OPTN Kidney & Pancreas Transplantation Committee Continuous Distribution Workgroup
Meeting Summary
January 15, 2021
Conference Call

Silke Niederhaus, MD, Chair
Rachel Forbes, MD, Vice Chair
Vince Casingal, MD, Chair
Martha Pavlakis, MD, Vice Chair

Introduction

The Kidney & Pancreas Transplantation Committee Continuous Distribution Workgroup (the Workgroup) met via Citrix GoToMeeting teleconference on 1/15/2021 to discuss the following agenda items:

1. Welcome & Review of Project Goals
2. Recap of 12/18 Meeting
3. Overview & Discussion: Assign Values to Attributes and Related Data Requests
4. Next Steps

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

1. Welcome & Review of Project Goals

The Workgroup reviewed the scope of the Continuous Distribution project, which is to change allocation from a classification-based system to a points-based system. The Workgroup is transitioning to the second phase of the project where they will be assigning values to the kidney and pancreas attributes and creating a concept paper.

Summary of discussion:

There was no discussion.

2. Recap of 12/18 Meeting

During the Workgroup's last call, the Workgroup completed discussions regarding identifying and categorizing kidney, pancreas, and kidney-pancreas attributes. The Workgroup also suggested collaborating with the following Workgroups/Committees for further discussion:

- Multi-Organ Transplant (MOT) Workgroup
  - KP vs. Pancreas vs. Islets (Medical Urgency)
- Living Donor Committee
  - Prior Living Donor (Patient Access)

Summary of discussion:

A member suggested that there's some value in establishing some sort of safety net for dual thoracic and kidney transplantation. A Workgroup Chair mentioned that there is an MOT Workgroup that is working on where multi-organ allocation falls in continuous distribution and, while this project doesn't necessarily address multi-organ allocation, it will create a foundation for it to be easily addressed when it's ready. The Chair continued by stating that there will be guidance on multi-organ procurement for

the lung-kidney and, as part of that, this Workgroup will be asked to add in the lung-kidney safety net. The Chair explained that this Workgroup will be able to add safety nets for other organs, similar to the liver safety net, into the continuous distribution model once the MOT Workgroup gains national consensus on their MOT policy.

Scientific Registry for Transplant Recipients (SRTR) staff mentioned that SRTR can't simulate multi-organ transplants, so the Workgroup should keep this in mind.

A Workgroup Chair emphasized that there's an urgency for multi-organ policy and inquired if the MOT Workgroup is discussing timelines for a possible heart-kidney safety net. A Workgroup Chair explained that it's not just about a safety net and, when the Simultaneous Liver-Kidney (SLK) safety net went into place, it was simultaneous with listing criteria for end stage liver patients who may or may not need a kidney. The Chair also mentioned that, currently, some of the allocation specifics regarding how the multi-organ process flows is decided by the Organ Procurement Organizations (OPO). A member mentioned that, during the last Policy Oversight Committee (POC) meeting, the following three scenarios were discussed: (1) try to implement MOT policy before continuous distribution, (2) wait until all the organs implement continuous distribution to implement MOT policy, or (3) address MOT policy and continuous distribution simultaneously. The Chair mentioned that this Workgroup doesn't need to address MOT further in this setting because it's going to be done in parallel with continuous distribution and the Workgroup will get updated.

A Workgroup Chair wanted clarification on whether there will be any changes to heart-kidney before continuous distribution is implemented. A Workgroup Chair mentioned that continuous distribution is under different timelines for different organs, so there isn't one implementation date. It was explained that these MOT discussions are currently ongoing and the implementation of MOT policy will depend on the progress the MOT Workgroup is making.

A Workgroup Chair mentioned that there are two issues with multi-organ: (1) allocating organs at the same time and (2) the safety net. Currently, the Workgroup doesn't have data on safety nets for other organs to model in the future and OPOs handle MOT placement in a different fashion that doesn't fit into the scope of work for this Workgroup. However, the Workgroup needs to monitor the MOT Workgroup's work appropriately to see how it affects the kidney list and to be able to create a framework that allows easy integration of MOT policy.

3. Overview & Discussion: Assigning Values to Attributes & Related Data Requests

The Workgroup reviewed what the second phase of the continuous distribution project will entail and assessed what they will need from United Network for Organ Sharing (UNOS) staff to help answer the following questions:

- How do we convert attributes to points?
- What data can help make these decisions?

The goal of the second phase of the continuous distribution project is to create a single score, known as the Composite Allocation Score, used to rank candidates on a match run.

The Workgroup was also presented with the following questions to initiate potential data requests that will be used in the creation of rating scales and weights:

- Does the Workgroup want to update the rating scales the Lung Committee is using for blood type and calculated panel reactive antibodies (CPRA) with data for kidney and pancreas?
- Are there special considerations needed for these organs, but not lung?
    - i.e., non-A1/non-A1B to B kidney candidates

Summary of discussion:

Assigning Values to Attributes

A Workgroup Chair suggested that it would be interesting to see what the match run looks like currently compared to what it looks like after continuous distribution has been implemented. Staff mentioned that there would be value in looking at that comparison, since current allocation really emphasizes proximity to the donor hospital in a way the community isn't really wanting.

A Workgroup Chair questioned the difference between weights and rating scales. Staff explained that a helpful analogy is homework. The rating scale is how an individual is scoring on a single homework assignment and the weight is how impactful homework assignments will be on the overall grade.

A Workgroup Chair questioned if most of the rating scales are going to be linear scales or if there's a potential for logarithmic scales. For example, wait time would increase by one point each year in a linear fashion; however, some of the attributes reach a point where a linear scale wouldn't allocate the appropriate amount of priority points for the increased importance. Members agreed with this idea and staff mentioned that proximity to donor hospitals is one of the attributes that may need another shaped scale instead of linear.

Related Data Requests

A member explained that, when blood group was included in continuous distribution, they thought the only area of importance was in the non-A1/non-A1B donors. Another member mentioned that another area for consideration is what is considered ABO identical and ABO permissible, since there are situations where transplant professionals don't just want blood type to be ABO compatible. For example, blood group O organs shouldn't go to blood group compatible candidates, but instead should go to blood group identical candidates. It was emphasized that these blood group relationships need to stay in the continuous distribution system.

A Workgroup Chair explained that this is an even larger issue in the pancreas community than it is in the kidney community. For example, pancreas blood group O candidate's waiting time is significantly longer than it is for blood group AB pancreas candidates. Transplant centers wouldn't want a blood group O organ to go to a blood group AB pancreas candidate just because it's permissible and they already have a lot less waiting time. In this situation, centers should use blood group AB organs that blood group O candidates can't use.

A Workgroup Chair also explained that, in the pancreas community, some pancreata are recovered locally, which begs the question whether it is better for that pancreas to be utilized locally in a non-blood group identical recipient or if the pancreas should be offered within the allocation circle. It was noted that acceptance rates are vastly different for locally recovered organs than others. A Workgroup Chair mentioned a second concern which is when cold ischemic time expires on a pancreas at the end of allocation, if that pancreas is at risk of being discarded, it should be allowed to be used in any blood group compatible candidate.

A member mentioned that in the last iteration of the Kidney Allocation System (KAS) there was an ability to allocate blood type A2 kidneys to blood type B kidney candidates because these candidates have such long wait times. The member noted that the Workgroup has two options: (1) continue allocating blood type A2 kidneys to blood type B kidney candidates, or (2) give the blood type B kidney candidates a much higher wait time. A member suggested that there are ways to make up for this in the continuous distribution system, such as basing blood type allocation on wait time, because there are scenarios where a blood type B kidney candidate will show up before a blood type A candidate after recently being listed.

Staff informed the Workgroup that blood type limits the amount of match runs a candidate shows up on, so the idea is that the Workgroup would give certain blood types some type of priority in order to ensure the blood type O candidate shows up above the blood type AB candidates since they're not going to get many offers just by virtue of their blood type. Staff also stated that what lung has done regarding blood type will at least be a starting point for this Workgroup.

The Workgroup discussed potential literature and data to review related to:

- HLA
    - Benefit: increased post-transplant survival
    - Cost: disparate access for non-white candidates
- Pediatric Access
    - New to pancreas allocation
    - Which children need a pancreas?
    - What does pediatric access to pancreata look like now?
    - How does pediatric priority work for kidney?
    - How does kidney access compare to pancreas?
- Travel (cost) Efficiency
    - Surrogates of ischemic time
    - What organs fly vs. not fly?
    - Figure out what data is available to answer "what is the cost?"

A member noted that the Workgroup doesn't know whether the HLA-DQ loci matching is disadvantageous for non-white candidates because the data hasn't been reviewed. The member emphasized that the Workgroup will have to do their due diligence before coming up with the rating scales.

A member stated that, currently, points are being allocated for HLA-DR matching and suggested that data should be gathered on HLA-DR matching as well, before introducing another variable to assign or subtract points for HLA matching.

A Workgroup Chair mentioned that the Pancreas Continuous Distribution Workgroup has also had conversation about giving priority to pediatric candidates and changing the sensitization to be more aligned with what kidney has done in the recent KAS. However, they were hoping for more granularity to assign priority as well as pediatric priority, so the Chair suggested it would be helpful to see the priority in the current system before the Workgroup tries to move forward with these changes.

The Chair mentioned that there are some children who have diabetes and their kidney fails due to an unrelated cause, but have little access to a kidney-pancreas (KP) transplant – these patients have access to a kidney, but can't receive a pancreas at the same time. The Chair suggested looking at access for those pediatric KP candidates and compare it to access for pediatric kidney alone candidates.

A member expressed concern that a lot of these attributes are focused on the candidate; however, for pediatric patients, there are some donor attributes that might change how important the candidate attributes would be. Staff mentioned that looking at donor attributes is relatively new for kidney allocation, but the goal of this project is to make sure that patients are being prioritized appropriately and pediatric patients is one of the key focus groups for the Workgroup.

4. Next Steps

Workgroup members should review the list of attributes, thinking about the following questions:

- What questions do we need to answer in order to decide how to incorporate this attribute in a composite allocation score?
- Is there relevant literature on the attribute the Committees should review?

Upcoming Meetings

- January 29, 2021 (Teleconference)

Attendance

- **Committee Members**
  - Vince Casingal
  - Silke Niederhaus
  - Martha Pavlakis
  - Rachel Forbes
  - Abigail Martin
  - Alejandro Diez
  - Amy Evenson
  - Arpita Basu
  - Beatrice Concepcion
  - Caitlin Shearer
  - Cathi Murphey
  - Jeffery Steers
  - Parul Patel
  - Peter Kennealey
  - Pradeep Vaitla
- **HRSA Representatives**
  - Jim Bowman
  - Raelene Skerda
- **SRTR Staff**
  - Ajay Israni
  - Bryn Thompson
  - Jonathan Miller
  - Nick Salkowski
- **UNOS Staff**
  - Joann White
  - Lindsay Larkin
  - Rebecca Brookman
  - Kayla Temple
  - Ross Walton
  - Tina Rhoades
  - Alison Wilhelm
  - Amanda Robinson
  - Ben Wolford
  - Jen Wainright
  - Joel Newman
  - Kerrie Masten
  - Lauren Motley
  - Leah Slife
  - Matt Prentice
  - Melissa Lane
  - Nang Thu Thu Kyaw
  - Roger Brown
  - Sara Moriarty