes for patients. Therefore, future research is needed on financial toxicity in patients with heart failure, and prescription access disparities based on demographics such as age, gender, and income. Key approaches should include improving access to affordable medications through prescription assistance programs, generics, or biosimilars, and advocating for policies that lower the cost of heart failure drugs, such as angiotensin receptorneprilysin inhibitors and sodium-glucose cotransporter-2 inhibitors.¹⁰

Another important strategy is integrating financial counselling into the care process, guiding patients through the process of insurance coverage, payment plans, and community resources, while minimising the medical cost burden. Telemedicine and remote monitoring technologies provide another solution by making care more accessible and less expensive, allowing patients to manage their condition from home, thereby reducing costly hospital visits.¹¹

Beyond these practical approaches, financial toxicity requires systemic changes

in expanding access to healthcare, reducing out-of-pocket costs, and addressing social determinants of health. Out-of-pocket costs for patients with heart failure may include insurance premiums, copays, and coinsurance, which vary significantly based on insurance type, such as commercial, Medicare, Medicaid, or lack of insurance. Removing financial barriers to care is an important part of what policymakers can do. Of course, patient and family education about the financial aspects of heart failure is paramount. If patients are aware of potential costs, insurance options, and financial support available to them, they will be in a better position to make informed decisions. All these strategies combined will help alleviate the financial burden on patients with heart failure, improving their health overall.

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