OPTN Liver and Intestinal Organ Transplantation Committee
OPTN Pediatric End-Stage Liver Disease (PELD)/Status 1B Work Group
Meeting Summary
March 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 Work Group) met via Citrix GoToMeeting teleconference on 03/18/2021 to discuss the following agenda items:

1. PELD Trajectory Variable
2. Pediatric Waitlist Mortality Characteristic Review

The following is a summary of Work Group's discussions.

1. PELD Trajectory Variable

The Work Group heard a presentation from the SRTR.

Summary of discussion:

A member noted that the Model for End-Stage Liver Disease's (MELD) predictive capacity decreases as the score increases. They asked if there is a similar circumstance for the PELD. The presenter confirmed that for PELDs over 34, the lab c- statistic was .59. They added that the new PELD increases this statistic to .72 and is more accurate at ranking children based on risk of mortality in the upper range of PELD. A member asked about the difference between the old and new PELD. The presenter responded that the SRTR has added estimated glomerular filtration rate (eGFR)/creatinine, turned dichotomous variables into continuous variables, and used splines.

A member asked if the addition of eGFR to the PELD model is responsible for more accurate mortality prediction. The presenter responded that overall, the eGFR does make an improvement. This member asked if the addition of renal replacement to the model would make it weaker or stronger. The presenter confirmed that this model considers patients on dialysis.

The Work Group determined that the PELD trajectory variable does not make a large difference when priority ranking patients and would be complex to add to the updated PELD. For these reasons, the Work Group has decided not to add this variable to the update PELD.

2. Pediatric Waitlist Mortality Characteristic Review

Summary of discussion:

A member presented frailty and sarcopenia to the Work Group. A member asked if frailty has been considered as a factor for the MELD score. A member responded that the test for frailty is challenging from a practical standpoint as it requires frequent access to patients. They added that sarcopenia testing

requires a computerized tomography (CT) scan for each test. A member asked about how frailty and sarcopenia impact growth and if there is any correlation between these factors. The presenting member responded that there is not enough data to answer this question yet.

A member presented encephalopathy. The member stated that that encephalopathy is currently collected by the OPTN, but only for candidates who are 12 and older. The member added that they did not believe that encephalopathy should be included in a future modeling request. A member pointed out that objective characteristics are likely to be more reliable than subjective ones. The presenting member discussed developmental delay. They reported that this characteristic is not ideal for incorporation to the PELD as it excludes pediatric candidates listed before age one and is limited by subjectivity and vulnerability to observer bias. This member presented functional status. While it is collected by the OPTN, the member does not believe it should be included in the PELD. Members agreed that encephalopathy, developmental delay, and functional status will not be included in the updated PELD.

Next steps:

The Work Group will continue work towards the submission of an adolescent data request.

Upcoming Meetings

- April 15, 2021

Attendance

- **Work Group Members**
  - Andy Bonham
  - Regino Gonzalez- Peralta
  - Evelyn Hsu
  - Patrick Kamath
  - Steve Lobritto
  - John Magee
  - Emily Perito
  - Jorge Reyes
  - James Trotter
- **HRSA Representatives**
  - Jim Bowman
  - Marilyn Levi
- **SRTR Staff**
  - Michael Conboy
  - Ryo Hirose
  - David Schladt
  - Andrew Wey
- **UNOS Staff**
  - Rebecca Brookman
  - Matt Cafarella
  - Julia Foutz
  - Betsy Gans
  - Kelley Poff
  - Niyati Upadhyay
  - Karen Williams