

**OPTN Histocompatibility Committee
Meeting Summary
September 13, 2022
Conference Call**

**John Lunz, PhD, D(ABHI), Chair
Gerald Morris, MD, PhD, Vice Chair**

Introduction

The Histocompatibility Committee (the Committee) met via Citrix GoToMeeting teleconference on 09/13/2022 to discuss the following agenda items:

1. Offer Efficiency
 - Redefining Provisional Yes Concept Paper
 - Optimize the Use of Kidney Offer Filters Concept Paper
2. Candidate Equity
 - Transparency in Transplant Program Selection White Paper

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

1. Offer Efficiency

- Redefining Provisional Yes Concept Paper

The Chair explained that "Provisional Yes" is defined as when the transplant hospital notifies the OPTN or host organ procurement organization (OPO) that they have evaluated the offer and are interested in accepting the organ or receiving more information about the organ. This project seeks to improve processes to increase the efficiency of the organ offer, review, and acceptance system and reduce overall organ allocation time. The Operations and Safety Committee produced a concept paper that introduced a concept of a three-tiered framework that aims to provide outlined requirements for transplant programs and allow transparency across OPOs and transplant programs.

The Chair explained the Operations and Safety Committee is looking for feedback on the three-tiered framework and associate responsibilities, time limit on offers within each tier, and the number of offers that can be sent within each tier.

The Chair explained the Tiered Framework:

- Tier III

Transplant programs evaluate organ offers to see if the offer immediately meets any of their program's refusal reasons. This would streamline how notifications are sent and notify OPOs of offers that are turned down. A transplant program would receive an electronic offer and provide a response.

- Tier II

In addition to the requirements in Tier I, transplant programs assess the candidate's medical suitability and notify OPOs of any additional information needed for testing or evaluation. This tier would include additional back up offers, one offer for each organ available, and a one-hour time limit on offers.

- Tier I

In addition to the requirements in Tier I and Tier II, transplant programs assess histocompatibility and confirm candidate availability for transplant. There would be primary and back up offers with one offer sent for each organ available. This would include a one-hour time limit on the first offer and 30 minutes for subsequent offers.

- Optimize the Use of Kidney Offer Filters Concept Paper

The Chair explained the goal of this concept paper is to develop a more broadly utilized offer filter model that will create multi-factorial offer filters to filter off organ offers more precisely. This will first address kidney offer filters, then eventually offer filters for all organs. The concept paper increases awareness on the benefit of offer filter usage and updates the community on the Operations and Safety Committee's work on kidney offer filters, while asking for feedback on potential offer filter options: default and mandatory options.

The Chair explained that default filters would involve recommended offer filters turned on by default and allow transplant programs to have the ability to turn off filters and/or adjust recommended offer filter criteria. He explained that mandatory offer filters would develop a pathway to demonstrate change in behavior and uses model filter to develop more restrictive criteria, either using distance, cold ischemia time, or a mixture of all criteria.

The Operations and Safety Committee asked for feedback on:

- Should OPTN policy promote increased filter use? If so, which option outlined in the concept paper do you support?
- What is the appropriate threshold for applying a filter?
- Should the filter be mandatory? If so, can a program request removal under certain circumstances?
- Should the filter be removable by the program? If so, should the filter reset if the center continues to decline the organs?
- Should certain hard to match candidates never be subject to having offers filtered?
- How often should the acceptance data be re-evaluated for transplant programs to adjust the model identified offer filters?

Summary of discussion:

- Redefining Provisional Yes Concept Paper

A member voiced concern about the 1.5-hour timing in tier I since a histocompatibility assessment can mean a lot of different things based on center. She noted a physical crossmatch and antibody testing at a rapid rate would likely take hours, and these are at times performed by all centers. UNOS staff asked about the associated workload and feasibility of the histocompatibility assessment within this proposal. A member responded that this relates to the first offer and acceptance using the UNOS refusal codes and there is no time for additional testing here. He noted at his center they use a three-tiered system for crossmatch that takes much longer than 1.5 hours.

A member stated it would be advantageous for a program to designate a primary and some back-up options in tier II. Another member suggested these tiers be used for time allowed to place refusal codes based on the risk assessment they have now, and additional testing would need to be completed after. A member recommended placing virtual crossmatching in tier II to make this more feasible, and another member stated there needs to be a balance between not taking too much time and having enough time to assess histocompatibility. The Chair vocalized concern with this because programs would need to

determine patients are medically suitable and available to transplant prior to asking for a histocompatibility assessment.

UNOS staff asked about the use of other antibody specificities to have a multi-tiered histocompatibility assessment. A member stated this is good in theory, but it is complicated because some centers require a physical crossmatch to occur for a specific set of patients while the organ is already allocated. A member presented a scenario regarding a 100% CPRA patient on the list for 8 years with an inconclusive virtual crossmatch. He explained this would require a physical crossmatch that would require lymph nodes. Members agreed this would require a lot more than 1.5 hours to adjudicate these cases in tier I. A member suggested a caveat that requires response time in 1.5 hours unless additional histocompatibility is required, which would then give a program an 8–12-hour timeframe. Members suggested using CPRA as a metric to identify these patients that would require this.

A member questioned who identifies the backup offers. She voiced concern that time constraints would disadvantage highly sensitized patients because the short time frame will force programs who are not comfortable to move to different candidates that don't require a prospective crossmatch. A member stated the transplant program would choose the backup offer and the histocompatibility assessment is based on the information available then, not with additional testing. The member suggested accepting the organ for the highly sensitized patient with the provision that the crossmatch is negative to avoid time constraints and give labs this option to communicate this with the OPO. A member suggested standardizing how often centers test CPRA for patients and streamline the process to have this information readily available and current, and set a minimum standard.

- Optimize the Use of Kidney Offer Filters Concept Paper

The Vice Chair suggested allowing programs to opt out of filters for given patients. He noted matching patients with the same CPRA does not result in the same level of difficulty. Members stated there should be additional candidate opt out options based on candidate sensitization level, as opposed to a default level. A member suggested automatically removing filters for those with a CPRA of 98% or higher. A member argues there should be flexibility despite CPRA level because it varies based on region or locality. The Vice Chair agreed and stated there is varying criteria.

2. Candidate Equity

The Chair presented on a white paper that aims to ensure patient autonomy and shared decision-making through the transplant process. The paper examined the distinction between information and data that would aid in patient decision making, the role patients should have in determining which information they are interested in, and the education resources that can be provided to ensure that patients understand the information provided. The Chair explained the Committee found that the ethical principles of organ allocation support increased transparency, challenges that may arise when increasing transparency can be mitigated and should not deter centers from increasing transparency, and information ought to be provided in a way that is accessible and patient centered.

The OPTN Ethics Committee asked for feedback on:

- What factors are important to patients when selecting a transplant program?
- Do patients and transplant professionals think that it is important to share program specific listing criteria prior to transplant evaluation?
- What best practices have transplant programs developed for increasing transparency?
- Does the transplant community think this information, shared with patients, would strengthen the provider-patient relationship, and/or provide better care for patients?

Summary of discussion:

The Vice Chair stated it is fair for transplants to disclose how they handle highly sensitized patients. He noted that there are programs that have a high success rate for transplanting highly sensitized patients and programs that have successful outcomes for highly sensitized patients, but how that is shared with patients is complicated. A member stated histocompatibility data is very program specific, but programs can disclose success rate rather than how they determine CPRA. She stated the only issue with that is a high CPRA patient looks different between centers, and the Vice Chair argued there are national standards, and centers can disclose time to transplant for highly sensitized patients and show how they benefit these patients. A member stated the more informed patients are, the more proactive they will be. She also noted that patients want to know and understand how CPRA affects their chances of receiving an organ. The Vice Chair mentioned clarifying why highly sensitized patients may wait longer for an organ will allow for programs to provide metrics to show patients how programs can get them to transplant in plain language.

A member stated the main question is what is the likelihood of a compatible donor, and the answer needs to be disclosed by centers. He suggested using a formula that determines this to provide to the physician, which then they can provide to the patient. He explained his center does this specifically for patients with a CPRA higher than 98%. Another member agreed and suggested providing a level (high, medium, or low) that a patient will receive additional offers after a virtual crossmatch is completed and HLA type is determined. The Vice Chair asked about center metrics that should be provided to patients to help them determine where to list. UNOS staff asked about listing criteria that should be disclosed. The Vice Chair responded that it comes down to sensitization and using broad metrics such as how quickly highly sensitized patients are transplanted.

Upcoming Meetings

- October 7, 2022, in-person, 8:30AM CST

Attendance

Committee members:

- Amber Carriker
- Andres Jaramillo
- Caroline Alquist
- Gerald Morris
- Hua Zhu
- John Lunz
- Kelley Hitchman
- Lenore Hicks
- Laurine Bow
- Manu Varma
- Marcelo Pando
- Omar Moussa
- Peter Lalli
- Qingyoung Xu
- Reut Hod Dvorai
- Valia Bravo-Egana

SRTR Staff

- Katherine Audette

HRSA Representatives

- Jim Bowman
- Marilyn Levi
- Megan Hayden

UNOS Staff

- Amelia Devereaux
- Alex Carmack
- Courtney Jett
- Matt Belton
- Nadine Drumn
- Sarah Scott
- Susan Tlusty
- Taylor Livelli
- Thomas Dolan