

OPTN Liver & Intestinal Organ Transplantation Committee PELD/Status 1B Criteria Workgroup Meeting Summary December 17, 2020 Conference Call

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

Introduction

The PELD/Status 1B Workgroup (the Workgroup) met via Citrix GoToMeeting teleconference on 12/17/2020 to discuss the following agenda items:

- 1. Updated PELD Score: Derivation Request and Next Steps
- 2. Pediatric Waitlist Mortality Characteristic Review

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

1. Update PELD Score: Derivation Request and Next Steps

Summary of discussion:

The Workgroup has submitted a Pediatric End-Stage Liver Disease (PELD) derivation request that aims to update the PELD score to more accurately predict waitlist mortality. Once derived, the Scientific Registry of Transplant Recipients (SRTR) will calibrate the new PELD score so that children's mortality risk will equal the age-standard mortality rate of adults. Because some pediatric waitlist mortality factors are not collected by the OPTN, the Workgroup is seeking ways to account for these factors and equalize mortality risk within the pediatric population.

2. Pediatric Waitlist Mortality Characteristic Review

Summary of discussion:

Workgroup members presented information on cirrhotic cardiomyopathy and parenteral nutrition for the Workgroup's consideration.

Waitlist mortality characteristic: Cirrhotic Cardiomyopathy

- 1. Is there evidence that the characteristic predicts pediatric waitlist mortality?
 - Yes, relating to post-operative complications, post-operative death, intensive care unit (ICU) length of stay (LOS) and hospital LOS
- 2. Is it currently collected by the OPTN?
 - No
- 3. Moving forward, what information would need to be collected about this characteristic to inform risk of mortality and morbidity?
 - Left ventricular mass index (severity of LVMI) and myocardial performance index (MPI)

The presenter confirmed that the LVMI and MPI values can be derived across any age. The presenter also agreed with a member who suggested that most centers will not reassess these values unless the

patient is sick, hospitalized, or in the ICU. The presenter noted that candidates who remain on the waiting list for three or four months will likely receive a reassessment of their LVMI and MPI. Members agreed that the Workgroup would need to know how feasible the collection of LVMI and MPI would be across multiple centers.

Waitlist mortality characteristic: Parental Nutrition

- 1. Is there evidence that the characteristic predicts pediatric waitlist mortality?
 - While there is evidence that malnutrition predicts pediatric waitlist mortality, there is insufficient data to conclude the same for parental nutrition.
 - A review of the literature showed that only two centers have done extensive work with parental nutrition's relation to pediatric waitlist mortality and that total parental nutrition (TPN) is usually only provided to extremely ill patients.
- 2. Is it currently collected by the OPTN?
 - No
- 3. Moving forward, what information would need to be collected about this characteristic to inform risk of mortality and morbidity?
 - TPN use at the time of listing
 - TPN at the time of transplant

A member commented that collection of whether or not TPN was used could serve as an indication of an attempt to stabilize a very sick patient. A member added that the Workgroup should consider any other objective measures that could reflect patient malnutrition. A member mentioned that TPN is often noted on PELD exception requests. The Workgroup discussed the possibility of programs starting TPN in order to gain more points and if the collection of TPN data was worth this unintended risk. Members concluded that currently there is not enough evidence to support the collection of TPN for the purpose of better predicting pediatric waitlist mortality.

Next steps:

The Workgroup will continue their review of clinical characteristics that may predict pediatric waitlist mortality.

Upcoming Meetings

• January 21, 2020

Attendance

• Workgroup Members

- Regino Gonzalez- Peralta
- Evelyn Hsu
- Steven Lobritto
- George Mazariegos
- Douglas Mogul
- o Emily Perito
- Sarah Jane Schwarzenberg

• HRSA Representatives

- o Jim Bowman
- o Adriana Martinez
- SRTR Staff
 - David Schladt
- UNOS Staff
 - o Matt Cafarella
 - o Julia Foutz
 - o Betsy Gans
 - o Kelley Poff
 - o Karen Williams
 - o Victor Melendez
- Other Attendees
 - o Nicolas Wood