

OPTN Ad Hoc Multi-Organ Transplantation Committee

Meeting Summary

April 4, 2025

Conference Call

Lisa Stocks, RN, MSN, FNP, Chair

Zoe Stewart Lewis, MD, PhD, MPH, FACS, Chair

Introduction

The OPTN Ad Hoc Multi-Organ Transplantation Committee (the Committee) met via WebEx teleconference on 04/04/2025 to discuss the following agenda items:

1. Lung-MOT Workgroup update
2. Potential changes to policy based on data request: MOT recipients not covered by tables
3. Data request: Match run coverage
4. Potential changes to policy proposal based on public comment feedback
5. Outstanding policy/system questions
6. Next steps: Summer 2025 policy proposal

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

1. Lung-MOT Workgroup update

OPTN Contractor staff provided the committee with an update on the Lung-MOT Workgroup's recommendations on the lung CAS (Composite Allocation Score) thresholds for inclusion in the multi-organ allocation tables.

Summary of presentation:

The lung multi-organ workgroup has continued monthly meetings and has finalized its recommended lung CAS thresholds for seven donor groups:

- Blood type O donors: High threshold = 35, Low threshold = 34.
- Non-O donors: High threshold = 31, Low threshold = 30.

The thresholds are designed to provide similar access to transplant for lung-alone and lung multi-organ transplant candidates. The workgroup does not recommended changes to the placement of the lung CAS thresholds in the allocation tables.

OPTN Contractor Staff reviewed additional data shows the distribution of lung multi-organ transplants by donor group. Adult donation after brain death (DBD) donors with 0-34% KDPI accounted for 56% of lung multi-organ candidates during the period September 28, 2023-August 31, 2024. Adult DBD donors with 35-85% KDPI accounted for 29% of donors to lung multi-organ candidates. DBD donors aged 11-17 with 0-34% KDPI accounted for 14% and the other donor groups accounted for 0-1%. There have been very few DCD lung multi-organ transplants so far, but this is expected to increase.

Focusing on the primary allocation table for DBD adult donors with 0-34% KDPI, staff explained the data considered by the Workgroup. The lung CAS thresholds in the allocation table captured about 13% of candidates for both blood type O and non-O donors. O donors had a median of 48 candidates above the thresholds; non-O donors had a median of 10 candidates. The data also showed that lungs would often

be accepted above the proposed thresholds. Focusing on lung multi-organ candidates, the data shows that about one-quarter to one-third of lung multi-organ candidates would be captured above the thresholds. Lung-liver and lung-kidney candidates were captured less often, mainly because there are fewer of them.

For lung-liver candidates:

- 75% of O blood type candidates had a CAS ≥ 34
- 25% of A blood type and 75% of B blood type candidates had CAS ≥ 30
- No AB blood type lung-liver candidates were observed

For lung-kidney candidates:

- 40% of O blood type candidates had a CAS ≥ 34
- 65% of A and AB blood type candidates had CAS ≥ 30
- 50% of B candidates had CAS ≥ 30

Overall, across different donor groups, the proposed thresholds consistently captured a similar proportion of candidates.

The workgroup has also considered access to transplant for heart-lung candidates. The Workgroup is concerned that access to transplant for heart-lung candidates will not improve with the implementation of the upcoming policy proposal. The Workgroup analyzed data from 28 September 2023-31 December 2024 covering ~2,400 donors whose heart and lungs were transplanted. The data showed that about 30% of adult and 27% of pediatric heart and lung donors covered by the proposed allocation tables would still have hearts available when OPOs begin offering from the lung match. The Workgroup concluded that the position of the high lung CAS threshold in the allocation tables is appropriate and suggested consideration of an exception pathway for heart-lung candidates with high lung urgency to increase access to heart-lung offers.

Summary of discussion:

There was no discussion.

Next steps:

The Workgroup's next meeting is planned for April 8, 2025 and the Workgroup will review public comments on lung CAS thresholds and additional heart-lung data. The potential creation of an exception pathway for highly medically urgent heart-lung candidates would be handled separately.

2. Potential changes to policy based on data request: MOT recipients not covered by tables

Summary of presentation:

OPTN Contractor Staff reviewed key takeaways from the data request on multi-organ transplant recipients not covered by allocation tables, which was presented to the Committee on 26 March. During the presentation the Committee noted that lung-kidney and heart-kidney recipients were less likely to have been covered by a multi-organ allocation table than other multi-organ recipients. Noting the small number of lung-kidney candidates and the recommendations of the Lung-MOT Workgroup, the Committee did not propose changes to the CAS thresholds.

Summary of discussion:

The Committee discussed whether to add any additional heart classifications to the allocation tables to increase access to transplant for heart multi-organ candidates, including heart-kidney candidates. A member raised a question about whether the historical heart-kidney data reflected the period before medical eligibility criteria and safety net policies were in place. Staff clarified that the data covered June 2023–June 2024 and noted that the safety net was implemented in late June 2023, with eligibility criteria added in September 2023. Several members expressed support for not adding additional heart classifications at this time, noting that the Committee’s intent has been to include only very high priority classifications across organ groups and that additional classification could be added based on post-implementation data.

One member advocated for increased access to transplant for certain heart-liver and heart-lung transplant candidates, such as those with Fontan-Associated Liver Disease. The member noted public comments on this topic from professional organizations such as the Society of Thoracic Surgeons and International Society of Heart and Lung Transplantation.

The Co-Chair acknowledged the concerns and suggested revisiting the issue after the next data request is presented. Another member noted that the Committee previously considered which heart classifications should be included and the committee's responsibility to balance all organ groups fairly. A member added that adding classifications would increase complexity for OPOs. The member suggested that exception pathways may be a more appropriate path forward for small populations needing increased access to transplant.

Next steps:

The Committee will consider adding additional classifications after reviewing the data request on match run coverage.

3. Data request: Match run coverage

Staff presented the results of a data request which aimed to analyze how often organs would have been accepted within the proposed allocation tables and how often they would have been allocated according to OPO discretion. The results will increase understanding of the expected impacts of the policy proposal and give insights into the end-user experience for OPOs making offers.

Summary of presentation:

The data request reviewed ~58,500 deceased donor match runs from 2024. About 9,000 match runs (16%) were donors not covered by the proposed allocation tables. About 2,000 (3%) were not multi-organ donors. A small percentage of donors were excluded due to missing data such as KDPI. An allocation plan could have been generated for ~47,000 (~80% of total) donors.

Of the match runs analyzed, ~67% terminated beyond the allocation plan, requiring OPO discretion to place organs. Only <1% of donors had all matches close within the table. Most donors had 2 match runs (commonly kidney and liver). Some had up to 6–7, with 2–3 typically still active after the completion of the allocation table.

The match run type most likely to terminate beyond the table was kidney (96%), followed by kidney-pancreas (86%) and lung (66%). Liver was the match run type most likely to terminate within the tables (61% of liver matches would have terminated within the tables).

Summary of discussion:

A member expressed concern about the complexity of the tables for OPO users and emphasized the need for technological assistance to operationalize the policy. The Co-Chair noted that the OPTN

Computer System will generate a donor-specific plan, which will users through the applicable allocation table. Other members expressed their support for a user-friendly tool to guide OPO staff, with one member advising direct engagement with end users to evaluate whether the planned approach will be operationally effective.

Most members expressed their support for the tables as proposed, highlighting that the data tended to align with the long-standing goals of the Committee. The Co-Chair highlighted that the tables will be able to be adapted should post-implementation monitoring identify any major concerns.

A member reiterated their concern regarding access for heart-liver transplant candidates. They emphasized the complexity of congenital heart-liver cases, where matching is not just about urgency, but also about the logistics of dual organ transplantation (e.g., size compatibility, simultaneous availability). They advocated for including heart classifications 7–12 in the proposed allocation table for DBD adult donors with 0-34% KDPI after kidney classification 11, and either before the liver classifications 13 or possibly below liver classifications with a MELD of 33.

Other members expressed concern about the broader implications of making allocation more complex, especially when it could result in inefficiencies or delays in organ allocation for other candidates. The Co-Chair and another member noted that the committee had already conducted extensive reviews of data and scenarios during previous planning exercises (VPE). A member pointed out that these specific heart-liver and other patient groups have been considered, and while their needs are valid, the data does not seem to warrant substantial changes to the allocation tables. The Co-Chair called for a second to the motion to add heart classifications to the allocation table. No members seconded the motion and the Co-Chair suggested that this issue should be closely monitoring during post-implementation monitoring.

Next steps:

None discussed.

4. Potential changes to policy proposal based on public comment feedback

The Committee finished reviewing public comment feedback and focused on two specific areas where potential changes could be made to the allocation tables if necessary.

Summary of presentation:

Two high-interest issues were identified from public comment feedback:

1. Placement of pediatric kidney-alone (KA) and kidney-pancreas (KP) classifications in the allocation table for brain-dead donors aged 11–17 with KDPI 0–34%

There was general community support for the tables as proposed by the Committee, however, concerns were raised by the Pediatric and Pancreas Transplantation Committees regarding placement of classifications on this table. The key divergence lay in the placement of kidney Classification 6 (pediatric candidates). The Pediatric Committee recommended placement above all KP classifications. The Pancreas Committee recommended placement below KP Classification 4.

2. Priority of pediatric liver-kidney candidates

Public comments, including those from the Pediatric Committee and the American Society of Transplantation, expressed concern that proposed policy changes could disadvantage pediatric liver-kidney candidates compared to kidney-alone candidates. Commenters noted that many of these patients are on dialysis and need a liver due to metabolic disease, but their PELD scores put them below pediatric kidney-alone candidates.

The Committee reviewed data covering the period between July 1, 2022, and June 30, 2024. There were 41 pediatric liver-kidney recipients, representing 2.54% of all liver-kidney transplants during that period. Of these 41 recipients, only 7 were not covered under the current MOT (multi-organ transplant) allocation tables. A separate data request during the period July 1, 2023-June 30, 2024, identified 6 pediatric liver-kidney recipients who were not captured by the algorithm.

Summary of discussion:

A member asked whether the Pediatric Committee provided any specific reasoning for their recommendation in public comment. They added that the number of patients impacted is small, and they personally do not have strong feelings about whether pediatric kidneys go above or below KP class 4. The Co-Chair commented that the initial recommendation to place kidney classification 6 above KP was likely based on the low number of pediatric patients, and that it was included in public comment for broader input. Staff reminded the group of current allocation policy, where OPOs with both kidney and pancreas organs must first offer to KP classifications 1–4, then may choose between the remaining KP or kidney-alone candidates.

The Committee discussed the public comment from the Pancreas Committee, which noted that this donor group represents nearly 50% of pancreas donors. A member questioned the accuracy of the 50% figure, noting they had not seen such a high percentage in past data. A representative from the Pancreas Committee stated that the correct percentage is about 15%, confirming that the public comment erroneously stated 50%. The Committee confirmed that 15% is correct, with reference to data available on the OPTN website.

A member noted that late turndowns of KP offers can often lead to long cold ischemia times and inefficient reallocation of kidneys. They shared an example where a highly sensitized child did not receive a kidney offer due to a late KP turndown, and the organ was ultimately allocated far down the waitlist. They emphasized that this inefficiency often prevents high-priority pediatric candidates from receiving organs. Another member supported this concern, suggesting the need for data on how many KP organs are declined late, impacting subsequent kidney-alone candidates. They stressed the need to track not just successful transplants, but lost opportunities due to late turndowns.

The Co-Chair asked if there were any proposed changes to the current recommendation made by the Committee. A member recommended keeping the proposed tables as-is, despite it not aligning with either committee's preference. Other members voiced their support for keeping the tables as-is. The Co-Chair emphasized the importance of post-implementation monitoring of outcomes. A member noted that the main monitoring goal should be whether pancreas non-allocation results from kidney unavailability. Another member sought clarity on if that kind of tracking is feasible. Staff offered that the feasibility of this monitoring metric would be explored.

A member proposed that if a pancreas doesn't have a kidney available to go with it, and there's no pancreas-alone candidate, the system could temporarily prioritize the pancreas over pediatric candidates to avoid non-use. This would help address the Pancreas Committee concerns over increased non-use risk under the proposed policy. It was highlighted that such a change might be complex and could be outside the Committee's scope, however further examination could be warranted.

A member expressed their optimism after reviewing data on pediatric liver-kidney transplant recipients, noting that approximately 85% of those patients would have been covered under the proposed allocation tables, which they found reassuring. The member raised concerns about the remaining 15%—particularly those who receive kidneys due to liver match priority, often in cases of conditions like autosomal recessive polycystic kidney disease (ARPKD) or primary hyperoxaluria. These patients typically have kidney-dominant disease, and because the kidney doesn't influence liver allocation (unlike

the other way around), there's a risk that under the new system, they could lose access to the kidney if their donor's KDPI is 0–35% and they fall below pediatric kidney-alone candidates in the algorithm. The member then noted that about a third of their pediatric liver-kidney patients receive organs from donors with KDPI over 35%, for which there is no table for pediatric donors aged 11-17 years, intensifying concern about these cases being deprioritized. They concluded that expanding the tables or adding more classifications wouldn't solve the problem and recommended against further changes.

The Co-Chair confirmed that this aligned with the committee's perspective, agreeing there was no immediate need to revise the allocation tables further. The Committee appeared satisfied that the concerns had been acknowledged and appropriately addressed within the current proposal.

Next steps:

None discussed.

5. Outstanding policy/system questions

The Committee reviewed outstanding policy questions.

Summary of presentation:

- Organ-pulling hierarchy: The proposed approach is that thoracic organs (heart, lung, liver) can pull any other organs, while abdominal organs (e.g., kidney, pancreas) can only pull other abdominal organs—not thoracic ones. This reflects current policy and practice.
- Eligibility for multi-organ offers: The proposed approach is to incorporate current eligibility criteria for adult heart-kidney, lung-kidney, and liver-kidney candidates. Staff highlighted a key potential policy change: removing the minimum lung CAS of 25 requirement for heart-lung offers from the lung match run. This would align it with heart-liver and lung-liver policies, which do not have such a threshold.
- Liver policy considerations: To ensure consistency with *OPTN Policy 9.8.J: Allocation of Liver-Intestines from Non-DCD Donors 11 to 17 Years Old*, the Committee was asked to consider revising the proposed policy table for this group to include Liver Classifications 21-23 and moving Intestine Classifications 1-4 below Liver Classification 23.
- Implementation and allocation plans: Reviewed potential policy requirements governing allocation order and process for inclusion in the policy proposal:
 - Potential policy requirements:
 - OPOs must allocate organs per the new multi-organ allocation tables
 - OPOs must execute match runs for all organs intended for transplant
 - OPOs must generate a multi-organ allocation plan before making offers
 - Preliminary offers/notifications still allowed
 - Formal plan required before allocation starts
 - If OPTN Policy requires re-execution of a match run during allocation of organs from multi-organ donors, the OPO must also re-execute a multi-organ allocation plan
 - If information about a multi-organ donor changes during allocation, but OPTN Policy does not require re-execution of a match run, the OPO may continue to

follow the existing multi-organ allocation plan or re-execute the match run and the multi-organ allocation plan

- If an additional organ becomes viable for donation during allocation, the OPO must run the additional match and generate a new allocation plan
- Interaction with existing policies: Reviewed policies that may be triggered during multi-organ allocation:
 - Policy 5.6.D (binding offer acceptance)
 - Policy 5.4.C (initial offers made from match run less than 8hrs old for liver offers)
 - Kidney expedited placement (under development)
 - Policy 9.10 (expedited liver placement)
 - Policy 11.6 (Facilitated Pancreas)
 - Policy 5.9 (released organs)

Summary of discussion:

Decision #1: The Committee decided that the proposed allocation table for DBD donors aged 11-17 with KDPI of 0-34% should be revised for consistency with *OPTN Policy 9.8.J: Allocation of Liver-Intestines from Non-DCD Donors 11 to 17 Years Old*.

Members discussed whether intestine would follow kidney, as this does not occur in practice. Staff clarified that this is permissible under current policy, though it does not usually occur. The Co-Chair offered that vascularized composite allografts (VCAs) should be included in the table outlining which organs follow which, as in the instance of a bladder-kidney transplant. Staff offered that abdominal wall might also be transplanted with an intestine, so adding that clarification could help. Other members supported incorporation of the eligibility criteria in current policy.

The Co-Chair called for a vote on whether the proposed allocation table for DBD donors aged 11-17 with KDPI of 0-34% should be revised for consistency with *OPTN Policy 9.8.J: Allocation of Liver-Intestines from Non-DCD Donors 11 to 17 Years Old*. A member seconded the motion and no opposition was voiced. The motion passed.

A member raised concerns about how emerging technologies like machine perfusion are making expedited organ recovery and post-recovery allocation more common. In some recent cases, organs were recovered and placed on perfusion machines before match runs were executed, due to tight timelines or donor family constraints. They emphasized the need for future policy flexibility to account for these increasingly frequent scenarios. The Co-Chair acknowledged this is a growing trend but suggested that policy cannot easily address emerging and developing trends. They noted not all transplant centers accept perfused organs due to cost and equity concerns and flagged the issue for continued future discussion.

A member raised their concern regarding the required re-run of the match if a DCD transitions to a DBD, as they worried it might mean an organ offer is pulled from a potential recipient. The Co-Chair noted that the policy requiring match reruns when transitioning from DCD to DBD needs to be handled by the relevant committee.

Staff asked for clarity whether non-binding preliminary notifications might help OPOs manage preliminary kidney notifications without conflicting with multi-organ allocation. The Co-Chair confirmed they send preliminary kidney offers with language indicating they are pending MOT offers, and suggested policy could clarify that these early offers are non-binding. A member added that having a “generate allocation plan” function could help streamline early list execution, especially in regions like New England, and raised the idea encouraging wider use of virtual crossmatching, noting it's not widely implemented yet.

A member expressed concern over the inconsistency and outdated nature of existing organ allocation policies—specifically pointing out the long-standing rule that liver match run allocations must begin within 8 hours. They note that while this rule has been in place for about two decades, it's unclear why it only applies to livers and not to other organs. They argue that all match runs, regardless of organ type, should reflect the most up-to-date clinical information when allocation begins to ensure fairness and efficiency. Additionally, the speaker noted that re-running or regenerating match runs is sometimes necessary due to changing donor or recipient circumstances. Although they recall that such actions previously triggered follow-up inquiries or compliance issues, they suggest that this flexibility is essential and should be explicitly supported by policy.

Next steps:

Members will continue discussing outstanding policy and systems questions and will make final determinations at the next meeting.

6. Summer 2025 policy proposal

Staff presented the timeline for the Summer 2025 policy proposal and offered the Committee the opportunity for any questions.

Summary of discussion:

A member asked for clarity around the system and technical implementation requirements for a policy proposal, as they are concerned implementation delays. Staff provided clarification that an implementation plan is being developed at the same time as this policy language, the OPTN Contractor staff is developing a system solution that the Committee will be able to review.

Next steps:

None discussed.

Upcoming Meetings

- April 9, 2025
- April 23, 2025

Attendance

- **Committee Members**
 - Lisa Stocks, Co-Chair
 - Vincent Casingal
 - Chris Curran
 - Rocky Daly
 - Rachel Engen
 - Jonathan Fridell
 - Shelley Hall
 - Jim Kim
 - Precious McCowan
 - Oyedolamu Olaitan
 - Deanna Santana
 - Chris Sonnenday
 - Nicole Turgeon
- **SRTR Staff**
 - Avery Cook
 - Jon Miller
- **UNOS Staff**
 - Cole Fox
 - Houlder Hudgins
 - Sara Langham
 - Sarah Roache
 - Kelsi Lindblad
 - Erin Schnellinger
 - Kaitlin Swanner
 - Stryker-Ann Vosteen
 - Ross Walton