Introduction

The Thoracic Committee met via Citrix GoToTraining teleconference on December 7, 2017 to discuss the following agenda items:

1. December 2017 Board Meeting Recap
2. TSAM Request
3. Heart-Lung and Sensitized Candidates

The following is a summary of the Thoracic Committee’s discussions:

1. December 2017 Board Meeting Recap

Summary of discussion:

The CHD Guidance Document was approved as part of the Board of Directors’ (BOD) consent agenda. Given its inclusion in the consent agenda, there was no discussion around this guidance document. This guidance document will go live along with the heart proposal. The liver redistribution proposal was also approved. Liver redistribution talks have proceeded for years, and the proposal often was actively debated. These debates led to many different iterations of the liver redistribution proposal leading to now, and it has been heavily vetted among the transplant community. Particularly important and relevant to the Thoracic Committee is the steps this new liver distribution policy takes to deemphasize the DSA as a unit of allocation.

In addition to these major, relevant approved proposals, the president ordered the creation of a new ad hoc OPTN/UNOS Geography committee. The purpose of this committee is to define principle geographic distribution in allocation policies, especially in aligning across organ types while taking each organ’s unique situations into consideration (for example, ischemic times differ between organs). It was stressed by UNOS’ Chief Executive Officer Brian Shepard that different organs will not be held to a one-size-fits-all distribution system, but all organs must adhere to similar principles. Leaders of each organ-specific committee, organ procurement organization (OPO) leadership, and some Board leadership will be included in this newly created committee. This committee is tasked with making recommendations by April 1, 2018.

2. TSAM Request

Summary of discussion:

The Thoracic Committee began the process of finalizing the request for the Thoracic Simulation Allocation Modeling (TSAM). This modeling will be performed by the Scientific Registry of Transplant Recipients (SRTR). The immediate focus is placed on modeling the emergency change to lung distribution that was implemented in November.

The Thoracic Committee will be requesting SRTR for TSAM on distribution schemes at a variety of nautical miles away from the donor hospital. This draft request includes the following:

- First Share to:
  - DSA
Committee members noted that there was initial discussion to have the draft request include First Share to 50 nautical mile increments. However, 50 nautical miles would very likely fall within the DSA in the first place, which negates the purpose of including DSA as a baseline, and would also likely fail to demonstrate noticeable positive effects.

One committee member expressed two concerns: population density and coastal centers. As for designing units of distribution around population density (instead of static circles), SRTR representatives responded that this type of analysis is complex, and it was outside the current timeline to analyze such data. In particular, the inclusion of such complex analyses would prevent the January 2018 target data for receiving the results of the TSAM. SRTR representatives voiced their agreement that the above draft request was reasonable for an initial, quick round of modeling. Committee leadership further voiced that more complex modeling could take place after this initial round as necessary. As for coastal geographies, committee members explained they are concerned that there may be a disadvantage for transplant programs on either coast, as a portion of their sharing circle extends into the ocean, and because populations tend to be denser in coastal cities. Previous inquiries made into this topic during heart sharing discussions yielded some analysis that minimized the concern for heart distribution. It is possible similar analyses could be completed for lung distribution.

Another committee member questioned whether discard rates could be included in the TSAM analysis. With regard to discard, SRTR makes assumptions based on how many offers it takes to place organs. TSAM cannot make predictions about changes in acceptance behavior or listing practice, both of which would affect discard rates. As such, TSAM is not a tool that can answer questions about discard rates.

A committee member advocated for a shorter distance to be included in the TSAM request out of concern that moving to longer distances for the first share may increase discard rates based on ischemic times. From an OPO standpoint, there is also a concern with cost and travel times with no real change in how many people are transplanted within a given amount of time. As such, it may be worthwhile to examine a nautical mile range under 150, particularly a distance that more likely lends itself to travel by vehicle rather than plane. This committee member voiced that the practical difference between 150 and 250 nautical miles is somewhat marginal, while the practical difference between – for example – 50 and 150 nautical miles is substantial. Another committee member did not advocate for this, as 50 nautical miles would be a distinct disadvantage to programs where the current DSA is currently larger than 50 nautical miles. Nevertheless, the Thoracic Committee felt it would be important to model a shorter distance for comparison purposes. As such, 75 nautical miles will be included in the draft request.
Additional discussion took place on differences between pediatric and adult lung allocation, namely how Zone A would function between the two. Currently, pediatric lung Zone A is 250 miles. However, the committee discussed TSAM analysis in which it would mirror the adult lung draft request. Committee leadership agreed that the pediatric Zone A should mirror adult Zone A.

3. Heart-Lung and Sensitized Candidates

Summary of discussion:
The proposal being put out by the Thoracic Committee in January 2018 will also address key components of policy that should be updated as a result of the emergency changes. The two key areas of policy that require policy change in light of the emergency changes are heart-lung transplant policy and sensitized candidates. Between the two, heart-lung will prove the more complicated to tackle.

Currently heart-lung policy states that when a heart-lung candidate is allocated a heart, the lung from the same deceased donor must be allocated to the heart-lung candidate. In addition, when the heart-lung candidate is allocated a lung, the heart from the same deceased donor may only be allocated to the heart-lung candidate if no suitable Status 1A isolated heart candidates are eligible to receive the heart. The Thoracic Committee issued a Heart-Lung Guidance Document for OPOs to clarify the then-current heart-lung policies in 2014. It is important to note that this guidance document will also need to be updated as it mentions DSA. In the meantime, it may be advisable to remove the guidance document from the OPTN website until changes are made.

Recommendations include the following:

- Keep the current heart-lung policy as written
- Update the heart-lung guidance to equate heart Zone A with lung Zone A+B and remove mention of the DSA
- Change approved but not yet implement heart-lung policy
  - Options here include minor changes, starting from scratch, and only driving off the heart list

Heart-lung will remain the focus for the upcoming meeting’s discussion, with sensitized patients following later.

Upcoming Meeting

- December 14, 2017
- December 21, 2017
- December 28, 2017
Attendance

- **Committee Members**
  - Kevin Chan
  - Ryan Davies
  - Rocky Daly
  - Greg Ewald
  - Chad Ezzell
  - Jeff Goldstein
  - Shelley Hall
  - Matthew Hartwig
  - Erika Lease
  - Tania Sherrod
  - Kurt Shutterly
  - Mark Barr
  - Maryjane Farr
  - Karen Lord
  - Donna Mancini
  - Masina Scavuzzo
  - Nirav Raval
  - Maryam Valapour
  - Jennifer Murieett

- **HRSA Representatives**
  - Joyce Hager
  - Marilyn Levi
  - Jim Bowman

- **SRTR Staff**
  - Katie Audette
  - Melissa Skeans
  - Monica Colvin
  - Bert Kasiske
  - Noelle Hadley

- **OPTN/UNOS Staff**
  - Liz Robbins
  - Rebecca Lehman
  - Shyny Mohan
  - Leah Slife
  - Anne Paschke