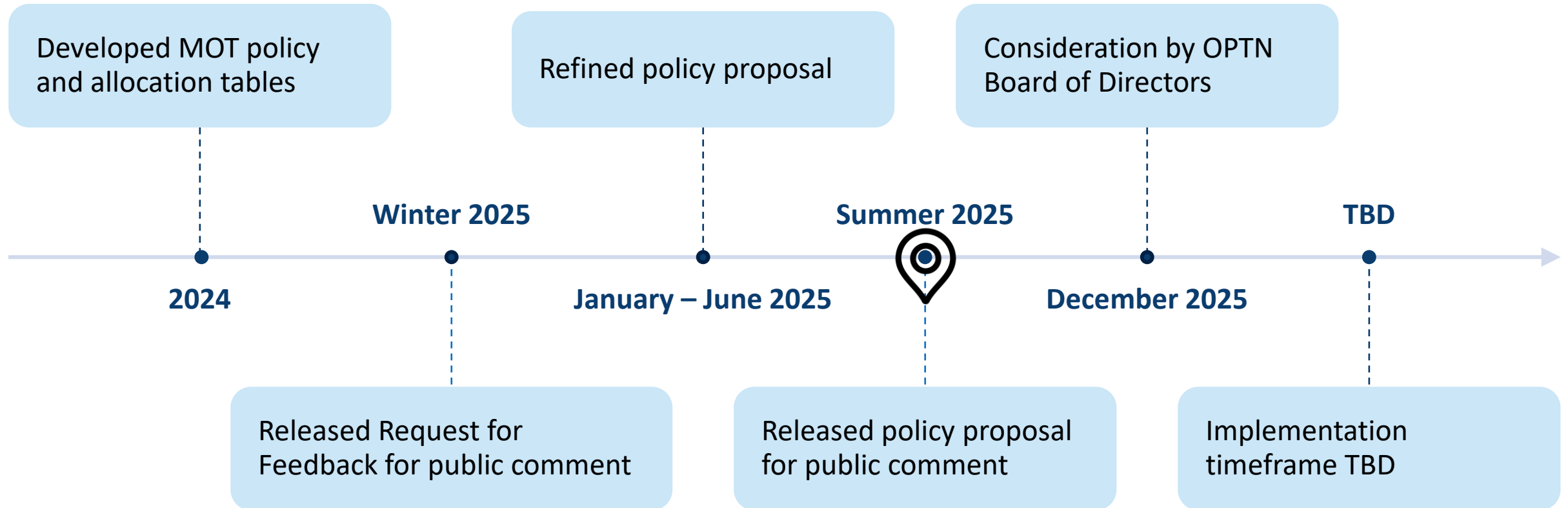


Establish Comprehensive Multi-Organ Allocation Policy Proposal

Ad Hoc Multi-Organ Transplantation Committee

Purpose and background

Timeline



Promoting equity, consistency, transparency, and efficiency

Equity	<ul style="list-style-type: none">• Promote equitable access to transplant among multi- and single-organ candidates• Direct order of allocation across match runs based on medical urgency, access to transplant, and optimizing organ use
Consistency and transparency	<ul style="list-style-type: none">• Standardize allocation processes, multi-organ offers, and order of priority across match runs• Facilitate stronger monitoring of outcomes, compliance, and allocation out of sequence• Increase transparency and allows candidates to better understand priority
Efficiency	<ul style="list-style-type: none">• Provide a system-generated, donor specific multi-organ allocation plan for most deceased donors• Update match runs to display which additional organs must/must not be offered• Direct allocation order for high priority candidate groups and provide flexibility for other offers

Promoting access for high priority single-organ candidates



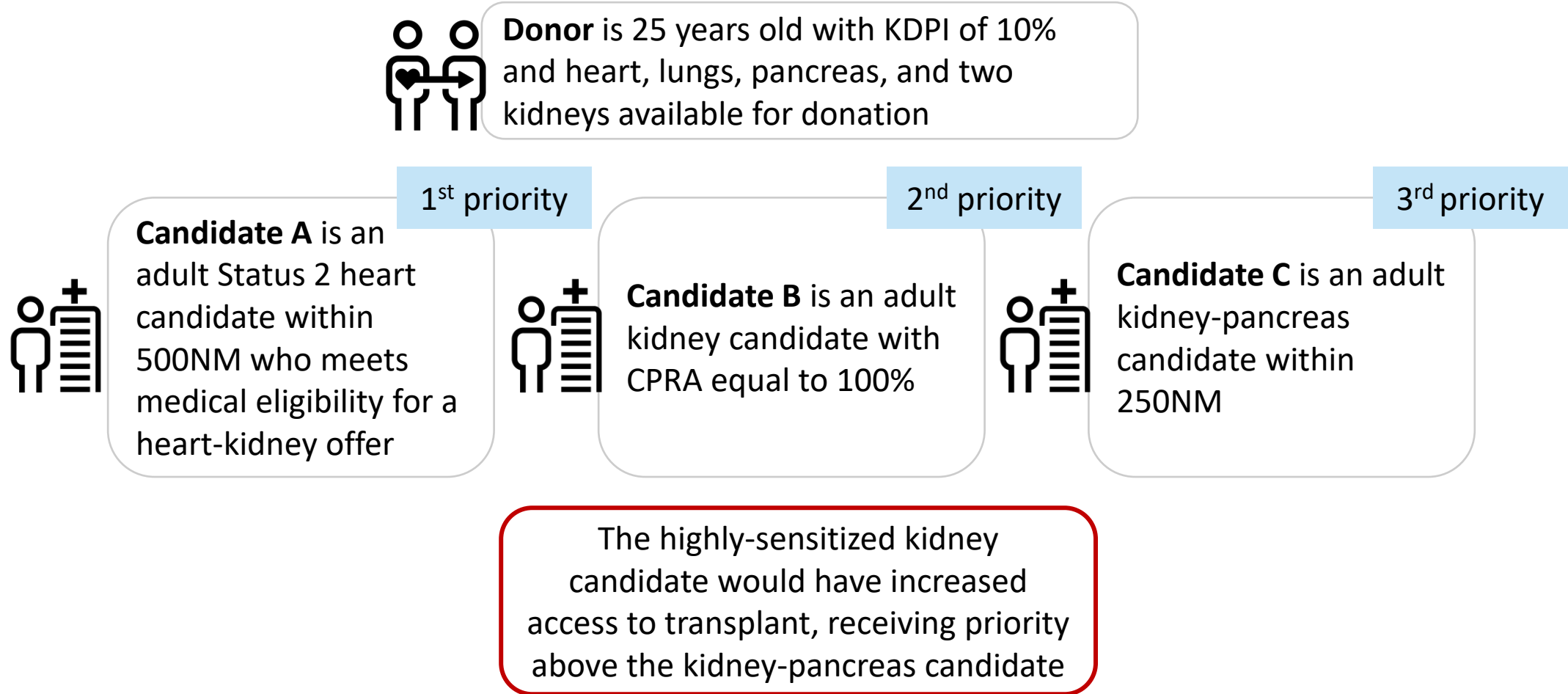
In May 2024, an OPTN member participated in open forum during an MOT Committee meeting. The member called for increased access to transplant for high-priority kidney candidates.

The member described the case of a highly-sensitized pediatric kidney candidate at their program, who missed an opportunity to receive a kidney offer. The kidney was accepted for a multi-organ candidate who was eligible for priority above all single-organ kidney candidates. After the multi-organ transplant did not proceed, the kidney was offered to another candidate on the waiting list.

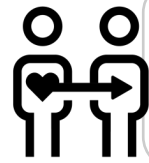
The proposed policy would help promote access to transplant for high-priority single organ candidates including medically urgent, highly-sensitized, and pediatric candidates.



Example: promoting access for single-organ candidates



Standardizing allocation order



Donor is 15 years old with KDPI of 6% and heart, lungs, liver, intestine, pancreas, and two kidneys available for donation

1st priority



Candidate A is a pediatric Status 1B liver candidate within 500NM

2nd priority



Candidate B is an adult Status 2 heart candidate within 250NM who is also registered for a liver

3rd priority



Candidate C is an adult lung candidate with a CAS of 35 who is also registered for a liver

Policy would direct the order in which OPOs make offers across different match runs, providing clear direction on priority among liver alone and multi-organ liver candidates

Winter 2025 public comment feedback

During the Winter 2025 public comment cycle, several themes emerged:

- Support for **standardizing** multi-organ policy to promote fairness, consistency, and transparency
- Support for ensuring access to transplant for **medically urgent, highly-sensitized, and pediatric candidates**
- General support for the **donor and candidate groups** covered by the multi-organ allocation tables, with some divergence on appropriate placement of **kidney-pancreas and pediatric kidney classifications**
- Requests for a **system solution** that effectively and efficiently guides users through complex policy
- Calls for **pre-implementation training** to promote compliance
- Calls for additional **data and/or modeling** to strengthen understanding of potential impacts
- Advocacy for strong **post-implementation monitoring**, including assessing impacts on pediatric candidates, organ non-use, and potential adverse effects or unintended consequences

Proposed changes to allocation of organs from multi-organ deceased donors

Key proposed changes to multi-organ allocation policy

The proposed policy would make the following key changes to multi-organ allocation policy:

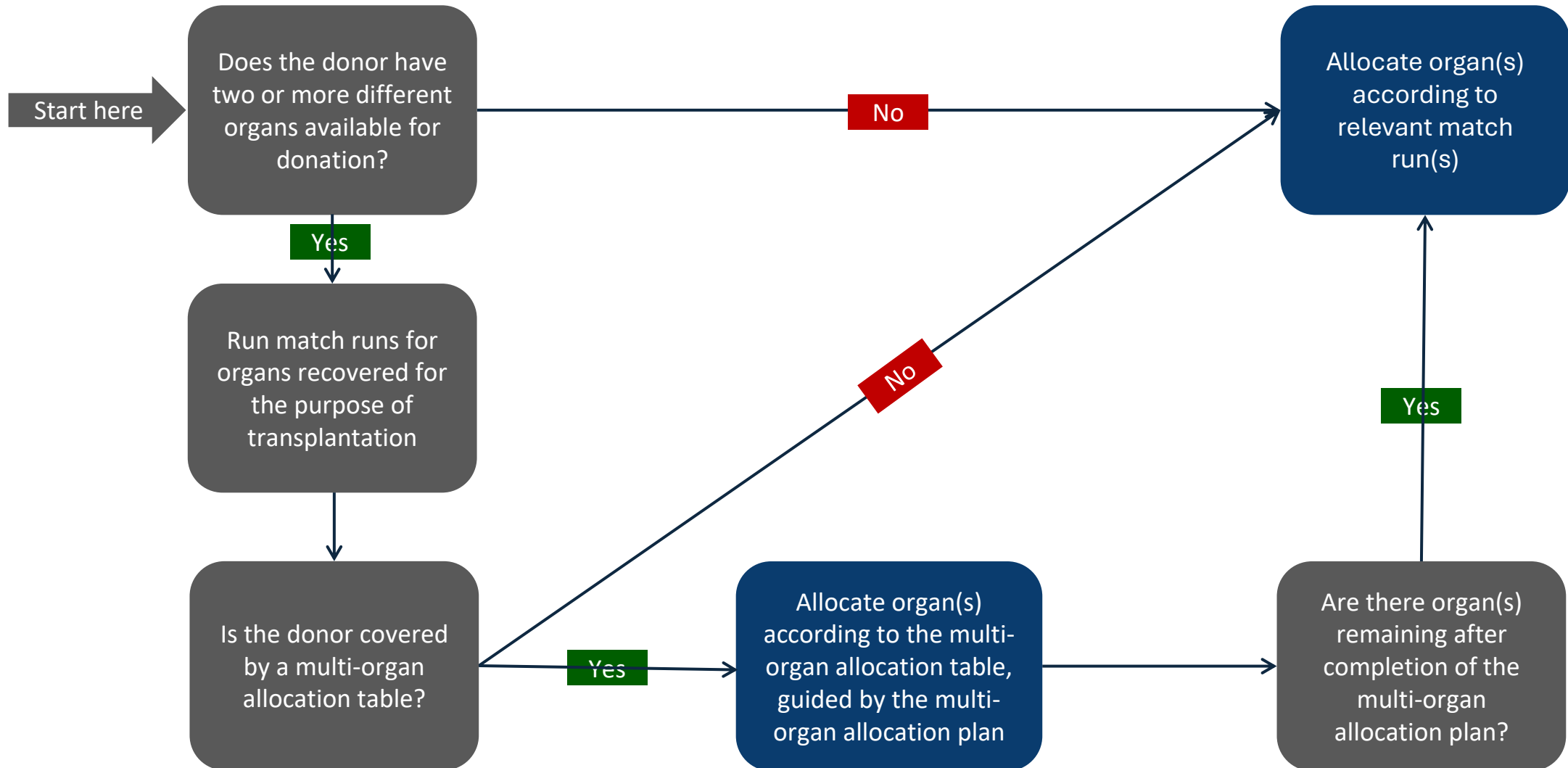
- **Direct allocation order across match runs** for donors and candidates covered by multi-organ allocation tables
- **Remove priority for some kidney-multi-organ candidates** with the goal of increasing access to transplant for high-priority single-organ candidates
- **Standardize the allocation process** for donors and candidates covered by multi-organ allocation tables
- **Direct which additional organs follow the primary organ** on each match run
- Incorporate a **binary “must”/“must not” offer framework for additional organs** for which candidates are registered, removing discretionary “permissible” offers

Allocation process

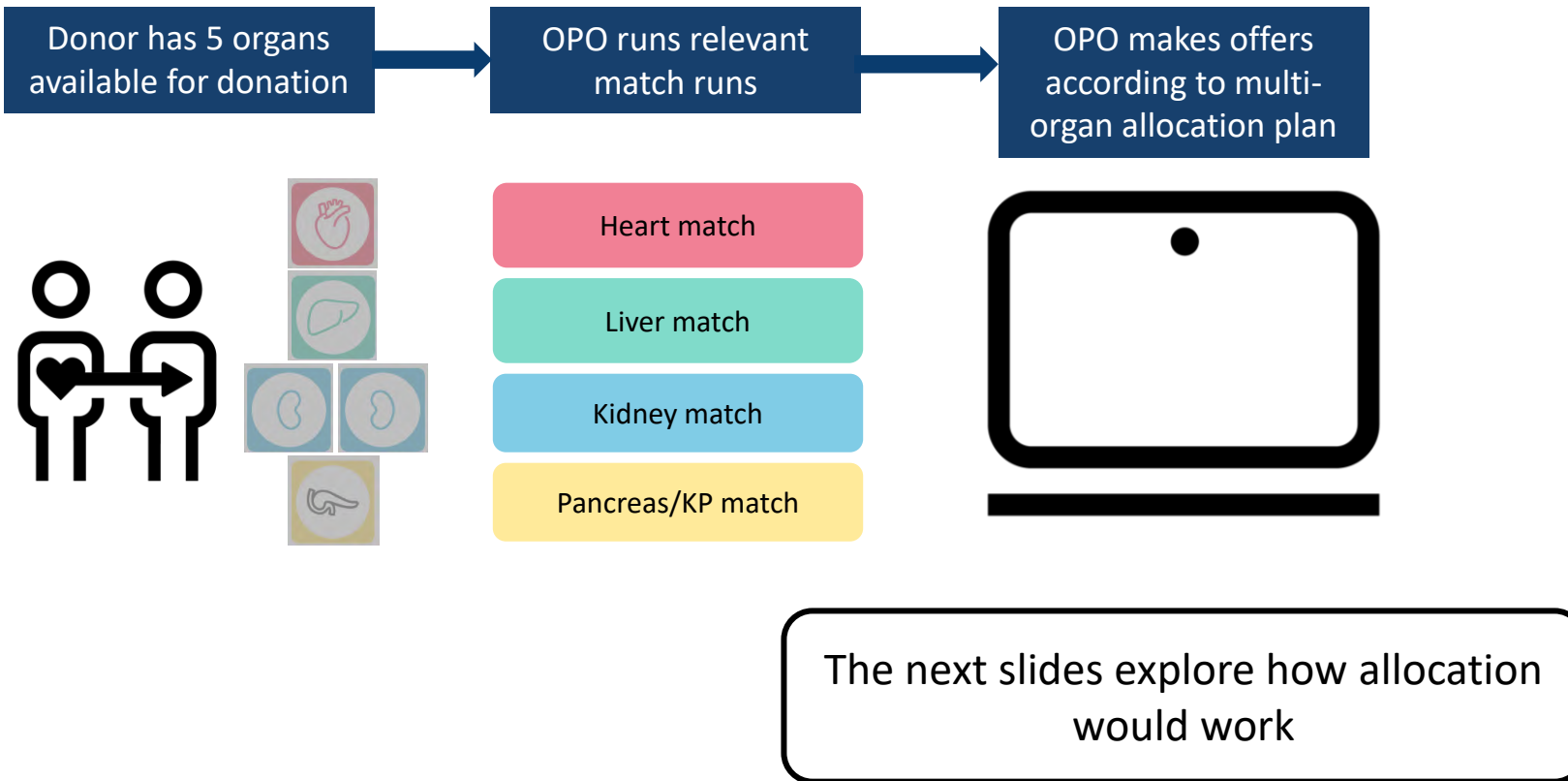
The proposed policy sets out the process that OPOs must follow for deceased multi-organ donors:

- OPOs must **execute match runs for organs recovered for the purpose of transplantation**
- **Prior to making organ offers to primary potential transplant recipients (PTRs), OPOs must generate a multi-organ allocation plan**
- For deceased donors **not covered** by a multi-organ allocation table or if **all organs have not been accepted** upon completion of the multi-organ allocation table, **OPOs may determine the order in which to make organ offers across match runs**, which is consistent with current policy and practice

Multi-organ allocation flow chart



Process for donors covered by a multi-organ allocation table



Order of priority

The proposed policy requires **OPOs to allocate organs from deceased multi-organ donors according to the multi-organ allocation tables**

- The order of priority is based largely on **medical urgency**, as well as **access to transplant** and **optimizing organ use**
- Policy proposal **uses the orders of priority developed by organ-specific Committees** – it does not propose any changes to orders of priority
- Policy proposal includes **7 multi-organ allocation tables**
- **Different tables are needed** because the tables incorporate **organ-specific allocation policies that are different based on donor characteristics**, such as age and KDPI

Multi-organ allocation table: DBD donor aged 18-69 with KDPI 0-34%

Organ classification and description		Organ classification and description		Organ classification and description	
1	Liver 1: Status 1A; 500NM	22	Liver 11: MELD or PELD \geq 37; Hawaii or Puerto Rico	41	Liver 13: MELD or PELD \geq 33; 150NM
2	Heart 1: Adult Status 1 or Pediatric Status 1A; 500NM	23	Liver 12: MELD or PELD \geq 37; Hawaii or Puerto Rico	42	Liver 14: MELD or PELD \geq 33; 150NM
3	Heart 2: Adult Status 1 or Pediatric Status 1A; 500NM	24	Intestine 1: Status 1; 500NM	43	Liver 15: MELD or PELD \geq 33; 250NM
4	Liver 2: Status 1B; 500NM	25	Intestine 2: Status 1; 500NM	44	Liver 16: MELD or PELD \geq 33; 250NM
5	Liver 3: Status 1A; Hawaii or Puerto Rico	26	Intestine 3: Status 1; nation	45	Liver 17: MELD or PELD \geq 33; 500NM
6	Liver 4: Status 1B; Hawaii or Puerto Rico	27	Intestine 4: Status 1; nation	46	Liver 18: MELD or PELD \geq 33; 500NM
7	Lung CAS threshold: \geq 41 for O donors; \geq 37 for non-O	28	Lung CAS threshold: \geq 34 for O donors; \geq 30 for non-O	47	Liver 19: MELD or PELD \geq 30; 150NM
8	Heart 3: Adult Status 2; 500NM	29	Pancreas or K/P 1: 0-ABDR mismatch; CPRA \geq 80%; 250NM	48	Liver 20: MELD or PELD \geq 29; 150NM
9	Heart 4: Adult Status 2; 500NM	30	Pancreas or K/P 2: CPRA \geq 80%;	49	Liver 21: MELD or PELD \geq 29; 150NM
10	Lung CAS threshold: \geq 35 for O donors; \geq 31 for non-O	31	Heart 5: Adult Status 3 or Pediatric Status 1B; 250NM	50	Liver 22: MELD or PELD \geq 30; 250NM
11	Kidney 1: 0-ABDR mismatch; CPRA = 100%; 250NM	32	Heart 6: Adult Status 3 or Pediatric Status 1B; 250NM	51	Liver 23: MELD or PELD \geq 29; 250NM
12	Kidney 2: CPRA = 100%; 250NM	33	Pancreas or K/P 3: 0-ABDR mismatch; CPRA \geq 80%; nation	52	Liver 24: MELD or PELD \geq 29; 250NM
13	Kidney 3: 0-ABDR mismatch; CPRA = 100%; nation	34	Pancreas or K/P 4: 250NM	53	Liver 25: MELD or PELD \geq 30; 500NM
14	Kidney 4: CPRA = 100%; nation	35	Kidney 6: Registered prior to 18 years old (pediatric); 250NM	54	Liver 26: MELD or PELD \geq 29; 500NM
15	Kidney 5: Prior living donor; 250NM	36	Kidney 7: Medically urgent; 250NM	55	Liver 27: MELD or PELD \geq 29; 500NM
16	Liver 5: MELD or PELD \geq 37; 150NM	37	Kidney 8: 0-ABDR mismatch; CPRA = 99%; 250NM		
17	Liver 6: MELD or PELD \geq 37; 150NM	38	Kidney 9: CPRA = 99%; 250NM		
18	Liver 7: MELD or PELD \geq 37; 250NM	39	Kidney 10: 0-ABDR mismatch; CPRA = 98%; 250NM		
19	Liver 8: MELD or PELD \geq 37; 250NM	40	Kidney 11: CPRA = 98%; 250NM		
20	Liver 9: MELD or PELD \geq 37; 500NM				
21	Liver 10: MELD or PELD \geq 37; 500NM				

The tables include ~50 high priority candidate groups across all organ types

Organs that follow the primary organ by match run

The proposed policy would direct which organs follow the primary organ on each match run

From this match run:	Additional organs that follow the primary organ
Heart or Heart-Lung	All other organs follow on the heart/heart-lung match
Lung	All other organs follow on the lung match
Liver	All other organs follow on the liver match
Intestine	Kidney, pancreas, and covered VCA follow on the intestine match
Kidney	Intestine, and covered VCA follow on the kidney match
Pancreas/Kidney-Pancreas	Intestine and covered VCA follow on the Pancreas/Kidney-Pancreas match

Framework for offering additional organs

The proposed policy would incorporate a binary “must”/“must not” offer framework for additional organs for which candidates are registered, removing discretionary “permissible” offers

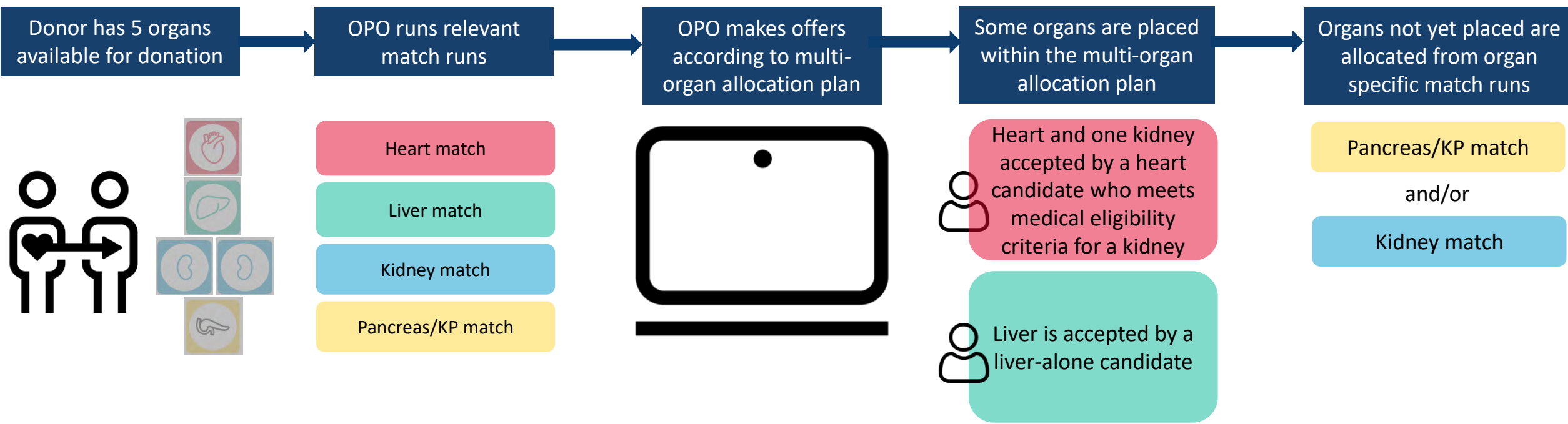
Example match run showing which additional organs must or must not be offered

Liver match

Seq#	Center	Name		Additional Organs		Offer response
				Must offer	Must not offer	
9	FXRX - TX1	Last name, First name		HR, KI		
10	FXRX - TX1	Last name, First name				
11	LXRX - TX1	Last name, First name			KI	

- Liver seq. 9:
Must offer liver, heart, kidney
- Liver seq. 10:
Must offer liver
- Liver seq. 11:
Must offer liver;
Must not offer kidney

Example allocation: DBD donor aged 18-69 with KDPI 0-34% and 5 organs available for donation



Example allocation showing organ placement

Organ classification and description		Organ classification and description		Organ classification and description	
1	Liver 1: Status 1A; 500NM	22	Liver 11: MELD or PELD ≥ 37; Hawaii or Puerto Rico	41	Liver 13: MELD or PELD ≥ 33; 150NM
2	Heart 1: Adult Status 1 or Pediatric Status 1A; 500NM	23	Liver 12: MELD or PELD ≥ 37; Hawaii or Puerto Rico	42	Liver 14: MELD or PELD ≥ 33; 150NM
3	Heart 2: Adult Status 1 or Pediatric Status 1A; 500NM	24	Intestine 1: Status 1; 500NM	43	Liver 15: MELD or PELD ≥ 33; 250NM
4	Liver 2: Status 1B; 500NM	25	Intestine 2: Status 1; 500NM	44	Liver 16: MELD or PELD ≥ 33; 250NM
5	Liver 3: Status 1A; Hawaii or Puerto Rico	26	Intestine 3: Status 1; nation	45	Liver 17: MELD or PELD ≥ 33; 500NM
6	Liver 4: Status 1B; Hawaii or Puerto Rico	27	Intestine 4: Status 1; nation	46	Liver 18: MELD or PELD ≥ 33; 500NM
7	Lung CAS threshold: ≥ 41 for O donors; ≥ 37 for non-O	28	Lung CAS threshold: ≥ 34 for O donors; ≥ 30 for non-O	47	Liver 19: MELD or PELD ≥ 30; 150NM
8	Heart 3: Adult Status 2; 500NM	29	Pancreas or K/P 1: 0-ABDR mismatch; CPRA ≥ 80%; 250NM	48	Liver 20: MELD or PELD ≥ 29; 150NM
9	Heart 4: Adult Status 2; 500NM	30	Pancreas or K/P 2: CPRA ≥ 80%;	49	Liver 21: MELD or PELD ≥ 29; 150NM
10	Lung CAS threshold: ≥ 35 for O donors; ≥ 31 for non-O	31	Heart 5: Adult Status 3 or Pediatric Status 1B; 250NM	50	Liver 22: MELD or PELD ≥ 30; 250NM
11	Kidney 1: 0-ABDR mismatch; CPRA = 100%; 250NM	32	Heart 6: Adult Status 3 or Pediatric Status 1B; 250NM	51	Liver 23: MELD or PELD ≥ 29; 250NM
12	Kidney 2: CPRA = 100%; 250NM	33	Pancreas or K/P 3: 0-ABDR mismatch; CPRA ≥ 80%; nation	52	Liver 24: MELD or PELD ≥ 29; 250NM
13	Kidney 3: 0-ABDR mismatch; CPRA = 100%; nation	34	Pancreas or K/P 4: 250NM	53	Liver 25: MELD or PELD ≥ 30; 500NM
14	Kidney 4: CPRA = 100%; nation	35	Kidney 6: Registered prior to 18 years old (pediatric); 250NM	54	Liver 26: MELD or PELD ≥ 29; 500NM
15	Kidney 5: Prior living donor; 250NM	36	Kidney 7: Medically urgent; 250NM	55	Liver 27: MELD or PELD ≥ 29; 500NM
16	Liver 5: MELD or PELD ≥ 37; 150NM	37	Kidney 8: 0-ABDR mismatch; CPRA = 99%; 250NM	Organs remaining to be placed	
17	Liver 6: MELD or PELD ≥ 37; 150NM	38	Kidney 9: CPRA = 99%; 250NM		
18	Liver 7: MELD or PELD ≥ 37; 250NM	39	Kidney 10: 0-ABDR mismatch; CPRA = 98%; 250NM		
19	Liver 8: MELD or PELD ≥ 37; 250NM	40	Kidney 11: CPRA = 98%; 250NM		
20	Liver 9: MELD or PELD ≥ 37; 500NM				
21	Liver 10: MELD or PELD ≥ 37; 500NM				

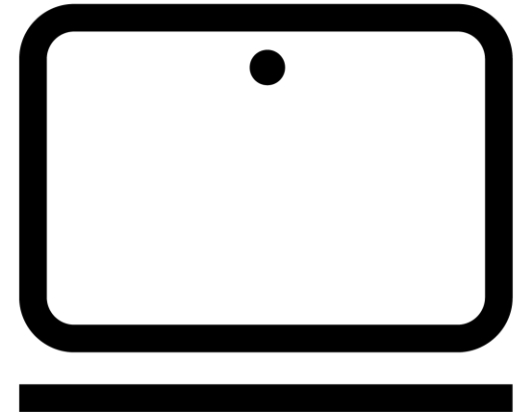
System solution

Proposed changes to the OPTN Computer System to support implementation

A system solution to guide allocation

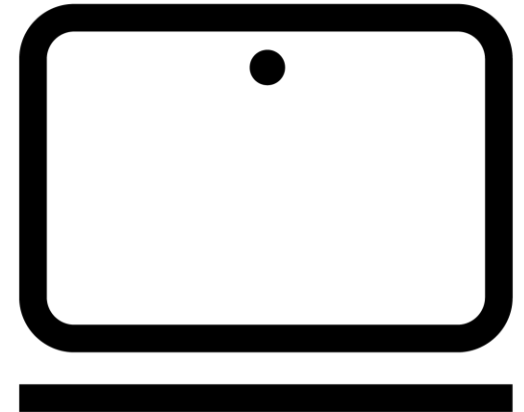
During the Winter 2025 public comment cycle, participants called for a system solution that guides users through complex multi-organ allocation policy and promotes compliance. They called for:

- Clear and easy-to-follow allocation plans
- Color coding
- Navigational aids
- Notifications when an OPO user needs to switch between match runs
- Warnings when OPO users attempt to make an offer from an incorrect match run



How will the system guide users?

- The user would run relevant match runs and request a system-generated donor-specific multi-organ allocation plan
- The plan would display the order in which the user should make offers across different organ match runs
- The system would determine whether candidates are eligible for a multi-organ offer and match runs would display whether additional organs candidates are registered for must or must not be offered

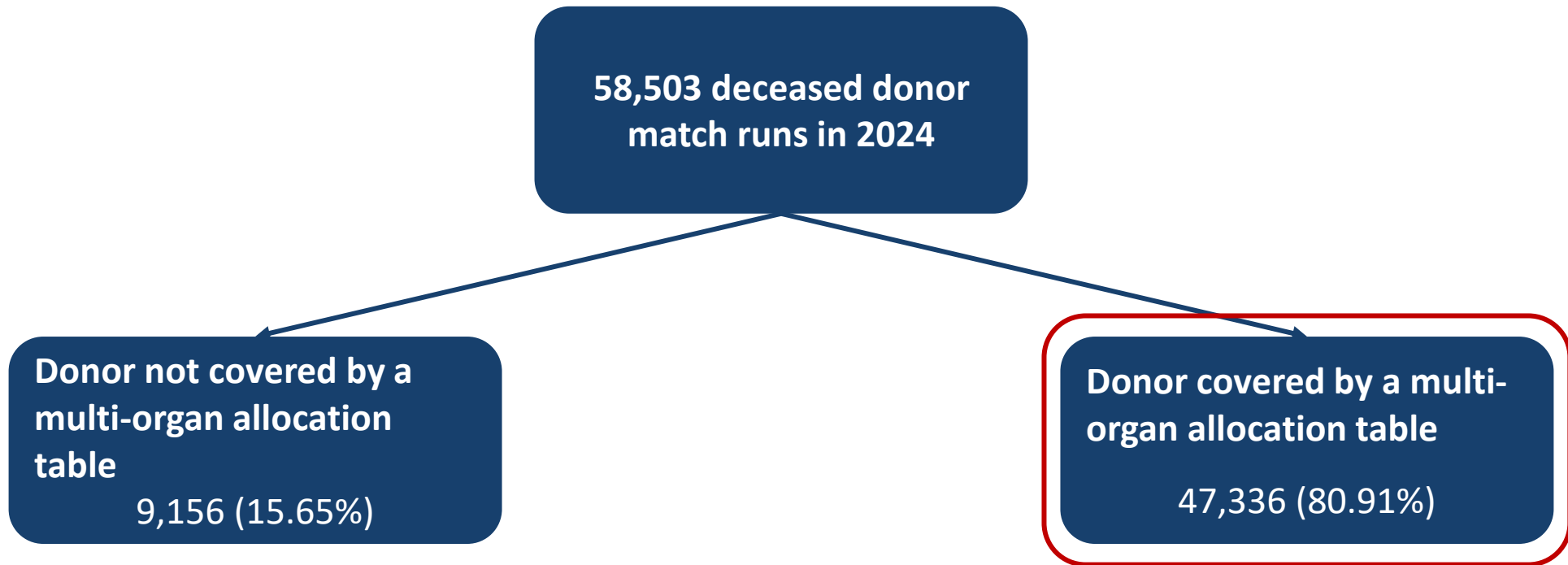


Data on covered donors, recipients, match runs, and organ offers

Covered match runs

Percent of match runs in 2024 covered by multi-organ allocation tables

Allocation plan expected to be generated for about 80% of deceased donor match runs



Not shown:

1,960 (3.33%) not multi-organ donors

75 (0.13%) of match runs were missing information such as donor age, KDPI, or DCD status

Covered donors

Seven multi-organ donor groups covered by a multi-organ allocation table

Donor group	% of multi-organ recipients	Rationale for inclusion
DBD donors aged 18-69 with KDPI of 0-34%	55.75%	Highest percentage of donations to multi-organ recipients
DBD donors aged 18-69 with KDPI of 35-85%	19.29%	Second highest percentage of donations to multi-organ recipients
DBD donors aged 11-17 with KDPI of 0-34%	8.40%	Third highest percentage of donations to multi-organ recipients
DCD donors aged 18+ with KDPI of 0-34%	6.23%	Likely growing percentage of donations to multi-organ recipients
DCD donors aged 18+ with KDPI of 35-85%	5.40%	Likely growing percentage of donations to multi-organ recipients
DBD donors aged <11 with KDPI of 0-34% and liver and intestine available	1.02%	Important donor group for pediatric multivisceral candidates
DBD donors aged <11 with KDPI of 35-85% and liver and intestine available	1.48%	Important donor group for pediatric multivisceral candidates
Total	97.57%	



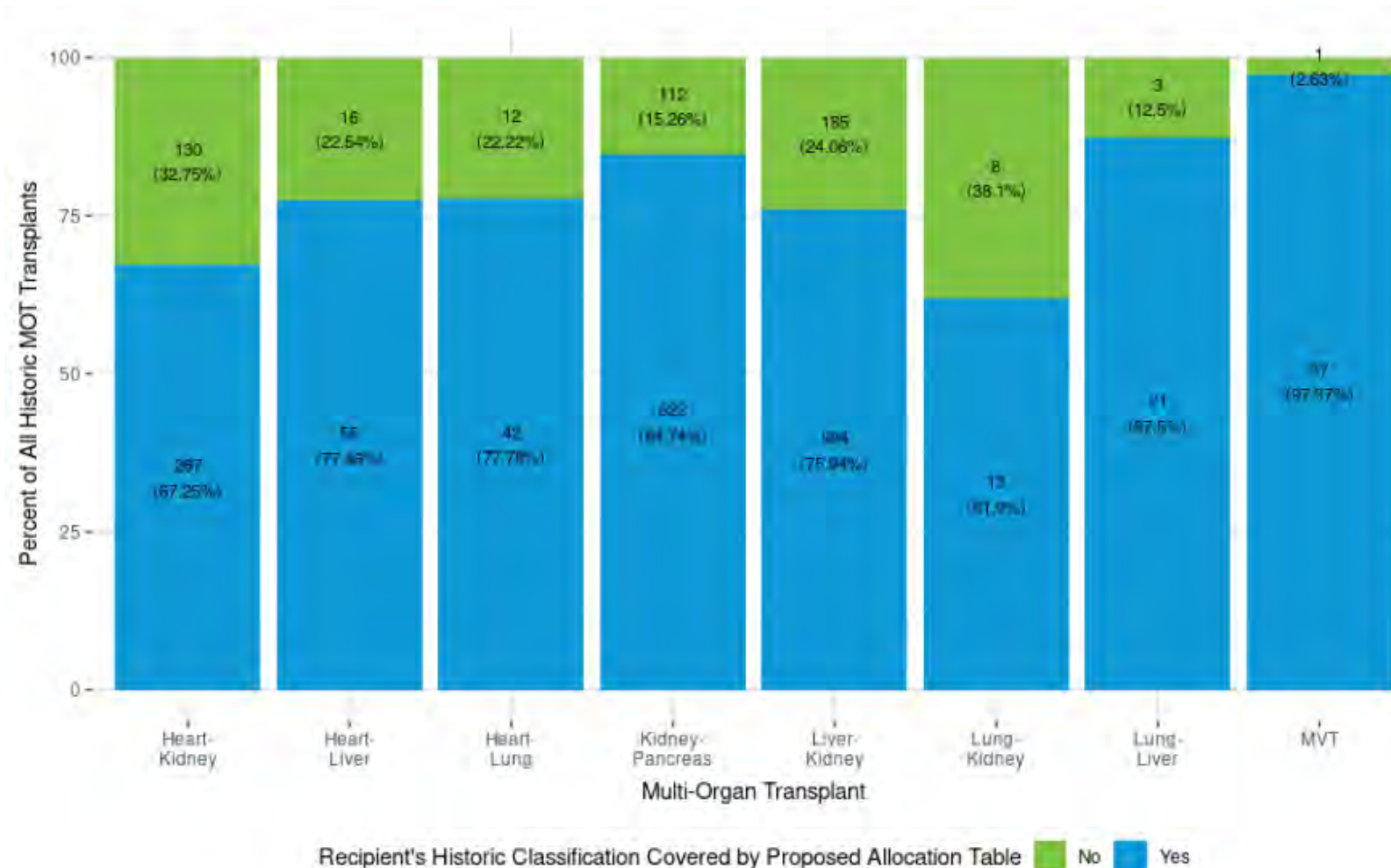
The MOT Committee acknowledges the importance of the gift of life from *all* organ donors, whether they are included in the multi-organ allocation tables. While the tables focus on donors that typically donate to multi-organ recipients, donors that are not covered by multi-organ allocation tables would still be able to donate multiple organs to both single- and multi-organ candidates.

The multi-organ allocation tables cover ~98% of donors to multi-organ recipients

Covered recipients

Percent of multi-organ recipients who received a transplant from donors covered by a multi-organ allocation table

- The allocation tables cover ~78% of multi-organ recipients who received a transplant from covered donors
- The proportion of recipients covered by an allocation table varies between 62%-97% depending on the multi-organ combination

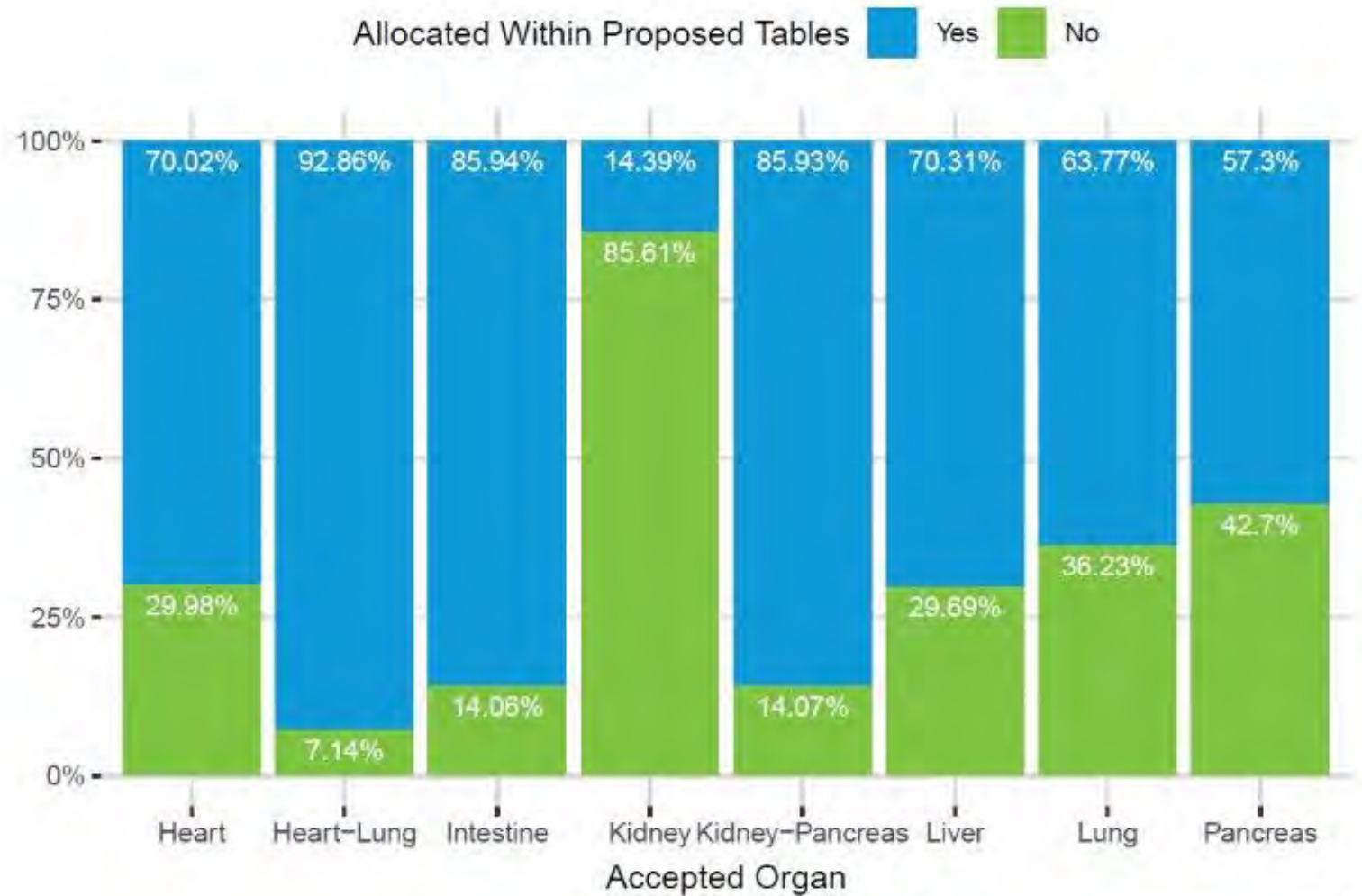


Based on data for multi-organ transplant recipients between 07/01/2023 and 06/30/2024

Organs allocated within the multi-organ allocation tables

Percent of accepted organs allocated within the proposed multi-organ allocation tables for deceased donors with match runs in 2024 by organ

- Heart-lungs were most likely to be accepted within the tables (~93%)
- Kidneys were least likely to be accepted within the tables (~14%)
- Typically, 2-3 organs would remain available and OPOs would allocate these organs according to the individual organ match runs



35 accepted pancreatic islets omitted

DBD donors aged 18-69 with KDPI 0-34% + median appearances (MA)

Organ classification and description	MA	Organ classification and description	MA	Organ classification and description	MA
Liver 1: Status 1A; 500NM	0	Liver 11: MELD or PELD ≥ 37; Hawaii or Puerto Rico	0	Liver 13: MELD or PELD ≥ 33; 150NM	1
Heart 1: Adult Status 1 or Pediatric Status 1A; 500NM	1	Liver 12: MELD or PELD ≥ 37; Hawaii or Puerto Rico	0	Liver 14: MELD or PELD ≥ 33; 150NM	0
Heart 2: Adult Status 1 or Pediatric Status 1A; 500NM	0	Intestine 1: Status 1; 500NM	4.5	Liver 15: MELD or PELD ≥ 33; 250NM	0
Liver 2: Status 1B; 500NM	0	Intestine 2: Status 1; 500NM	1	Liver 16: MELD or PELD ≥ 33; 250NM	0
Liver 3: Status 1A; Hawaii or Puerto Rico	0	Intestine 3: Status 1; nation	5.5	Liver 17: MELD or PELD ≥ 33; 500NM	3
Liver 4: Status 1B; Hawaii or Puerto Rico	0	Intestine 4: Status 1; nation	2	Liver 18: MELD or PELD ≥ 33; 500NM	1
Lung CAS threshold: ≥ 41 for O donors; ≥ 37 for non-O	9	Lung CAS threshold: ≥ 34 for O donors; ≥ 30 for non-O	29	Liver 19: MELD or PELD ≥ 30; 150NM	1
Heart 3: Adult Status 2; 500NM	10	Pancreas or K/P 1: 0-ABDR mismatch; CPRA ≥ 80%; 250NM	0	Liver 20: MELD or PELD ≥ 29; 150NM	0
Heart 4: Adult Status 2; 500NM	0	Pancreas or K/P 2: CPRA ≥ 80%;	0	Liver 21: MELD or PELD ≥ 29; 150NM	1
Lung CAS threshold: ≥ 35 for O donors; ≥ 31 for non-O	20	Heart 5: Adult Status 3 or Pediatric Status 1B; 250NM	3	Liver 22: MELD or PELD ≥ 30; 250NM	1
Kidney 1: 0-ABDR mismatch; CPRA = 100%; 250NM	0	Heart 6: Adult Status 3 or Pediatric Status 1B; 250NM	0	Liver 23: MELD or PELD ≥ 29; 250NM	0
Kidney 2: CPRA = 100%; 250NM	0	Pancreas or K/P 3: 0-ABDR mismatch; CPRA ≥ 80%; nation	0		
Kidney 3: 0-ABDR mismatch; CPRA = 100%; nation	0	Pancreas or K/P 4: 250NM	27		
Kidney 4: CPRA = 100%; nation	0	Kidney 6: Registered prior to 18 years old (pediatric); 250NM	3		
Kidney 5: Prior living donor; 250NM	0	Kidney 7: Medically urgent; 250NM	0		
Liver 5: MELD or PELD ≥ 37; 150NM	0	Kidney 8: 0-ABDR mismatch; CPRA = 99%; 250NM	0		
Liver 6: MELD or PELD ≥ 37; 150NM	0	Kidney 9: CPRA = 99%; 250NM	0		
Liver 7: MELD or PELD ≥ 37; 250NM	0	Kidney 10: 0-ABDR mismatch; CPRA = 98%; 250NM	0		
Liver 8: MELD or PELD ≥ 37; 250NM	0	Kidney 11: CPRA = 98%; 250NM	0		
Liver 9: MELD or PELD ≥ 37; 500NM	2				
Liver 10: MELD or PELD ≥ 37; 500NM	1				

- Most candidate groups included in the multi-organ allocation tables have 0 median appearances
- This means that, on average, 0 registrations appeared in that classification across historic match runs

Limitations and opportunities

- The MOT Committee has reviewed extensive **historic data** and undertaken a **Values Prioritization Exercise (VPE)** to inform the multi-organ allocation tables
- During Winter 2025 public comment, some participants requested **modelling or additional data** to better understand the potential impacts
- Policy does not currently direct the order in which OPOs make offers across match runs
 - Analysis of **historic data** cannot predict how the proposed policy changes will impact access to transplant, organ non-use, and other areas of concern
 - **Modelling** is not currently feasible for multi-organ allocation
- Adoption of this policy proposal and implementation of the system solution would **allow for stronger monitoring of outcomes, compliance, and allocation out of sequence in the context of multi-organ allocation**

Post-implementation monitoring

Compliance

Verification for deceased multi-organ donors:

- Organs were allocated according to the multi-organ allocation tables
- Multi-organ allocation plans were generated using the appropriate organ match runs
- Compliance with multi-organ medical eligibility criteria
- Compliance with policy on which organs follow the primary organ on each match

Evaluation

Key metrics:

- Number and proportion of multi-organ and single-organ candidates transplanted pre- vs. post-policy
- Median waiting time to transplant for multi- and single-organ candidates pre- vs. post-policy
- Median time from start of first match run (e.g., electronic notification time) to recovery of donor organs (e.g., cross-clamp time) pre- vs. post-policy

Special attention will be paid to the following groups to assess impacts on access to transplant and organ use and utilization:

- Heart-lung
- Heart-kidney
- Multi-visceral
- Pancreas
- Pediatric

The full monitoring plan, with additional metrics and stratifications, is available in the policy proposal.

Revisions to other sections of policy

Revisions to other policy sections

The proposal would **consolidate multi-organ allocation policy** and revise several related sections of policy to ensure **consistency and coherence**:

- *Policy 1.2: Definitions*
- *Policy 5.4.B: Order of Allocation*
- *Policy 5.6.D: Effect of Acceptance*
- *Policy 8.6.A: Choice of Right versus Left Donor Kidney*
- *Policy 9.8.F: Allocation of Livers from Non-DCD Deceased Donors 11-17 Years Old*
- *Policy 9.8.J: Allocation of Liver-Intestines from Non-DCD Donors 11 to 17 Years Old*
- *Policy 9.12.B: Closed Variance for Allocation of Blood Type O Deceased Donor Livers*
- *Policy 11.4.A: Kidney-Pancreas Allocation Order*

Considerations for patients and donor families

How would the proposal impact patients and donor families?

Promote equitable access

- Promote equitable access to transplant
- Increase access for high priority single-organ candidates such as medically urgent, highly sensitized, and pediatric candidates

Increase consistency and transparency

- Ensure consistent allocation practices across the country
- Increase transparency and allow candidates to better understand priority
- Honor the gift of life by ensuring that organs are offered to the highest priority candidates

Strengthen the allocation system

- Facilitate stronger monitoring of outcomes, compliance, and allocation out of sequence
- Promote system efficiencies through policy revisions and system updates

Community feedback

What do you think?

1. Does the community support the **standardized process** for multi-organ allocation? The process includes requirements that:
 - OPOs execute match runs for organs recovered for the purpose of transplantation
 - OPOs generate a multi-organ allocation plan within the OPTN Computer System before making organ offers to primary potential transplant recipients (PTRs)
2. What **challenges do members anticipate if the policy proposal is implemented** and how should the **OPTN support** members to ensure successful implementation and promote compliance? E.g.
 - System solution components
 - Pre-implementation outreach and training
3. Are there **specific candidate groups or areas of interest** that should be the focus of **post-implementation monitoring**? The proposed monitoring plan pays special attention to the following groups to assess impacts on access to transplant and organ use and utilization:
 - Heart-lung, Heart-kidney, Multi-visceral, Pancreas, Pediatric

Provide Feedback

Submit public comments on the OPTN website:

- August 8 – October 7, 2025
- **optn.transplant.hrsa.gov**

