

**OPTN Continuous Distribution of Lungs
Meeting Summary
November 14, 2019
Conference Call**

Erika Lease, MD, Workgroup Chair

Introduction

The Continuous Distribution of Lungs Workgroup met via Citrix GoTo teleconference on 11/14/2019 to discuss the following agenda items:

1. Continuous Distribution: Discuss placement efficiency metric

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

1. Continuous Distribution: Discuss placement efficiency metric

The Workgroup continued their discussion of continuous distribution, including metrics to use for determining placement efficiency.

Summary of discussion:

Since the start of discussions regarding continuous distribution, the community has mentioned a desire to consider the efficiency of transporting organs. Much of this conversation has focused on the financial costs of transporting organs over further distances and by air vs. ground transportation. The OPTN does not currently collect travel mode nor costs related to the transportation of organs. Because of this, the Workgroup discussed whether to combine the cost information in the Gentry and Dubay articles with the SRTR methodology for predicting travel mode, and whether there are more recent or more robust sources for cost data. The Workgroup also discussed how to construct a ratings scale (see hypothetical scale below):



During the discussion, there were several members concerned about making “value judgments” for different for levels of urgency (e.g. costs of travel compared to benefit for candidate based on diagnosis). One Workgroup member gave the following example: suppose there are two patients, the first patient is local with an LAS of 35, and the second patient is 500 miles away with an LAS of 36. For this member, that 1 point LAS point difference does not justify shipping an organ 500 miles, because the odds are there is an organ that will get offered closer to the patient with an LAS of 36, and will be offered in enough time whereby the patient won’t die. However, if you have the exact same scenario,

but a local candidate has an LAS of 90, and another candidate 500 miles away has an LAS of 91, then that difference is more significant because there is more uncertainty about whether the candidate farther away will live long enough to receive another organ offer. For this Workgroup member, the key is how to determine when to travel when you have two candidates with similar medical urgency and when to delay a candidate receiving an organ offer. Staff clarified that there are more mathematical ways to account for this concern, but these other mathematical ways are less transparent about the decision-making process. It was conveyed to the Workgroup that as the attributes are coming together, the relative points for medical urgency should outweigh the relative points given for system efficiency, thereby prioritizing the sickest candidates. An SRTR staff member supported this process, and commented that the continuous distribution system should prioritize the candidate closer whom has similar medical urgency as one further away. This SRTR staff member commented that the Workgroup could square the LAS, so that a one point difference makes more of a difference for higher LAS scores. In this way medical urgency and distance won't have to interact as much. Based on the above discussion, the Workgroup agreed to revisit this issue at a later date once they better understand how the decisions they're making now will impact the above example.

There was concern that the current system does not take into account the distance from the donor hospital to the airport. SRTR staff clarified that they factored in travel time to the airport into the last data request. A member stated that the Workgroup will need to make sure the community knows this has been accounted for.

Another member suggested that since the current discussion about this attribute is solely cost-based, that another attribute be considered. This other attribute would focus on the logistics of travel. For example, if you have to arrange air travel, this runs the risk of delays, inclement weather etc. Based on this suggestion, the Workgroup will further consider whether to create this attribute.

A member had a concern that helicopter costs are not factored into the scale (approximately 50-150 miles) and that helicopter flights would be more expensive than fixed-winged. This difference in distance and cost would not create a linear relationship, and may disadvantage those candidates who are close enough to use helicopters. Furthermore, this member was concerned that giving priority to closer candidates based on relative cost differences is not broader sharing and may give candidates in urban cities an advantage because they are within driving distance to several donor hospitals. Clarification was provided that though the model does only account for driving for shorter distances, this is because helicopters are not used universally across the country. Furthermore, these issues can be addressed by how the Workgroup decides to weight the different factors and how well they can determine meaningful clinical differences between LAS scores. Also, one member noted that continuous distribution is not necessarily broader sharing, but rather "smarter sharing".

The Workgroup reviewed graphs depicting potential scales for the LAS score, post-transplant outcomes score, and the placement efficiency score. The Workgroup also reviewed a heat-map in table format, whereby the table showed a potential order of organ offers. The potential scores would change as either the weights assigned to each attribute or the points assigned within each rating scale are modified.

Based off the discussion and the graphs shown, members agreed to finalize the format of the rating scale on a future call.

Next steps:

The Workgroup will continue their discussions about continuous distribution and the attributes at their next call.

Upcoming Meetings

- November 20
- November 21

Attendance

- **Workgroup Members**
 - Alan Betensley
 - Whitney Brown
 - Marie Budev
 - Kevin Chan
 - Rocky Daly
 - Gundeep Dhillon
 - Hilary Goldberg
 - Shelley Hall
 - Matthew Hartwig
 - Lisa Hinsdale
 - Erika Lease
- **SRTR Staff**
 - Katie Audette
 - Nick Salkowski
 - Maryam Valapour
- **UNOS Staff**
 - Eric Messick
 - Rebecca Goff
 - James Alcorn
 - Elizabeth Miller
 - Leah Slife
 - Susan Tlusty
- **Other Attendees**
 - Jesse Kontra
 - Samantha Taylor