OPTN ORGAN PROCUREMENT AND TRANSPLANTATION NETWORK

Meeting Summary

OPTN Liver and Intestinal Organ Transplantation Committee
Meeting Summary
December 06, 2024
Conference Call

Scott Biggins, MD, Chair
Shimul Shah, MD, MHCM, Vice Chair

Introduction

The OPTN Liver and Intestinal Organ Transplantation Committee (the Committee) met via WebEx teleconference on 12/06/2024 to discuss the following agenda items:

1. Continuous Distribution: Finalize Research Questions for Modeling All Attributes

The following is a summary of the Committee's discussions.

1. Continuous Distribution: Finalize Research Questions for Modeling All Attributes

<u>Presentation Summary</u>

The Committee reviewed a proposed timeline for liver Continuous Distribution (CD). The timeline is as follows:

- Questions to Scientific Registry of Transplant Recipients (SRTR) by end of 2024
- SRTR builds liver Organ Allocation Simulator (OASIM) by June of 2025
- Massachusetts Institute of Technology (MIT) builds liver optimizer by July 2025
- The Committee works with MIT to optimize policies and submit final policy options to SRTR for Modeling by September 2025
- SRTR models final policy scenarios by December 2025
- The Committee finalizes policy after reviewing SRTR modeling by June 2026

The Chair encouraged the Committee to remember as they finalized research questions that they could discuss and make value-based decisions after MIT optimization and that it was best to ask a broad number of research questions.

The Committee reviewed metrics for determining CD success.

- Waitlist mortality
- Access to transplant
- Disparities in access to transplant
- Distance traveled
- Allocation efficiency
- Post-transplant survival
- Non-use of livers

The Committee reviewed various subgroups under access to transplant, waitlist mortality, disparities in access, distance organs travel, and post-transplant survival along with potential donor characteristics.

Additional Questions the Committee considered under Placement Efficiency and Travel

- Do organs travel further when they are procured in more geographically isolated areas than organs in highly populated urban areas?
- Do candidates listed in geographically isolated and/or less dense areas have similar access to patients listed in more dense areas, all else equal?
- Are organs crossing in the air to reach similarly medically urgent patients?
- What is the non-use rate overall and for DCD donors or donors over 70 years old?
- What is the offer burden by Status 1A/1B and Model for End-Stage Liver Disease (MELD) / Pediatric End-Stage Liver Disease (PELD)?
- What is the sequence number of final acceptor?
- What is the time from first to last electronic offer?
- How many offers extended beyond final acceptor?
- What was the rate of intraoperative turndowns?
- What was the rate of expedited placement?

Summary of Discussion:

Decision #1: Leave non-use as a metric for success.

Decision #2: Add Ideal Split to donor characteristics.

Decision #3: Add age as a subgroup under post-transplant survival.

Decision #4: Stratify offer burden for Status 1A/1B and MELD/PELD by distance categories.

Decision #5: Add a question asking what the time from offer to cross clamp is.

The Vice Chair proposed adding out of use allocation as a metric for success. There was some discussion about dropping non-use as a metric for success, but the Committee decided to keep it in case the metric was requested later. The Committee also decided to add Ideal Split to donor characteristics, age as a subgroup under post-transplant survival, to stratify offer burden for Status 1A/1B and MELD/PELD by distance categories, and to add a question asking what the time from offer to cross clamp is.

The Committee discussed whether it was possible to include multiple organ transplantation (MOT) data in the simulation. Several members felt it would be useful, especially for simultaneous liver kidney (SLK) transplants, liver and intestinal transplants, and multi-visceral transplants. Unfortunately, due to a low number of these types of transplants there is not a high enough volume of data to accurately model these types of transplants in simulations. Similarly, the Committee inquired if it would be possible to include organs on machine perfusion in the simulation but due to machine perfusion being an emerging technology in the transplant field, there is not sufficient collected data to use for modeling.

The Committee discussed briefly if it was possible to change policy so that organs do not travel farther to geographically isolated areas compared to highly populated urban areas. They felt that while it may not be possible to solve this issue, at the very least they wanted to make sure their policies did not make the issue worse than it is in the current system.

One member asked if there was a way to get more specific regarding the urban vs rural subgroup under disparities for access. They asked if it was possible to look at that information by zip code or community risk which had been done in previous simulations for MELD 3.0.

<u>Next steps:</u>

- The Committee will continue to review these research questions and add additional research questions they feel may be beneficial.
- The research questions will be submitted to SRTR.

Upcoming Meeting

- January 3, 2025

Attendance

- **Committee Members**
  - Scott Biggins
  - Shimul Shah
  - Chris Sonnenday
  - Michael Kriss
  - Vanessa Pucciarelli
  - Allison Kwong
  - Joseph DiNorcia
  - Kathey Campbell
  - Shunji Nagai

- **SRTR Staff**
  - Katie Audette
  - Jack Lake
  - Nick Wood

- **UNOS Staff**
  - Emily Ward
  - Cole Fox
  - Susan Tlusty
  - Ben Schumacher
  - Alina Martinez
  - Ethan Studenic
  - Keighly Bradbrook
  - Laura Schmitt
  - Kaitlin Swanner