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## The Economic Sustainability of Dialysis Models: Time to Move Forward?

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Dear Editor,

Health systems in developed economies face a tremendous fiscal challenge. On one hand, demand for health care is expected to keep on increasing, considering population ageing and increasing comorbidities. On the other hand, health care costs are growing substantially. with technology and innovation contributing to much of that increase. Finally, modest economic growth limits the fiscal space available to finance increases in health care spending. Many of these challenges have been identified decades ago, suggesting that focus should be given to improve the value for money in health systems.

The Portuguese health system shares many of these challenges with other countries, including in kidney care. For instance, between 2011 and 2022 the estimated number of patients undergoing dialysis has increased by 29%, to around 12 thousand patients per year. The growing number of dialysis patients, and the high costs of providing renal care, poses substantial challenges to health systems.<sup>2</sup>

Portugal has innovated in 2008 with the implementation of a comprehensive price for dialysis. The implementation of such model allowed for a substantial reduction on the average cost of dialysis' patients in Portugal between 2011 and 2021 (8% and 15% in nominal and real terms, respectively). 1 Moreover, research suggests that key performance indicators have improved, generating gains to providers, to the health system, and most importantly, to patients.<sup>3</sup>

Since the implementation of the comprehensive price for dialysis in Portugal, kidney care models have evolved throughout the world. However, the current model in Portugal is not yet flexible enough to accommodate different care pathways, with restrictions regarding peritoneal, incremental, or home dialysis, as well as conservative treatment. This lack of flexibility prevents stronger emphasis on patient-centred care initiatives. Hence, time has come to revise the current model to strengthen the gains captured by patients, providers, and the health system.<sup>4</sup> A revision of the current model and indicators, based on International Consortium for Health Outcomes Measurement (ICHOM) guidelines, must place quality of life at the centre of the discussion.

However, revising dialysis indicators and financing models is not enough. Providing adequate and timely care to patients implies placing a greater emphasis on prevention and literacy interventions. An integrated approach for kidney care is required, looking to the full cost of treating chronic kidney disease (CKD) patients. Growing evidence from other geographies, suggests that kidney care models are evolving towards an integrated approach. For instance, the Kidney Care Choices model, rolled out in the US in early 2022 provides financial incentives for providers to manage CKD patients before and after dialysis. 5 The program expects to postpone and plan dialysis initiation, increase the share of renal transplants and improve patients' quality of life.

In 2008, Portugal innovated with the introduction of a comprehensive price for dialysis care. Fifteen years later, it is now time to consider two major changes. First, to revise the current model to provide next generation dialysis care. Second, to place a stronger emphasis on evidence-based pre-dialysis programs. These two approaches require establishing and strengthening partnerships between the health system, public and private providers – placing the patient at the centre of care.

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