OPTN Liver and Intestinal Organ Transplantation Committee
OPTN PELD/Status 1B Work Group
Meeting Summary
February 18, 2021
Conference Call

Evelyn Hsu, MD, Workgroup Chair
James Trotter, MD, Committee Chair
James Pomposelli, MD, PhD, Committee Vice Chair

Introduction
The OPTN PELD/Status 1B Work Group (the Workgroup) met via Citrix GoToMeeting teleconference on 02/18/2021 to discuss the following agenda items:

1. PELD Score Derivation Request Update
2. Pediatric Waitlist Mortality Characteristic Review

The following is a summary of the Workgroup’s discussions.

1. PELD Score Derivation Request Update

The Workgroup received a presentation on Pediatric End-Stage Liver Disease (PELD) refit and scaling from the Scientific Registry of Transplant Recipients (SRTR).

Summary of discussion:
A member asked how an increased number of transplants influences mortality. This member explained that the majority of available organs are allocated to pediatric candidates with exceptions and that pediatric candidates without exceptions often die on the waiting list. The presenter responded that even if a change was made to the allocation system that increased transplants and decreased death, the mortality rate may not change. The member responded that when an allocation change is made for adults, the predictability of high Model for End-Stage Liver Disease (MELD) mortality does decrease, but because so many pediatric candidates have exceptions, the pediatric mortality rate is not impacted.

A member commented that this formula would be the most useful if it could discriminate between candidates with high PELD scores. Another member added that the mean PELD at transplant (MPaT) is currently 34 and that this number is so high due to the large number of pediatric candidates with exceptions. The presenter responded that results from this data request show that reparametrizing PELD factors and adding eGFR or creatinine factors improve the overall ability of PELD to discriminate on mortality risk.

A member commented that the Workgroup should be careful not to disrupt the current calculated system as they develop their adjustments. Another member asked if a liver simulation allocation model (LSAM) could analyze potential impacts. The presenter responded that the SRTR could run an LSAM with calibration for different mean PELD scores.

The Workgroup discussed that the evidence based adjustment for age standardized mortality should predict the 90- day waitlist mortality and be used as a factor of medical urgency. Other factors, such as an access score could be accounted for during the development of continuous distribution for liver.
A member commented that the Workgroup could consider creating standardized exceptions for specific conditions so that pediatric candidates that do need an exception will not lose their status with any shifts to the system.

Next steps:
The Work Group will continue to receive updates from the SRTR on the effort to derive an updated PELD score.

2. Pediatric Waitlist Mortality Characteristic Review

The Workgroup aims to account for characteristics not currently collected by the OPTN to better predict waitlist mortality for children and equalize mortality risk within the pediatric population.

Summary of discussion:
A member presented micro-nutrient deficiencies to the Workgroup. This member supported the collection of Vitamin E, iron levels, and data from neuropsychologic assessments. A member asked if any macro or micro-nutrients were particularly influential. The presenter responded that much of the research on micro-nutrient deficiencies has focused on iron. They added that fat soluble vitamins such as Zinc and Vitamin E are important. A member asked about any plateau for age. The presenter answered that by puberty, most of these deficiencies can be recovered. The presenter added that while micro-nutrient deficiencies are likely not the cause of mortality, these deficiencies could be associated with it. They would not dismiss this as a mortality factor and would like to see additional research in this area.

Upcoming Meeting
- March 18, 2021
Attendance

- **Workgroup Members**
  - Regino Gonzalez- Peralta
  - Julie Heimbach
  - Steve Lobritto
  - John Magee
  - Emily Perito
  - James Pomposelli
  - Sarah Jane Schwarzenberg
  - James Trotter
  - Andy Bonham
- **HRSA Representatives**
  - Marilyn Levi
- **SRTR Staff**
  - Michael Conboy
  - David Schladt
- **UNOS Staff**
  - Rebecca Brookman
  - Matt Cafarella
  - Julia Foutz
  - Samantha Noreen
  - Kelley Poff
  - Karen Williams