

Designing a Dashboard to Streamline Pediatric Heart Transplant Decision
Making
(Technical Report)

Unequal Opportunity:
Transplant Denial for Patients with Intellectual Disabilities
(STS Research Paper)

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by

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Preface

To assign the few available donor organs to the transplant patients who need them, doctors evaluate candidates on a transplant waitlist, prioritizing them by medical urgency. Evaluation criteria, however, are not conclusively definitive, and are therefore controversial. Critics note disparities by social group for patients with end-stage organ disease.

Cardiologists' decision criteria in transplant cases vary in ways that can reduce the use of available donor hearts. To guide their decisions, cardiologists use DonorNet, but the system presents information in ways that can complicate their task. DonorNet can thereby promote nonoptimal decisions and erode cardiologists' confidence in these decisions. The project team adopted a user-centered approach to develop a donor dashboard that physicians can use to better align their pediatric heart transplant decisions with the needs of the end users. After user research, we designed an ideal system with Figma, using our findings to address identified pain points in the decision-making process. The team developed a high fidelity mockup of a dashboard that incorporates real data from databases of information on patient and donor heart characteristics.

Though the Americans with Disabilities Act prohibits discrimination on the basis of disability, physicians assigning donor organs to transplant patients often pass over patients who have disabilities. Physicians' primary justification for such denials is a low assessment of the patient's post-transplant outcome. To some advocacies, however, many such decisions constitute discrimination on the basis of disability. To fight back, they use publicity, sponsor education programs, and issue policy recommendations.