

OPTN Liver and Intestinal Transplantation Committee OPTN Improving the MELD Calculation Work Group Meeting Summary February 19, 2021 Conference Call

James Trotter, MD, Chair James Pomposelli, MD, PhD Vice Chair

Introduction

The OPTN Improving the MELD Calculation Workgroup (the Workgroup) met via Citrix GoToMeeting teleconference on 02/19/2021 to discuss the following agenda items:

- 1. Project Scope and Plan
- 2. Background and MELD 3.0

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

1. Project Scope and Plan

The Workgroup heard an overview of the project.

Project Purpose: To eliminate sex-based disparity in access to liver transplant by updating the Model for End-Stage Liver Disease (MELD) score to better predict 90-day waitlist mortality for liver transplant candidates.

Goal: An improved MELD score that more accurately predicts 90-day waitlist mortality for liver transplant candidates.

Summary of discussion:

A member asked for clarification on this project's alignment with the Pediatric End-Stage Liver Disease (PELD)/Status 1B project. The Scientific Registry of Transplant Recipients (SRTR) explained that submitting the MELD and PELD data requests simultaneously could make for a more efficient process. Conversely, these projects may need separate data requests if differing project goals cause the derivation of MELD and PELD scores to conflict.

2. Background and MELD 3.0

A Workgroup member presented literature on gender disparity in liver transplant.

Summary of discussion:

The Workgroup reported that creatinine levels are more impactful than height when predicting 90-day mortality. A member added that because females tend to have lower creatinine than males, this variable is able to distinguish female gender as more of a disadvantage than height. Another member confirmed that according to their recent work, small men were not disadvantaged due to their height.

A member asked if the increased use of segmental organs in adults could be used for female candidates. Another member responded that while one segment of a split liver typically benefits pediatric candidates, the other segment would not necessarily always go to a female candidate because the current system disadvantages their placement on the waiting list. A member asked if gender disparity was observed in women off all heights. Another member responded that women who are taller than 175cm (about 5' 9) are less disadvantaged, but that because on average women are shorter than this cut off, it is difficult to conclude this finding's significance. A member suggested that the work group should consider using this 175cm cutoff when accounting for gender disparity in the MELD score.

A member asked about the impact of using glomerular filtration rate (GFR) on gender disparity in the MELD score. A member commented that some work has suggested that GFR could decrease the gender disparity. This member also said that adding GFR to the MELD calculation could be a longer process and that the potential for the removal of race from GFR calculations should also be considered throughout the project.

Upcoming Meeting

• March 19, 2021

Attendance

• Workgroup Members

- o Pete Abt
- Sumeet Asrani
- Kimberly Brown
- Derek DuBay
- o Julie Heimbach
- o Jim Markmann
- o James Trotter

• HRSA Representatives

- \circ Jim Bowman
- o Marilyn Levi
- SRTR Staff
 - Michael Conboy
 - Ray Kim
 - o Josh Pyke
 - o David Schladt
 - o Tim Weaver
 - o Andrew Wey
 - o Simon Horslen
 - o Ajay Israni
 - o John Lake
 - o Ryutaro Hirose
 - o Jon Snyder

UNOS Staff

- o Matt Cafarella
- o Julia Foutz
- o Betsy Gans
- o Samantha Noreen
- Kelley Poff

• Other Attendees

• Scott Biggins (incoming vice chair, July 2020)