

# The Importance of Considering Total Patient Economics for Hemodialysis



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Many countries are facing a ubiquitous problem: rising frequency of complex chronic illnesses. This puts a strain on patients clinically and psychosocially, and the socioeconomic system. A broader, general study of chronic disease in Australia demonstrated similar results with regard to economic hardship.<sup>1</sup> Much work on this topic has been done in the oncology literature, in which the same issues of loss of income plus treatment-associated costs can have significant consequences for patients and their families.<sup>2</sup> On World Kidney Day this year, it is important to recognize that illness-related economic hardship affects nephrology patients around the world.

In this issue of *Kidney International Reports*, Bradshaw *et al.*<sup>3</sup> address whether economic subsidies for patients with end-stage renal disease on dialysis in Kerala, India, impact catastrophic health expenses or distress financing. This question is especially relevant

given that many countries have chosen to cover dialysis as a benefit under the premise that doing so will not only improve the lives of patients but also be more efficient for the health care system as a whole by reducing the number of emergency and hospitalization expenses.

What is the problem? The growing size of the renal population is challenging public resources and rapidly becoming a serious public health issue. The provision of dialysis represents a significant expense for many developing nations. This, in turn, has led to attempts at cost shifting to patients.

It is important, then, to distinguish between 2 different types of adverse economic patient hardships. The first is related to access: do subsidies allow patients to receive care they otherwise could not afford? These may take the form of income-based copayments or subsidized rates for medical services. Despite these efforts, there are usually some out-of-pocket expenses patients are asked to cover. As a result, patients are forced to make economic decisions about medical therapy. Patients may have to decide between twice-a-week and 3-times-a-week

hemodialysis, frequency of laboratory testing and medication choice. This, in turn, has an impact on the effectiveness of therapy. These cost-shifting efforts may affect practice patterns in India, Malaysia, Indonesia, and other countries.

The second economic medical hardship, and perhaps more important, is the impact that chronic disease has on the patient's and their family's individual income. Because patients have limited income, chronic disease and treatments may create a new and substantial category of household expense. This is further compounded by the loss of income associated with some diseases, often forcing tradeoffs between living and other expenses and medical treatments. For dialysis patients, this may mean being asked to cover some of the medical costs noted previously, incurring ancillary expenses, such as needing to pay for transportation to and from treatments, or loss of income given the frequency of dialysis sessions. As a result, patients may need to make choices between spending money on food, medication, or treatment. This is the question that the authors attempt to answer.

Specifically in India, where much of the payment for dialysis is out of pocket, such subsidies could have a very significant difference. The study in this month's issue surveyed 835 patients on hemodialysis. The authors found financial hardship was prevalent in nearly 91% of patients, and governmental subsidies were used by 29% of households; however, the use of such medical subsidies was not associated with lower rates of household financial hardship. Most of these adverse financial events were related to either loss of employment income or transportation expenses.

The authors recommend financial counseling on the potential

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expense before initiating chronic outpatient dialysis to allow patients and their families to better understand the total cost of care. This is a prudent conversation, and should take place with the same intensity and consistency as discussing the impacts on lifestyle the therapy will have and modality selection, including the option for transplantation. Shared decision-making models that take all patient factors into account, with the multidisciplinary treatment team, nephrologist, and the patient, should include assessing patient preferences and setting clear expectations.

The negative finding on the impact of subsidies in this article, however, may be confounded by a variety of unmeasured factors. Given the subsidies are income based and the amount of the subsidy is unknown, it could be the case that the amounts are simply not enough to make an impact. This is especially relevant given the percentage of financial hardship related to transport and wage loss made up more than one-half of monthly dialysis-related expenses. Thus, traditional unemployment or disability benefits may be insufficient.

The magnitude of the loss of income versus the incremental medical expense could be addressed with access to nontraditional dialytic modalities. Keeping patients working with home or nocturnal modalities could potentially address both of these large financial hardship categories. The same benefits are possible with kidney transplantation, depending on the procedural and immunosuppressive costs for each country. However, there may be

market-specific challenges with implementation and acceptance that could limit the use of these alternatives.

There are significant differences in how various governments and countries provide and subsidize disability and unemployment benefits to those affected by chronic conditions. Therefore, the findings from this study covering one state in India may not be applicable to other care settings.

Given the ubiquity of this problem, what are potential solutions? First, it is not only important to take the patient's medical conditions into account when discussing treatment options but also one should include a "whole patient view" of the impact of treatment on financial and socioeconomic factors. Such discussion should allow an individualized approach to the benefits and risks discussion conducted with the patient and the patient's family. In the case of dialysis, this may affect modality choice.

Next, it is critical to provide not only medical support services but also social support services. In many settings, the ability for a patient to successfully navigate the variety of potential social support programs and options is challenging, and it is made even more so by the time pressures associated with making major, life-altering decisions. Formalized support programs may be helpful here and have proven successful.<sup>4</sup> Nonprofit sector engagement playing a supplementary role may aid such programs.

But what such research evidence should hopefully do is steer analytical thinking, policy decisions, and

public programs toward designing chronic kidney disease management programs, targeting early phases of the disease. Building high-risk screening strategies in the evolving, noncommunicable disease public health initiatives could pay rich dividends in such challenging environments where the demand supply gap may not be bridged with the short-sighted, though well-intentioned, payer system.

As the middle-class population increases, so will rates of obesity, hypertension, diabetes, and chronic kidney disease. Societal demands for health care equity will grow. Balancing the societal and personal costs of therapy for chronic diseases will be a continuous learning curve for policy makers, health systems, communities, families, and patients.

## DISCLOSURE

The author is employed by and owns stock options with DaVita.

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