

## **OPTN Organ Procurement Organization (OPO) Committee**

### **Meeting Summary**

**March 28, 2022**

### **Go To Meeting**

**Kurt Shutterly, RN, CPTC, Chair**

**PJ Geraghty, MBA, CPTC, Vice Chair**

## **Introduction**

The OPTN Organ Procurement Organization (OPO) Committee met via Microsoft Teams Teleconference on 03/28/2022 to discuss the following agenda items:

1. Introduction and Rules of Engagement
2. Review of AHP Reports
3. AHP Attributes Discussion

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

### **1. Introduction and Rules of Engagement**

The Committee reviewed the goals of the meeting discussion as well as ground rules for engagement.

#### Summary of discussion:

The Committee had no questions or comments.

### **2. Review of AHP Reports**

The Committee reviewed the results of the

#### Overall AHP Exercise Results Summary:

Participation: 34 OPO professionals participated in the Kidney AHP exercise, and 32 participated in the Pancreas AHP exercise. Some participants were from the same OPO while others were the only participant from their OPO, with participation around the country and diversity in donor service area (DSA) size and geographically.

#### *Pancreas AHP Results – OPO participants*

- Biologically Difficult to Match – 27.2 percent
- Long Waiting Time – 10.4 percent
- Prior Living Donors – 22.9 percent
- Pediatric Candidates – 17.7 percent
- Very Nearby Candidates – 11.4 percent
- Whole Pancreas, Not Islets – 9.4 percent

#### *Kidney AHP Results – OPO participants*

- Medically Urgent Candidates – 25.1 percent
- Biologically Difficult to Match – 17.5 percent
- Long Waiting Time – 7.9 percent
- Kidney After Liver Safety Net Candidate – 5.4 percent
- Prior Living Donor – 16.5 percent

- Pediatric Candidate – 11.5 percent
- Longevity-Matched Candidate – 8.1 percent
- Very Nearby Candidate – 7.0 percent

For both the Kidney and Pancreas exercises, OPO participants had more extreme results for Pediatric Candidates and Very Nearby Candidates (Placement Efficiency), compared to the overall results and other participant types, with lower weighting for pediatric and higher weighting for placement efficiency attributes.

#### Summary of discussions:

One member remarked that the differences between OPO participants and the overall results were very small. The member explained that their mindset, in completing this exercise, was focused on the practicalities of allocating and transporting a kidney to its intended recipient, and that this is always easier for a closer candidate than one across the state.

A member noted that transplantation rates are seemingly declining for pancreata, and so pediatric priority seems less relevant in pancreas allocation. Another member agreed, adding that pediatric pancreas transplantation is very uncommon, and typically is part of a multi-visceral transplant.

One member remarked that few surgeons are comfortable procuring pancreata, and accepting programs often need to procure their own pancreata. In these cases, if the program isn't nearby, the pancreas may not be utilized. Another member agreed, commenting that programs willing to procure pancreata themselves should be prioritized. The member emphasized that utilization is higher when the accepting program can procure and evaluate themselves, as opposed to receiving an offer via phone call. The member explained that often, liver teams procuring the pancreata can exaggerate how fatty or edematous the liver is, which can significantly decrease the organ's chance of utilization. Several members agreed that accepting program recovery improves utilization. One member added that patient and graft outcomes are better with less cold time, and that this is more easily achieved with a closer candidate. Members agreed that placement efficiency needs to have significant weight in pancreas, KP, and pancreas-islet allocation.

The Chair expressed that these numbers reflect OPO experience. The Chair pointed out that pediatric donor kidneys are rarely placed with pediatric candidates, and noted additionally that there are considerable challenges to efficient allocation in the current circles-based allocation system. The Chair added that reallocation in the circles-based system is more difficult in some ways.

One member shared that pediatric kidney candidates in their program and donor service area receive fewer offers in the circles-based system. The member explained that, previously, pediatric candidates would receive offers from rural donor hospitals within their DSA; in the circles based system, those pediatric candidates appear on the match run with candidates much further away.

A member remarked that practicality of allocation and transportation are hard to account for in an AHP exercise. The member explained that prioritizing candidates with other attributes over those nearby, there will likely be longer cold ischemic times, increased delayed graft function and primary non-function, potential decreases in utilization, and generally worse results long-term. Staff agreed, and shared that the Lung Committee experienced a similar dynamic in reviewing results from their own AHP exercise. Staff noted that these weights are meant to be a starting point, from which the Kidney and Pancreas Committees can begin more finalized discussions. Another member pointed out that OPOs understand logistics differently, and often unaccounted for factors beyond distance, such as time, cost, and wastage, that play a major role in transportation and allocation efficiency. The member continued

that these differences in understanding are evident in different weights given to placement efficiency by the various participant types.

The Vice Chair remarked that the logistical challenges of transporting organs can and has resulted in non-utilization. The Vice Chair continued that OPO staff deal with these issues every day, and therefore have a much deeper understanding of efficiency and logistic considerations.

One member explained that lung allocation and transportation has a much smaller scale and fewer challenges than kidney allocation and transportation. The member pointed out that kidney transportation relies on a completely different transportation infrastructure, and there are many more transplant programs involved in placing a kidney. The member emphasized that the number of transplant centers an OPO needs to interact with to place the kidney impacts allocation efficiency, as does the amount of blood needed for pre-recovery crossmatching and related costs for shipping. The member continued that the density of the area an OPO operates in, both in terms of transplant centers and donors, should be accounted for in considering efficiency.

Another member agreed, remarking on the extreme difficulties of air transportation for kidneys, particularly as cargo on commercial airlines. The member continued that challenges vary between airports of various sizes, making logistics extremely complicated. The location of the donor hospital, proximity to the airport, and the connecting airports to the candidate's transplant program all present individual considerations to air transportation logistics.

A member expressed the importance of donor quality in how effectively an organ is placed, explaining that time is much more important for high KDPI kidneys. Members agreed that donor characteristics need to be incorporated into efficiency considerations.

One member highlighted the importance of pre-recovery efficiency measures, particularly with respect to cross matching, offer monitoring, and early notification. The member emphasized efficiency considerations for transplant programs with distant candidates who may need to coordinate their own travel logistics to receive a transplant.

### **3. AHP Attributes Discussion: Placement Efficiency**

The Committee reviewed and discussed AHP results and public comments regarding placement efficiency in continuous distribution.

#### Presentation Summary:

##### Major Themes in Public Comment

- Hard-to-place kidneys
- KDPI and EPTS weighting
- Pancreas allocation and transportation efficiency
- Transportation challenges
- Transplant center/donor density
- Transplant center back-up
- Regional and geographic disparities
- Donor characteristics
- Cold time and recipient outcomes

##### Public Comment: Rating Scale Feedback

- Support for piece-wise linear approach
- Regional inequities in transplant center and population density impact allocation efficiency

- Geographic disparities

Public Comment: High KDPI, Hard to Place Kidneys, and Alternate Solutions

- “Organs from medically complex donors should be kept closer to donor hospitals to minimize impact of travel time on outcomes”
- Support to weight placement efficiency inversely with respect to KDPI
- Support for:
  - Transplant center density – distance parameters have unequal effects on various regions of the country
  - Transplant center, or smaller back-up
  - Flexibility in dual kidney allocation
  - Donor characteristics to influence attribute weights

Summary of discussion:

One member remarked that rules of engagement should be heavily considered, particularly with regard to the pre-recovery expectations of transplant programs and their responsibility in reviewing offers. The member noted that these expectations need to include vetting the offer with decision makers, checking the availability of their patient, and committing to performing the final crossmatch as early as possible. The member continued that placement efficiency is significantly impacted when transplant programs hold up allocation until the kidney is recovered. Other members agreed, adding that clear expectations and appropriate tools will have the biggest impact to allocation efficiency. Staff shared that there are active and ongoing efforts to address these issues and rules of engagement by the OPTN Operations and Safety Committee.

A member agreed, adding that rules of engagement should also include considerations for pre-recovery crossmatching material distribution. One member responded that each donor has a finite amount of tissue typing material to send, particularly with pediatric donors. Another member agreed, reiterating that each donor has a different and limited amount of crossmatching material that can safely be drawn and sent out to evaluating transplant centers. The member remarked that transplant centers have responsibilities even before receiving that sample. The member provided an example, explaining that some programs request crossmatching material before calling the surgeon to review the case, and end up declining before even receiving the blood. The member noted that virtual crossmatching technology is widely available, and that transplant program responsibility needs to be emphasized. Another member responded that certain programs have additional challenges, particularly those with candidates living greater distances from the hospital. The member remarked that OPOs have similar responsibilities in communicating with transplant programs, particularly in notifying their rising rank in the match run. Several members agreed there are challenges with notification for both transplant programs and OPOs.

Staff asked the workgroup what characteristics define hard to place organs, and whether it is appropriate to place increased emphasis on placement efficiency for these organs. One member supported placing more emphasis on placement efficiency for medically complex kidneys, and noted that OPOs should be allowed to continue allocating these organs. Another member agreed.

One member remarked that the longer the allocation goes, the longer cold ischemic time an organ has, the harder it becomes to place and the less likely the organ is to be utilized. The member remarked that specific donor characteristics have extreme effects on placement efficiency, and that a kidney with a KDPI of 20 cannot be allocated the same way as a KDPI 85 percent kidney, as the effects of cold ischemic time are much more pronounced on the latter. The member added that a KDPI 20 percent kidney with

surgical damage still may face similar challenges to allocation as a KDPI 85 percent kidney, and so allocation efficiency may not look the same across the board.

Staff asked how allocation would be affected if cold ischemic time could dynamically impact the weight of placement efficiency. A member responded that the current allocation system is very statically driven, and does not account for efficiency over time. The member continued that a center who may have been willing to accept a KDPI 70 kidney at cross clamp may not want to accept that same kidney at 8 hours of cold time. The centers who would accept that kidney at that level of cold ischemic time are difficult to get to because they are further down the list. The member noted that there needs to be emphasis on whether transplant programs accept organs they have chosen to receive offers on. Members agreed that accountability for transplant programs and use of filtering and screening tools is critical to allocation efficiency.

A member pointed out that efficiency is more than just proximity to donor hospital, and that placement efficiency needs to consider where the organs are during allocation and how the organs will be transported. The member provided an example, noting that their procurement team will travel to distant rural areas to recover organs, and take the kidneys back with them to an urban area near a major airport. This could be similar to the current practice for kidneys from Alaska, where Alaska kidneys are allocated from the Seattle airport, as there are no transplant hospitals in the state. The member added that it is important for transplant programs near these rural donor hospitals to have access to organs procured at nearby donor hospitals, but that something should be considered for harder to place kidneys. The member recommended the consideration of some kind of threshold based on KDPI or high cold time or something similar, at which allocation rules change to prioritize utilization.

One member commented on the driving, flying, and uncertainty zones, noting that these zones require more nuance than just miles. Availability, proximity to major airports, and other elements can impact the efficiency of air travel. The member remarked that ground travel is preferential, particularly for hard to place kidneys. The member continued that air transportation is riskier and the commercial air transportation system in general is very unreliable. The member added that a kidney traveling via ground transport can be easily rerouted if there is a sudden late decline. One member agreed, pointing out that driving and flying zones are also impacted by geography, as Philadelphia donor hospitals can easily access many transplant centers by car, while a donor hospital in rural Montana may not be able to do so.

The Chair remarked that his OPO tries not to fly organs anywhere, and will typically drive to any center within 500 nautical miles. Another member agreed, noting that their OPO uses ground transportation up to 500 nautical miles as well. One member shared that their OPO is central to many transplant programs, and that air transportation is not typically necessary even for hard to place kidneys.

Staff asked the Committee what donor characteristics define a hard to place kidney, and how these characteristics could be used to increase placement efficiency's weight. One member shared that KDPI 60 percent or higher kidneys are typically more difficult to allocate, as well as DCDs age 50 or older. Another member agreed, adding that KDPI should be updated to be as comprehensive and reflective as possible of every appropriate variable. The member continued that it is nearly impossible to capture and categorize every donor characteristic, but that KDPI could capture most of the important variables of what makes a kidney difficult to place. A member agreed, noting that KDPI is currently not that comprehensive, and likely will not be updated before implementation.

One member remarked that KDPI is a poor measure of kidney function, but that it is the most available measure. The member recommended varying the weighting of placement efficiency, such that a lower KDPI kidney focuses less weight on the attribute, but proximity becomes more important as KDPI

increases. Another member noted that KDPI needs to be more dynamic, and able to change with post-recovery information. The member continued that real time data needs to be accounted for in placement efficiency.

A member concluded that transplant center accountability and expectations, as well as improved and mandatory offer tools will make strides in allocation efficiency. Transplant centers have a role in efficiency as well, particularly in the compounding offer review time.

#### **4. AHP Attributes Discussion: Pediatric**

The Committee reviewed and discussed AHP results for pediatric priority.

##### Presentation Summary:

OPO professionals weighted kidney pediatric priority at 11.5 percent, much lower than all participants' weighting of 16.5 percent. Similarly, OPO professionals weighted pancreas and KP pediatric priority at 17.7 percent, lower than the all participant average of 24.4 percent.

##### Summary of discussion:

One member noted that, as an OPO participant, there is less distinction amongst "top of the list" candidates like pediatrics, medically urgent, or prior living donor.

A member shared additional placement efficiency considerations for pediatric pancreas patients, which are typically multi-visceral candidates. The member explained that they placed higher priority there because 3 or 4 organs can be placed at a time, ensuring efficiency and utilization. The Vice Chair added that these multi-visceral pediatric transplants usually come from pediatric donors, so there is typically less of an issue with allocating pediatric organs to adult candidates.

The Vice Chair commented that pediatric kidneys are almost never placed with pediatric candidates. The Vice Chair noted that some pediatric programs are potentially overly conservative in their acceptance practices, and decline seemingly acceptable low KDPI adult kidneys for less clinically meaningful risk factors.

The Vice Chair remarked that pediatric candidates are at greater risk of long-term consequences than adult candidates, but medically urgent prior living donor should take precedence with increased short-term consequences. Another member noted that many pediatric patients may have a willing living donor, but the same may not be true for a prior living donor.

One member shared that, in the previous allocation system, the pediatric program in their area would receive kidney offers from donors in their donor service area. Now, these donor hospitals are far outside of the 250 NM circle, and so pediatric candidates in their program are given similar ranking as those outside of the 250 NM at much greater distances. The member noted that there is decreased access for pediatric patients to donors they previously had priority for.

Staff asked the Committee whether pediatric or prior living donor candidates should have equal priority, or if one should be weighted more highly than the other. One member remarked that this seems to be somewhat of a delicate choice. The member remarked that pediatric candidates could potentially have slightly greater weight if those patients generally recover better with the transplant. Another member shared that there are significant benefits – particularly from a developmental perspective – to transplanting a pediatric candidate as quickly as possible, so they are not on dialysis for an extended period of time. The member added that they would prioritize pediatric candidates in this case.

A member asked whether there were similar populations of pediatric and prior living donor candidates on the waiting list. Staff clarified that the prior living donor population is very small and infrequent, but that they are given high priority.

**Upcoming Meetings**

- April 20, 2022 (Teleconference)

## Attendance

- **Committee Members**
  - Kurt Shutterly
  - PJ Geraghty
  - Diane Brockmeier
  - Debra Cooper
  - David Marshman
  - Bruce Nicely
  - Meg Rogers
  - Jeffrey Trageser
  - Samantha Endicott
  - Mary Zeker
  - Larry Suplee
  - Jill Grandas
  - Catherine Kling
  - Chad Ezzell
  - Valerie Chipman
  - John Stallbaum
- **HRSA Staff**
  - Marilyn Levi
  - James Bowman
  - Raelene Skerda
  - Vanessa Arriola
  - Adriana Martinez
- **SRTR Staff**
  - Katie Audette
  - Matthew Tabaka
- **UNOS Staff**
  - Robert Hunter
  - Kayla Temple
  - Amanda Robinson
  - Lindsay Larkin
  - Ross Walton
  - Alesha Henderson
  - Joann White
  - Sarah Booker
  - Rebecca Brookman
  - Darren Stewart
  - James Jobes
  - Katrina Gauntt
  - James Alcorn
  - Lauren Mauk
  - Kaitlin Swanner
  - Darby Harris
  - Meghan McDermott