

## **OPTN Liver and Intestinal Organ Transplantation Committee**

### **Meeting Summary**

**September 20, 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 09/20/2024 to discuss the following agenda items:

1. Recap, Continuous Distribution: Geographic Equity and Exceptions & Median MELD/PELD at Transplant (MMaT & MPaT)
2. Continuous Distribution: Travel Efficiency
3. Continuous Distribution: Split Livers

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

### **1. Recap, Continuous Distribution: Geographic Equity and Exceptions & Median MELD/PELD at Transplant (MMaT & MPaT)**

#### Summary of discussion:

- Geographic Equity: consider a model using a 20 million population density for linear decay down to 50 million.
- Exceptions: direct exceptions through the medical urgency attribute using median MELD and PELD.

#### Next Steps:

A data request is pending to review standard and nonstandard exceptions to determine if the MELD and PELD should be adjusted.

### **2. Continuous Distribution: Travel Efficiency**

The purpose of this attribute is to reduce the distance between the donor hospital and the transplant center. Determining how to operationalize this using GPS data is not possible because the sample size is too small. Slides reviewed how other organs committees, such as lung, and kidney and pancreas, and heart, have decided to determine travel efficiency. Kidney's rating scale is more segmental and based on nautical miles to determine flying or driving to transport organs. Flying may still be necessary in urban areas, due to traffic volume. The Committee seemed to agree with the threshold of over 150 miles to fly instead of drive.

#### Summary of discussion:

A member commented that a 2-hour drive is a good limit, but the exact mileage limit can be a problem when considering urban density. Attendees at regional meetings could not agree on a limit.

A member commented that new technologies could make this concern irrelevant in the future. Less concerned about ischemic times, with the use of pumps, could allow for variability.

A member commented that travel efficiency may not be as important as medical acuity.

A member commented that it is better to transport fewer livers long distances, and this should be considered.

The Chair commented that a linear decline scale is less important than the weight assigned. Kidney's model may be a good way model for Liver. Population density and travel efficiency should be synergistic.

A member commented that center resources, such as staff available and ability to fly, are currently not considered.

The kidney concept is correct for Liver. Labels should be erased. When considering the outcomes, consider not only the miles traveled, but also the number of organ offers the center may receive. This may drive the scale. Also consider flying at using helicopters in urban areas.

Only mileage is captured, but not whether organs are driven or flown.

#### Next Steps:

Discuss, at the October full committee meeting, a 150-mile threshold to change from drive to fly, but with an inflection point for fly versus drive decisions. An MIT simulation, including a weight, should also be created. Determine how many CAS points should be awarded.

### **3. Continuous Distribution: Split Livers**

Split livers are not being used very often. It is important to align two patients at the same center for transplant. There remains confusion in the transplant community about closed, open, and segmental policy variances. Modifications to the variances could be included in the Access attribute for Continuous Distribution. It is important to ensure there is no harm to small adults and pediatric patients.

A member presented a recap of a small workgroup, including Pediatric Committee representatives, to consider split liver policy. It is important to maintain access and encourage growth in split liver transplant. Adult whole grafts show similar outcome results to extended right split lobe grafts. The number of these grafts is very small. Split liver still remains uncommon, at only 3-4%. There are many discards of segmental grafts. The policy does not encourage collaboration to ensure both sides of the graft are used. Greater use of split liver is associated with lower waitlist mortality for children. The majority of split livers are only performed at 10 centers. The stimulus to split livers for high MELD patients is low. There are policy limitations to the variances and there are not best practices established. Many centers mark candidates eligible for split liver but have never performed split liver transplantation. Continuous distribution must preserve access to pediatric transplantation. Preserving this is possible. Another idea is that splittable pair could be listed in tandem, and also identify these pairs ahead of time.

#### Summary of discussion:

If the urgency score is 70 percent of the overall weight and how could this pooled score be incorporated? If this was done through the Access attribute, the score would be lower and would be more challenging to operationalize. The "Trotter" approach is still possible.

A member commented that a paired approach put a lot of pressure on the adult center with a pediatric candidate. There is also a lot of variability as to when OPOs offer the split. This needs to be streamlined.

Will centers that can do split livers have an advantage? It will likely depend on the score. A member argued this is unfair. The Chair commented that that this may encourage centers to pair up to do this.

A member commented that there should be a mechanism in place to ensure that centers that indicate split livers actually have the capability to do it.

Next Steps:

Determine a framework for split livers in continuous distribution.

**Upcoming Meetings**

- October 9, 2024, at 8 am ET (in person)
- October 18, 2024, at 2pm ET (virtual)

## Attendance

- **Committee Members**
  - Aaron Ahearn
  - Allison Kwong
  - Chris Sonnenday
  - Shimul Shah
  - Scott Biggins
  - Shunji Nagai
  - Vanessa Pucciarelli
  - Cal Matsumoto
  - Michel Kriss
  - Vanessa Cowan
  
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - Jack Lake
  - Nick Wood
  - Katie Audette
- **UNOS Staff**
  - Laura Schmitt
  - Niyati Updahyay
  - Shelby Jones
  - Jesse Howell
  - Susan Tlusty
  - Emily Ward