OPTN Liver and Intestinal Organ Transplantation Committee
National Liver Review Board (NLRB) Subcommittee
Meeting Summary
September 8, 2022
Conference Call

James Trotter, MD, Chair

Introduction

The OPTN National Liver Review Board Subcommittee (the Subcommittee) met via Citrix GoToMeeting teleconference on 09/08/2022 to discuss the following agenda items:

1. Challenges in the Multivisceral Transplant Allocation System

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

1. Challenges in the Multivisceral Transplant Allocation System

The Subcommittee continued discussing the research regarding challenges with the multivisceral transplant allocation system.[1]

Summary of discussion:

The Chair asked for a defined population when discussing multi-visceral transplant. A member of the community stated that the population includes liver-intestine transplants, and majority of the time multi-visceral transplants include the pancreas as well.

A member of the community clarified that the research analyzed two separate populations. The member of the community stated that if a liver transplant candidate was added to the waitlist during the pre-acuity circles (AC) era, and continued to be on the waitlist during the post-AC era, then those individuals were censored from the analyses.

The Chair noted that there appears to be an increase of about 15% in waitlist additions for multi-visceral candidates during the post-AC era compared to pre-AC era. The Chair also noted that the analyses show that the rates of mortality on the waitlist increased three-fold post-AC era, but the absolute number remains small. A member of the community stated that waitlist mortality is not an accurate metric to determine priority in allocation because the clinical situations of multi-visceral transplant candidates vary greatly among each other. The Chair asked what metric should be utilized. The member of the community stated that a metric to determine medical urgency does not yet exist for multi-visceral transplant candidates. The Chair noted that a comparator group must be determined in order to understand the effect of any potential change to allocation.

A member of the community stated that access to transplant is very limited for multi-visceral candidates unless their MELD score is over 35, or close to 40.

[1] Tommy Ivanics et al. "Impact of the Acuity Circle Model for Liver Allocation on Multivisceral Transplant Candidates," *American Journal of Transplantation* 22, no. 2 (2021): pp. 464-473, https://doi.org/10.1111/ajt.16803.

Another member of the community stated that determining a metric for survival is likely impossible for this patient population due to multi-visceral candidates being very different from each other. The member of the community stated that the multi-visceral candidates need access to specific deceased donors. The member of the community stated that when there is alignment between a multi-visceral candidate and quality liver, intestine, pancreas deceased donor organs, then the multi-visceral candidate should receive priority. The member of the community stated that the research presented to the Subcommittee is the first glance at the current state and it is likely going to continue to worsen.

A member stated that the research showed more exception points were awarded during the pre-AC era. The member wondered whether some of the issues are not attributable to implementation of AC but to less exceptions being awarded through the National Liver Review Board (NLRB). The member suggested that changes to exception policies or NLRB guidance may be a solution.

A member of the community noted that when an appropriate deceased donor for a multi-visceral candidate, the multi-visceral candidates appear on the match run with MELD scores in the 20-30s. The member of the community stated that the liver will be allocated to a high MELD score candidate, so the multi-visceral candidates with MELD scores of 20 do not have access to transplant.

It was noted that there is currently no policy or NLRB guidance to address exceptions for liver-intestine candidates. A member of the community stated that the lack of policy and guidance make it unclear on how transplant programs can receive exception points for their multi-visceral candidates.

The Chair suggested that multi-visceral experts are needed on the NLRB to address these specific cases. The Chair noted that liver transplant professionals are not experts on the needs of multi-visceral cases. A member of the community agreed and stated that this needs to be addressed by determining criteria and the amount of necessary exception points.

Another member of the community noted that there is precedence in allocation to prioritize kidney-pancreas candidates above kidney-alone candidates due to the recognition that there are few kidney-pancreas candidates and their need of quality organs. The member of the community stated that a similar pathway could be determined within liver allocation. The member of the community added that liver-alone candidates will likely receive organ offers within a couple days whereas the same opportunity for multiple offers is not afforded to multi-visceral candidates.

A member of the community noted that the multi-visceral community would prefer one of the following options, 1) use the intestine match run to allocate multi-visceral combinations; or 2) create Status 1C for multi-visceral candidates. The member of the community stated that the multi-visceral community may be receptive to higher NLRB exception scores.

A member asked if there is a corresponding comparison of waitlist mortality between multi-visceral candidates and liver-alone candidates at the same MELD score. The member added that research has shown an increase in multi-visceral candidate waitlist mortality post-AC era, but wondered how that compares to liver-alone candidate waitlist mortality at the same MELD score. A member of the community responded that MELD is an inappropriate comparison because liver is not always the driving reason for a multi-visceral transplant. The member stated that comparing corresponding mortality is important. The member of the community responded that MELD score is not an appropriate comparison.

UNOS staff noted that the Subcommittee can submit a data request to analyze corresponding mortality between liver-alone candidates and multivisceral candidates. A member of the community suggested to separate the requested data into pediatric and adult. The Chair noted that if changes to allocation will decrease access to liver transplant for high MELD candidates, then the data analyses are necessary. The

Chair added that the Subcommittee is open to a different metric, if it is determined that there is a metric better than waitlist mortality.

Another member stated that continuous distribution of livers and intestine may provide the opportunity for a larger solution, but changes to exception policy and NLRB guidance may be a feasible short-term solution.

Another member of the community asked whether the impact seen post-AC era on multi-visceral candidates may be an unintended impact of a policy implementation. The member asked if addressing unintended consequences found through post-implementation monitoring necessitate a more urgent remedy. The Chair stated that while this may be viewed as an unintended consequence, it does not appear to be a crisis. The member of the community stated that very few transplant programs are interested in multi-visceral transplantation because of the difficulty of the specialty. The member of the community stated that multi-visceral candidates need to be transplanted when they are not too sick with the right quality organs. The member of the community suggested analyzing the cost of a multi-visceral transplant candidate waiting on the list.

Next steps:

The Committee will submit a data request. The Committee will continue to discuss options to address the challenges in multi-visceral allocation.

Upcoming Meeting

- October 13, 2022 @ 2:30 PM ET (teleconference)
- November 10, 2022 @ 2:30 PM ET (teleconference)
- December 8, 2022 @ 2:30 PM ET (teleconference)

Attendance

- **Subcommittee Members**
  - Alan Gunderson
  - Allison Kwong
  - Greg McKenna
  - James Eason
  - Jim Trotter
  - Neil Shah
- **HRSA Representatives**
  - Jim Bowman
  - Marilyn Levi
- **SRTR Staff**
  - John Lake
  - Katie Audette
- **UNOS Staff**
  - Erin Schnellinger
  - Julia Foutz
  - Kaitlin Swanner
  - Matt Cafarella
  - Meghan McDermott
  - Niyati Upadhyay
- **Other Attendees**
  - Jonahtan Fridell
  - Shunji Nagai