

EDITORIAL

Rethinking performance benchmarks in kidney transplantation

Transplantation is a highly regulated field. Transplant centers answer to local, regional, and national authorities responsible for ensuring that patients have access to providers who give them the best chance at a good outcome. It is plausible that these efforts have contributed to improvements in kidney transplant outcomes over time. One-year patient and graft survival in the United States (US) both now exceed 93%. Perhaps just as important, outcomes are more consistent. In one recent study, short-term survival rates following deceased donor kidney transplant only differed by 3% between low- and high-performing centers.¹

In a recent article published in *AJT*, Bowring et al. present an analysis of kidney offer acceptance rates for transplant centers participating in Systems Improvement Agreements (SIA).² The Centers for Medicare and Medicaid Services (CMS) designed SIAs as a final stop-gap for centers that accrue multiple performance flags related to substandard patient and graft survival. The authors demonstrated a 5.9% decrease in kidney offer acceptances at centers subjected to SIAs compared to controls matched on waitlist volume. This was driven, in large part, by a significant decrease (-12.3%) in acceptance rates for high quality offers (KDPI 0-40). Because of the rigorous study design, it is reasonable to conclude that the effects of SIA on transplant center acceptance practices are largely independent of donor/recipient factors and overall secular trends in organ acceptance rates.

On one hand, adopting a more selective approach to organ offers is a rational response for programs looking to improve performance. Transplant centers reduce acceptance rates when presented with a performance flag and these practice changes appear to be reasonable—acceptance rates for high-risk donors tend to fall first.³ While their approaches will differ, most centers subjected to performance flags do improve their outcomes.⁴ On the other, implementing more restrictive acceptance practices have unintended consequences. The independent benefits of incremental increases in selectivity alone are unclear and more aggressive practice changes may have diminishing returns. Patients miss out on organs that could offer them the best chance at survival. Bowring and colleagues identified a troubling decrease in acceptance rates for high-quality offers for centers exposed to an SIA.

This article raises questions about how transplant centers respond to regulatory policies and whether the incentives for performance improvement reflect the changes currently most relevant to transplant centers and their patients. Present day outcomes following deceased donor kidney transplantation are consistently good. As it becomes harder to differentiate centers based on one-year patient and graft survival, the focus should shift towards other domains of quality. It is also possible that

understanding what distinguishes adequate from exceptional performance is no longer possible under the current framework and methodology.

Assume that a transplant center subjected to a performance citation increases one-year graft survival from 92% to 99%—shifting them from a low- to high-performing designation. However, in order to accomplish this marked “improvement,” that center accepted 20% fewer kidney offers and, as a result, did 10% fewer transplants each year. The marginal benefit of performance improvement is unclear, especially when considering its effect on other important problems facing patients with end stage renal disease. The singular focus on patient and graft survival stifles other opportunities to improve outcomes. For example, organ discards and acceptance rates vary widely. Shifting incentives to reduce variation in these outcomes can result in a large survival benefit for patients on kidney transplant waitlists.¹

In this context, the transplant community's role in addressing kidney disease should be viewed from societal or population health perspective. There is a significant survival benefit of transplantation for the vast majority of patients. Policies designed to reduce waitlist mortality, minimize kidney discards and offer turn-downs, and maximize recovery of organs do not need to be at odds with existing standards to optimize posttransplant survival. In order to reflect these priorities, it will be necessary to change payment systems in order to optimize the care of a regional cohort of patients with end-stage renal disease. To this end, relevant work is already underway. ESRD Seamless Care Organizations (ESCO) integrate systems of providers caring for patients with kidney disease.^{5,6} Incentivizing population-based approaches that includes transplant care can align initiatives designed to improve access with novel value-based reimbursement strategies.

There are several ways in which policy changes such as this can be studied to ensure that they produce the desired outcomes. One option would be a pilot program within one of the eleven organ procurement operations (OPO) with a single transplant center. This would allow for alignment of transplant and recovery operations under the new incentive structure. Selecting a transplant center with exemplary survival outcomes would mitigate some of the potential risks associated with shifting incentives towards other metrics. Alternatively, it may be beneficial to pursue a pilot program in a large OPO with multiple centers. There are four OPO's with 10 or more kidney transplant centers. It is difficult to predict how each would respond to the policy changes. However, this may facilitate creativity and a better understanding of the potential risks associated with new quality benchmarks.

Changes like this are daunting but continuing to push for greater improvements in survival for kidney transplantation is counterproductive. Short-term survival outcomes no longer reflect the greatest problems facing kidney transplant patients. Testing new quality benchmarks in this population will have spillover effects to practices for other solid organ transplants. Finally, aligning the current and most relevant problems with appropriate performance benchmarks is the best way to optimize the care of patients with kidney disease in the US.

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