Current UNOS allocation: a two-step process

The two-step organ allocation process combines determinations made by private transplant teams with the criteria set forth by UNOS. The first step entails physicians and hospitals determining whether a patient needs a transplant and what that patient’s chances are of post-transplant survival and benefit. To make those determinations, physicians and hospitals use criteria incorporating both physiological and psychosocial considerations. The physiological evaluation considers the patient’s overall health and physical condition. Some OPOs [organ procurement organizations] require a minimum life expectancy, usually two years, before placing a patient on the UNOS list. The psychosocial evaluation considers a “patient’s understanding of and ability to tolerate the emotional stress associated with transplantation, including the wait for a donor organ, and organ rejection, and his willingness to comply with a rigorous postoperative treatment regimen that lasts a lifetime.” Of course, the criteria still must fall within the mandates of federal antidiscrimination laws such as the ADA and some funding requirements. The private transplant teams create their own criteria for listing within those limits.

Step two of the organ allocation process utilizes UNOS methods to select recipients from the waiting list. The UNOS system attempts to mix social worth and randomization models by offsetting medical utility with justice. UNOS defines medical utility as “the net medical benefit to all transplant patients as a group,” and justice as “the basic equity or fairness in the distribution of the benefits and burdens of the organ allocation policy.”

UNOS allocates organs based on medical criteria, striving to achieve a balance between medical utility and justice. It requires ‘medical criteria’ to include at least the following: (1) anatomical and immunological compatibility between donor and recipient; (2) medical urgency; (3) efficiency in physically moving the organ from the donor to the recipient in a way that ensures viability and enhances the probability of a successful outcome; and (4) medical ethics considerations inherent in the allocation of a scarce resource. [Economic status and social criteria are not factored into the ‘medical criteria.’]

Under the theory of medical utility, key factors include: attaining the longest patient survival time; striving for significant improvement in the patient’s quality of life before and after the operation; and a cost-benefit ratio. The ‘justice’ component of UNOS’s approach includes factors such as: priority to patients who are most medically urgent; priority to those who have spent the longest period of time on the waiting list; local access to available organs; and policies that do not restrict the patient’s access to the list. The selection of recipients from the waiting list utilizes a point system, which varies by organ.

It has been suggested that transplant success should be judged by three criteria: length of patient survival; length of graft survival; and the patient’s post-transplant quality of life. Length of patient survival may be separable from length of graft survival because of replantation; some patients whose first organ fails are candidates for a second, although statistical survival rates have gradually made it clear that a third organ is seldom justified.