OPTN Pancreas Transplantation Committee
Meeting Summary
July 17, 2023
Conference Call

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Introduction

The OPTN Pancreas Transplantation Committee (the Committee) met via Citrix GoToMeeting teleconference on 07/17/2023 to discuss the following agenda items:

1. Scientific Registry of Transplant Recipients (SRTR) Presentation of OASIM Results

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

1. Scientific Registry of Transplant Recipients (SRTR) Presentation of OASIM Results

The Committee was provided an overview of the results of the second Organ Allocation Simulator (OASIM) modeling request. The four pancreas scenarios modeled in the second OASIM request were selected with the objective of exploring different ratios of proximity efficiency to qualifying time while maintaining appropriately high access for high CPRA/pediatrics/prior living donor attributes.

The report was guided by questions grouped in the following categories: Placement efficiency, candidate biology, patient access, and other.

Data summary:

Placement efficiency

Question 1: What is the distribution of organ travel distance (assessed separately for kidney-pancreas (KP) and pancreas (PA))?

- Organ travel distance distributions for KP and PA show less of a hard boundary at 250NM under the continuous distribution scenarios compared to the simulation of the current policy.
- KP and PA median travel distance was lower under continuous distribution scenarios compared to the simulation of the current policy.
    - Particularly for scenarios "1.3:1", "1.6:1", and "2:1," which have the highest weights on proximity efficiency.

Question 2: When KP/PA travel farther, are they doing so to reach highly sensitized candidates, pediatric candidates, and/or candidates with long qualifying times?

- Variation across the simulation iteration makes it difficult to draw strong conclusions.
- Pediatric and older adult candidates showed longer median travel distance for KP and PA under continuous distribution scenarios compared to the simulation of current policy.
- Median travel distance was not notably different for other age groups from the simulation of current policy to the continuous distribution scenarios.

- Variation across the simulation iterations also makes strong conclusions difficult for the highest **calculated panel reactive antibody (**cPRA) categories.
- The cPRA categories above 0.8 showed greater median travel distance than the lower cPRA categories.
- The cPRA categories above 0.8 showed greater travel distance under the continuous distribution scenarios as compared to the simulation of the current policy.
- Median travel distance remains highest for KP and PA transplants to candidates waiting more than 2 years for all scenarios compared to candidates with less time waiting.
- Compared to the simulation of the current policy, the median travel distance was:
    - Slightly higher under the "1:1" scenario for candidates waiting more than 2 years.
    - Slightly lower under all other continuous distribution scenarios
    - Variation across simulation iterations make drawing strong conclusions difficult.

Candidate Biology

Question 1: How does access to transplant compare across cPRA groups?

- There were no substantial differences in transplant rates under the continuous distribution scenarios compared to the simulation of current policy for cPRA groups <= 0.98 or for cPRA > 0.999
- Transplant rates for cPRA groups 0.98 to 0.995 and 0.995 to 0.999 were notably higher under the continuous distribution scenarios compared to the simulation of the current policy.

Question 2: How does access to transplant by candidate blood type compare with access under the current system (expect no change given no ABO attribute, but would like to confirm)?

- There were no substantial differences in transplant rates from the simulation of current policy to the continuous distribution scenarios for any of the blood types either for:
    - Combined pancreas and KP transplants
    - KP transplants alone

Patient Access

Question 1: How does overall access to KP vs. PA transplant compare with access under the current system?

- Overall KP and PA transplant rates were relatively consistent from the simulation of current policy to the continuous distribution scenarios.
- KP rates were slightly lower under continuous distribution compared to the simulation of the current policy.
- PA rates were only slightly higher under continuous distribution compared to the simulation of the current policy.
- KP and PA transplant rates were higher for pediatric candidates under all the continuous distribution scenarios compared to the simulation of the current policy.
- All other age groups showed relatively consistent transplant rates from the simulation of current policy to the continuous distribution scenarios.

Question 3: Do candidates with the highest qualifying times receive transplants at a rate similar to the current policy? Higher than the current policy? Ideally, look at this separately for KP and PA, and would like to look at both qualifying time and time on the waitlist for KP (since KP qualifying time includes time on dialysis prior to listing).

- There is not a substantial difference in KP and PA transplant rates by waiting time from the simulation of current policy to the continuous distribution scenarios.
- For candidates with more than 2 years of waiting time, the KP and PA transplant rates were slightly higher under the "1:1", "1.3:1", and "1.6:1" continuous distribution scenarios compared to the simulation of current policy.

Other

Question 1: Do the proposed CD policies result in any new/unintended disparities in access to transplant for any of the following subpopulations: Geography, Age, Race, Ethnicity, Sex

- There are no substantial differences in KP and PA transplant rates from the simulation of current policy to the continuous distribution scenarios by race or by ethnicity.
    - Native American candidates showed very slightly lower KP and PA transplant rates only under the "2:1" continuous distribution scenario.
    - Latino candidates showed very slightly lower KP and PA transplant rates under the "1:1" continuous distribution scenario compared to the simulation of the current policy.

Summary of discussion:

A member noted that the results didn't include anything concerning and inquired how the Committee should select the best scenario to move forward with. The presenter agreed and replied that the scenarios had minor differences. Another member asked if the impact of organ non-utilization was looked at in any of the scenarios in the simulation. The presenter replied that modeling for organ non-utilization was not simulated due to not being able to accurately predict organ non-utilization.

A member noted that the number of KP prior living donors is relatively small, and if there is any negative impact on this specific group, it is expected to be minimal. The presenter agreed that the number of KP prior living donors is small. It was further explained that the Committee initially decided that the prior living donors should get high priority, which would increase their score in any of the scenarios without affecting the rest of the attributes.

Next steps:

The Committee will review the modeling report and incorporate the data received in their continued discussions.

Upcoming Meeting

- August 9, 2023 (Teleconference)
- August 21, 2023 (Teleconference)

Attendance

- **Committee Members**
  - Colleen Jay
  - Dean Kim
  - Diane Cibrik
  - Dolamu Olaitan
  - Jessica Yokubeak
  - Muhammad Yaqub
  - Neeraj Singh
  - Nicholas Marka
  - Nikole Neidlinger
  - Rupi Sodhi
  - Shehzad Rehman
  - Ty Dunn
- **HRSA Representatives**
  - Marilyn Levi
- **SRTR Staff**
  - Bryn Thompson
  - Jon Miller
  - Raja Kandaswamy
  - Peter Stock
- **UNOS Staff**
  - Carlos Martinez
  - Joann White
  - Joel Newman
  - Krissy Laurie
  - Kristina Hogan
  - Sarah Booker
  - Tamika Watkins