Continuous Distribution of Kidneys and Pancreata Update

OPTN Kidney & Pancreas Transplantation Committees

OPTN ORGAN PROCUREMENT AND TRANSPLANTATION NETWORK

Committee Update

- Informs community on the progress to date on continuous distribution projects
- Paper Highlights:
 - Outlines considerations for allocation components outside of the composite allocation score
 - Updates on Organ Allocation Simulator (OASIM) results
 - Details current Committee and Workgroup structure and their focus areas
 - Outlines next steps

Kidney and Pancreas Progress to Date



Organ Allocation Simulator (OASIM)

- Results of the first Organ Allocation Simulator (OASIM) request were recently received and are currently being reviewed by the Committees
 - First round: Test effects of what would happen in extreme cases
 - Next round: More detailed/granular
- Decisions are <u>not</u> final
- Full report and addendum report can be found on the OPTN website

SRTR Modeling Key Takeaways - Kidney

- Expanding and increasing weight on longevity matching showed:
 - Lower transplant rates in 35-50 year old candidates
 - Post-transplant graft failure rates lower in 18-34 and 35-49 year olds at 1 and 10 years
 - Increased graft failure rates in older kidney recipients
- Median travel distance increased in all scenarios
 - Increasing proximity efficiency weight does reduce this, but also reduces transplant rate for CPRA >98%
 - Increasing the donor modifier for high KDPI kidneys reduces the median travel distance for those kidneys
 - Pediatric candidates saw largest increase in median distance (likely due to pediatric priority weight)
- *Additional context of results can be found on the OPTN site
 - Optn.transplant.hrsa.gov/policies-bylaws/a-closer-look/continuous-distribution/

SRTR Modeling Key Takeaways - Kidney

Transplant rates

- Lower for Black candidates and those on dialysis 5+ years in scenarios where less weight placed on qualifying time
- Varied by OPTN region
- Decreased for highly sensitized in scenarios where less weight placed on CPRA

- *Additional context of results can be found on the OPTN site
 - Optn.transplant.hrsa.gov/policies-bylaws/a-closer-look/continuous-distribution/

OASIM Key Takeaways – Pancreas/KP

- Organ travel distance
 - Increasing weight on proximity efficiency reduces median distance
 - Pancreas:
 - Median distance under "Combined AHP" (10% proximity weight) was higher than current policy
 - Median distance under "All Donor Efficiency" (30% proximity weight) was lower than current policy
 - Kidney-pancreas:
 - Median distance under "Combined AHP" (10% proximity weight) was similar to current policy
 - Median distance under "All Donor Efficiency" (30% proximity weight) was lower than current policy

- *Additional context of results can be found on the OPTN site
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OASIM Key Takeaways – Pancreas/KP

- Transplant rates
 - Decreased for AB candidates under all CD scenarios (likely due to the "blood type identical" attribute)
 - Increased for pediatric candidates under all CD scenarios (likely due to new pediatric priority attribute)
 - Slight variation in transplant rates across OPTN regions, with the largest variation for Region 8

- *Additional context of results can be found on the OPTN site
 - Optn.transplant.hrsa.gov/policies-bylaws/a-closer-look/continuous-distribution/

Mathematical Optimization

- In complement with the OASIM analysis, this analysis will help fine-tune and hone-in on a range of acceptable policy options
- Helps narrow the options to those with an acceptable equity versus utility balance
- Help inform the Committee's selection of weight for each attribute

Other Considerations

- Committees developed two Workgroups to consider those allocation components that could fall outside of the composite allocation score.
 - Utilization Considerations Workgroup
 - Review Boards Workgroup

Utilization Considerations Workgroup

- Goal: Transition the operational aspects of Kidney and Pancreas allocation to a Continuous Distribution framework with minimal changes to current operational requirements
- Topics discussed include:
- Dual Kidney
- En Bloc
- Facilitated Pancreas
- Mandatory KP Offers

- National Offers
- Screening and Filters
- Minimum Acceptance Criteria (MAC)
- Released Organs
- This work is in addition to other efficiency efforts such as predictive analytics, offer filters, minimum acceptance criteria, and the use of the proximity efficiency attributes

Kidney and Pancreas Review Boards Workgroup

- Goal: Focus on development of kidney and pancreas-specific Review Boards
- Discussions include:
 - Identifying candidate-based attributes that could qualify for exception requests within the continuous distribution framework
 - Development of operational and clinical guidance for the new Review Boards



- Committees and Workgroups will continue work on building the continuous distribution framework for kidney and pancreas allocation
- Committees are currently reviewing the results of the first modeling request
 - Will adjust as needed and re-submit for additional modeling
- Committees will continue to update community on progress of project
 - Public comment received will be reviewed and considered in development of framework and eventual proposal



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