Might the Current Gauge of Transplant Center Quality Result in Reducing Patient Access via Diminished Organ Utilization?

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Although dialysis outcomes have improved, kidney transplantation remains the renal replacement modality of choice for eligible individuals. Multiple studies have demonstrated that kidney transplantation is associated with improved patient survival compared with dialysis. Studies have also demonstrated similar survival benefits in patients with long waiting times and those who have received kidneys from extended criteria donors (1–3). Kidney transplantation is also associated with improved quality of life as well as a reduction in cardiovascular events and healthcare expenditures regardless of the age and comorbidities of the recipients compared with dialysis-dependent patients (4,5). There are currently >100,000 patients in the United States on the deceased-donor waiting list. Despite the rising number of patients added to the waiting list annually, the number of kidneys transplanted annually has not mirrored this growth.

There are many reasons for the burgeoning need for deceased donors. Previous infectious and immunologic barriers to transplantation are no longer contraindications to transplantation and have further increased the number of eligible recipients. Patients who historically perished from cardiovascular disease, malignancy, and dialysis are surviving longer. As a result, we have become victims of our own success, leading to an increased disparity between donor organ supply and demand. In this issue of CJASN, Schold et al. make the argument that the aforementioned disparity was a driving force to increase organ utilization (6). Increasingly challenged, marginal, or so-called extended criteria donor organs were being utilized in an attempt to increase organ access to those active on the national deceased-donor wait list. The authors argue that receiving a challenged organ still results in superior outcomes versus remaining on dialysis. In the United States, without significant government oversight, we reached a pinnacle of transplanted individuals surpassing 17,000 persons by 2006. Unfortunately, there has been a slow yet steady decline in kidneys transplanted since 2006.

In 2007, the US Centers for Medicaid and Medicare Services (CMS) issued a Conditions of Participation, which linked the performance evaluation of transplant centers to certification of centers by the CMS and access to reimbursement (7). This was intended to provide a framework to improve quality outcomes of transplant centers by identifying potential deficiencies, which has led to improvement efforts (8). Schold et al. argue that government attempts to rate transplant centers are the reason for declining organ utilization especially among the “lower performers” because centers that have been put on alert will radically change their protocols and become risk averse in an attempt to survive even at the compromise of reducing volume (6). The authors make a cogent argument that even the lowest performing centers still save lives versus persistent dialysis and the focus of government efforts should be to improve overall transplant access and not attempt to cull transplant centers in a punitive fashion.

It is our opinion that Schold et al. have actually substantiated the contentions of the CMS that lower-performing centers produce inferior graft survival outcomes (6). One could argue that shifting volume to high-performing centers may actually lead to an overall reduction in organ need because retransplantation rates might decrease. The authors further associate “stagnation” of organ supply due to government censor. Although this is a plausible explanation, it is unlikely to be the only one. Living donor rates have declined as well and certainly cannot be explained by the 2007 CMS regulations. Concomitant changes in public safety measures such as implementation and enforcement of helmet laws, speed/traffic/seat belt laws, lowering legal alcohol levels, and so forth have consequently lowered traumatically derived organ availability. The article by Schold et al. (6) does not provide a “denominator” to prove that actual available organ utilization has been reduced versus an absolute reduction in available organs for the aforementioned reasons.

Finally, risk avoidance through pure avoidance of challenged donors may not improve a transplant center’s “report card” because expected center outcomes are weighted for complexity of both the donors and recipients. A pure low-risk approach would leave little room for error to maintain satisfactory or center “expected” outcomes.

In short, we believe a balance must exist between regulation to ensure a minimally acceptable rate of patient and allograft survival while not realizing the fears
of Schold et al. and reduce overall organ utilization. Our concern has been shared by others that the currently used metrics to calculate the expected performance of a transplant center do not account for all factors suspected to affect outcomes. A formula that does not account for known risk factors for allograft loss has resulted in center size becoming an independent variable. Because of the complexity of the statistics, transplant center volume has resulted in censoring centers that are in truth performing well (9). Perhaps more time, research, and vetting of the performance formula should occur before final implementation becoming the principal measure of a transplant center’s success and in certain circumstances their survival.

Disclosures
None.

References

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