

Topics in Transplantation

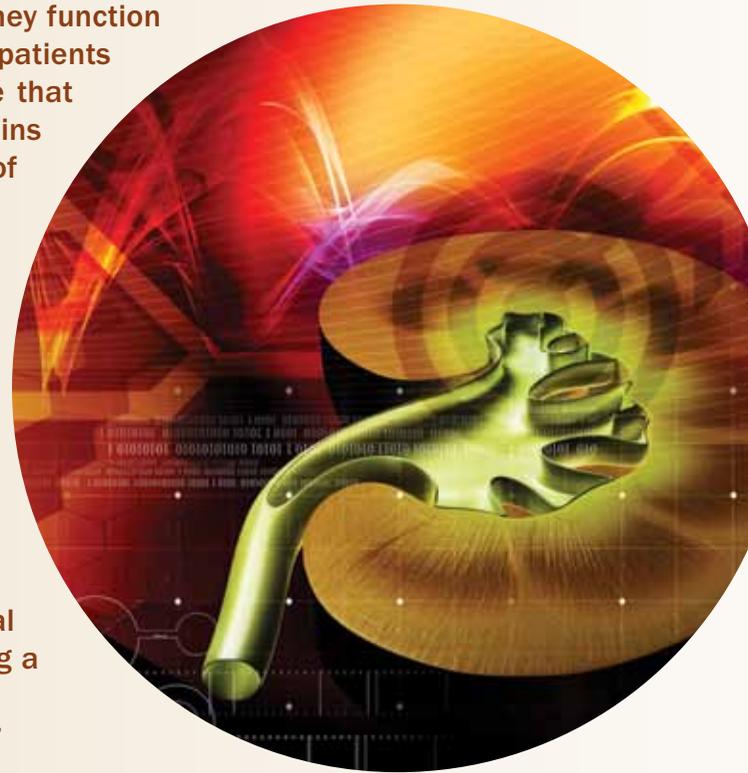
Outcomes of kidney transplants and the rate of deterioration in posttransplant kidney function in the United States have improved in recent years. This news provides optimism to patients awaiting transplants, their caregivers, and their families, as well as the assurance that they are waiting for a transplant that has a durable lifespan and function. These gains are particularly tied to advances in patient selection and medical management of the many complexities posed by renal transplantation.

Extended criteria donor kidneys (ECDs) may afford timely transplantation to patients with a high expected waitlist mortality, who could benefit from shorter wait times. But the ECD listing practices prevailing in the United States have thus far fallen short of promises. Jesse Schold outlines a general guideline for rational use of ECD organs that would benefit those most in need of short waiting times.

The ranks of patients waiting for a kidney transplant are being swelled by recipients of prior liver, heart, and lung transplant recipients with renal failure. The rate of growth of this population is much greater than the growth of the kidney-alone waitlist. The challenges posed by this emerging population, especially in the ethical domain, are addressed by David Goldfarb.

Adolescent transplant recipients transitioning to adulthood pose several medical and psychosocial challenges. Charles Kwon and Julie Corder look at this issue using a patient vignette as a backdrop.

—Titte Srinivas, MD, *Kidney News* editorial board member



Deceased Donor Kidney Allocation: What Is the Next Step?

By J. D. Schold

Policies governing the allocation of deceased donor organs must incorporate numerous factors, which are often very difficult to satisfy in a simultaneous manner. These policies can have a significant impact on patients' lives, but we must carefully consider objective factors such as logistical operations and efficient resource allocation along with more subjective constructs such as equity and justice.

Perhaps an even more difficult challenge is to prospectively consider possible unanticipated changes in behavior by patients and caregivers that may arise from these policies. For certain, any changes in policy should be considered deliberately and conscientiously, with the best information available and with input from many experts in the field. However, it is also clear that failure to evolve allocation policy comes at a cost. Known inequities and inefficiencies in current policies have led to suboptimal use of available scarce donor organs and to disparities in access to transplantation (1–3).

One of the perceived challenges in revising allocation policy is related to the concept of a net-zero model. From this perspective, any alteration in policy that may benefit one aspect of policy or one subgroup of the transplant candidate population will inherently come at the expense of other aspects or patient populations. In a recent article, Schold and Hall challenged this notion and described potential opportunities for enhancing kidney donor policy without deleteriously affecting equity (4). As described in this viewpoint, the authors suggested that enhanced allocation policy could be achieved through two fundamental changes.

One suggested amendment is to improve oversight and guidance of the current Expanded Criteria Donor (ECD) policy. The initial aims of this policy were to objectively define higher-risk kidneys as falling within the ECD policy and to help direct patients to consider

acceptance of ECD kidneys as a tradeoff for extended waiting times for a donor organ with fewer risk factors (5). Improved implementation and oversight of this policy may lead to better matching of candidates with donor organs based on the presence of risk factors, and to transplantation at a more optimal time after patients have been placed on the waiting list. In general, failure to allocate the right donor kidney to the right patient at the right time is a significant source of inefficiencies in current allocation, leading to increased mortality on the waiting list and the need to seek additional donations after the failure of primary transplants for some patients.

Another potential enhancement to allocation may derive from more uniform implementation of the ECD policy across transplant centers. There is currently wide variability in the listing patterns for ECDs among transplant centers in the United States (6). In particular, some centers have almost their entire candidate population listed to receive ECD kidneys, whereas other centers have only a small percentage of their patients listed to receive them. This variable implementation of policy by centers leads not only to differential ramifications for listing for an ECD from one center to the next but also to suboptimal allocation of donor kidneys to patients on the basis of their risks for mortality on the waiting list or posttransplant graft loss (7).

Ideally, the challenges of donor allocation would be ameliorated by improved donation programs and a reduction in risk factors leading to end stage renal disease. In reality, the chasm between available donor kidneys and the need for transplants will continue to grow, emphasizing the need to expeditiously implement allocation policies that best serve the population. More rapid evolution of the current ECD policy may be a much more palatable and expedient process than delayed formulation of new policies that must satisfy numerous stakeholders. For

the sake of current and future patients requiring kidney transplantation, the time to evolve policy is now, and the transplant community should rapidly and strategically decide on the next step. ●

References

- Alexander GC, Sehgal AR. Barriers to cadaveric renal transplantation among blacks, women, and the poor. *JAMA* 1998; 280:1148–1152.
- Hall YN, O'Hare AM, Young BA, et al. Neighborhood poverty and kidney transplantation among U.S. Asians and Pacific Islanders with end-stage renal disease. *Am J Transplant* 2008; 8:2402–2409.
- Meier-Kriesche HU, Schold JD, Gaston RS, et al. Kidneys from deceased donors: maximizing the value of a scarce resource. *Am J Transplant* 2005; 5:1725–1730.
- Schold JD, Hall YN. Enhancing the expanded criteria donor policy as an intervention to improve kidney allocation: is it really a “net-zero” model? *Am J Transplant* 2010; 10:2582–2585.
- Port FK, Bragg-Gresham JL, Metzger RA, et al. Donor characteristics associated with reduced graft survival: an approach to expanding the pool of kidney donors. *Transplantation* 2002; 74:1281–1286.
- Schold JD, Howard RJ, Scicchitano MJ, et al. The expanded criteria donor policy: an evaluation of program objectives and indirect ramifications. *Am J Transplant* 2006; 6:1689–1695.
- Grams ME, Womer KL, Ugarte RM, et al. Listing for expanded criteria donor kidneys in older adults and those with predicted benefit. *Am J Transplant* 2010; 10:802–809.

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