

OPTN Liver and Intestinal Organ Transplantation Committee Meeting Summary May 2, 2025 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 05/02/2025 to discuss the following agenda items:

- 1. Continuous Distribution: Utilization Efficiency
- 2. Match Run Analysis

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

1. Continuous Distribution: Utilization Efficiency

The Committee continued to discuss utilization efficiency within liver continuous distribution.

Summary of discussion:

The Committee discussed the current state of utilization for donation after circulatory death (DCD) livers. Members noted that there are differences in DCD utilization based on donor age and distance. A member wondered how often DCDs are allocated within a 150-nautical mile (NM) radius or if organs are accepted beyond this range, and if such movement indicates a well-functioning system. It was noted that many DCD offers from donors of an older age become open offers late in the match run, indicating inefficiencies in the current system.

The possibility of adjusting the travel efficiency rating scale based on donor age was discussed. For example, donors aged 70 or older might have a reduced priority radius in the rating scale, meaning that more points are given if the offer is within 75 NM instead of 150 NM which may encourage local placement of older DCD organs. This aims to increase acceptance by closer candidates who may have lower MELD scores. Further discussion emphasized that travel efficiency-related points may represent a small fraction of the total composite allocation score, limiting the impact but increasing the weight could enhance local utilization of organs when appropriate.

A member pointed out that organs offered beyond a local range do not necessarily get transplanted faster or more efficiently. Expanding the allocation of DCD organs might improve competition and early acceptance by recipients higher on the list, potentially avoiding late-stage open offers.

The Committee considered the implications of removing DCD as a criteria from the definition of medically complex liver. There was agreement that donor age is an important factor, but insufficient data exist to define precise age cutoffs for complexity or to guide allocation changes.

The Committee discussed the potential impact of donor age on DCD organ allocation and placement efficiency. A member suggested analyzing data segmented by donor age groups—under 50, 50 to 65, and over 65—to better understand utilization patterns and identify opportunities for improving efficiency, especially given the rising number of older donors.

Overall, the Committee recognized the complexity of balancing distance, donor age, medical complexity, and perfusion methods in optimizing DCD organ allocation and utilization. The Committee recognized continuous distribution as a tool that can better balance urgency and efficiency factors to improve DCD allocation outcomes. The Committee noted that they will revisit the topic of expedited liver pathway in the future.

Next steps:

The Committee will continue to discuss this topic.

2. Match Run Analysis

SRTR introduced a new tool called match run analysis to the Committee. This tool complements traditional simulation analysis for evaluating organ allocation policies. Match run analysis uses historical match runs to assess how different policies impact candidate prioritization.

Summary of discussion:

A member emphasized the need to define clearly what the match run analysis should examine. The member suggested analyzing information related to attributes that had associated donor modifiers such as body surface area (BSA), pediatric priority, and utilization efficiency.

SRTR staff clarified that the match run analysis can be thought of as a sorting process that reorders real historical match runs using proposed allocation scores. This approach enables simulation of how different weighting schemes impact candidate prioritization across multiple donor-recipient scenarios.

A member noted the importance of constructing a scoring system—typically out of 100 points—and determining the allocated weights for each attribute. The analysis should help identify unforeseen issues with proposed scores by applying them to real candidate data, facilitating iterative refinement, as previously done by the OPTN Heart Transplantation Committee.

The Committee underscored the value of conducting "face validity" checks before detailed simulations to ensure the score aligns with clinical expectations and prioritization goals, thereby saving time and focusing on meaningful adjustments.

Discussion highlighted the balance needed between medical urgency (MELD score) and travel efficiency (distance), referencing prior experiences where high weighting of medical urgency led to increased travel burdens. The Committee considered exploring different medical urgency weight scenarios (e.g., 75%, 50%, 25%) to understand the effects on allocation and local organ utilization.

The Committee agreed on forming two focused subgroups ahead of the May 15 meeting: one to assign initial draft weights to attributes to develop a composite allocation score, and another to define desired match run characteristics and related concerns (e.g., distance, prioritization of pediatrics and high

medically urgent candidates). Members were encouraged to join one group and prepare preliminary recommendations to facilitate a productive discussion during the upcoming extended virtual meeting.

Overall, the Committee emphasized an iterative, data-driven approach to developing a transparent, balanced continuous distribution allocation system that effectively weights urgency, proximity, and other clinical priorities.

Next steps:

The Committee will participate in pre-meeting work in advance of the upcoming May 15 meeting during which they will draft a match run analysis request.

Upcoming Meetings

• May 15, 2025 at 12 pm ET (teleconference)

Attendance

• Committee Members

- o Aaron Ahearn
- o Allison Kwong
- o Chris Sonnenday
- o Colleen Reed
- o Kathy Campbell
- o Lloyd Brown
- o Marina Serper
- o Michael Kriss
- o Neil Shah
- o Omer Junaidi
- o Scott Biggins
- o Shimul Shah
- Vanessa Cowan
- Vanessa Pucciarelli
- SRTR Staff
 - o David Schladt
 - o Jack Lake
 - o Katie Siegert
 - o Nick Wood
- UNOS Staff
 - o Alina Martinez
 - o Benjamin Schumacher
 - o Betsy Gans
 - o Kaitlin Swanner
 - o Keighly Bradbrook
 - o Laura Schmitt
 - o Matt Cafarella
 - o Meghan McDermott
 - Niyati Updahyay