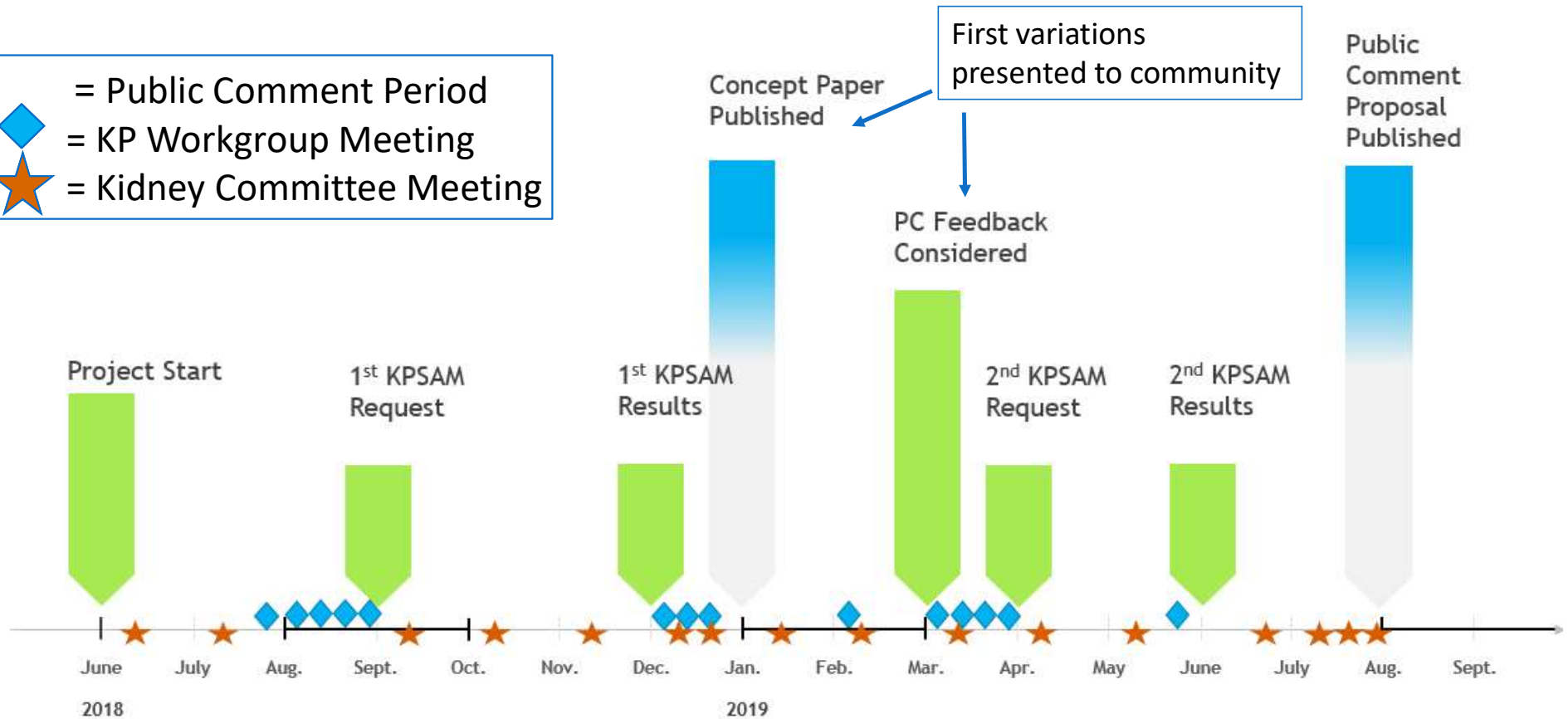


Eliminate the Use of DSA and Region in Kidney Allocation Policy

OPTN Kidney Transplantation Committee

Proposal Timeline – June 2018 to Present

- = Public Comment Period
- ◆ = KP Workgroup Meeting
- ★ = Kidney Committee Meeting



What Problems will this Proposal Address?

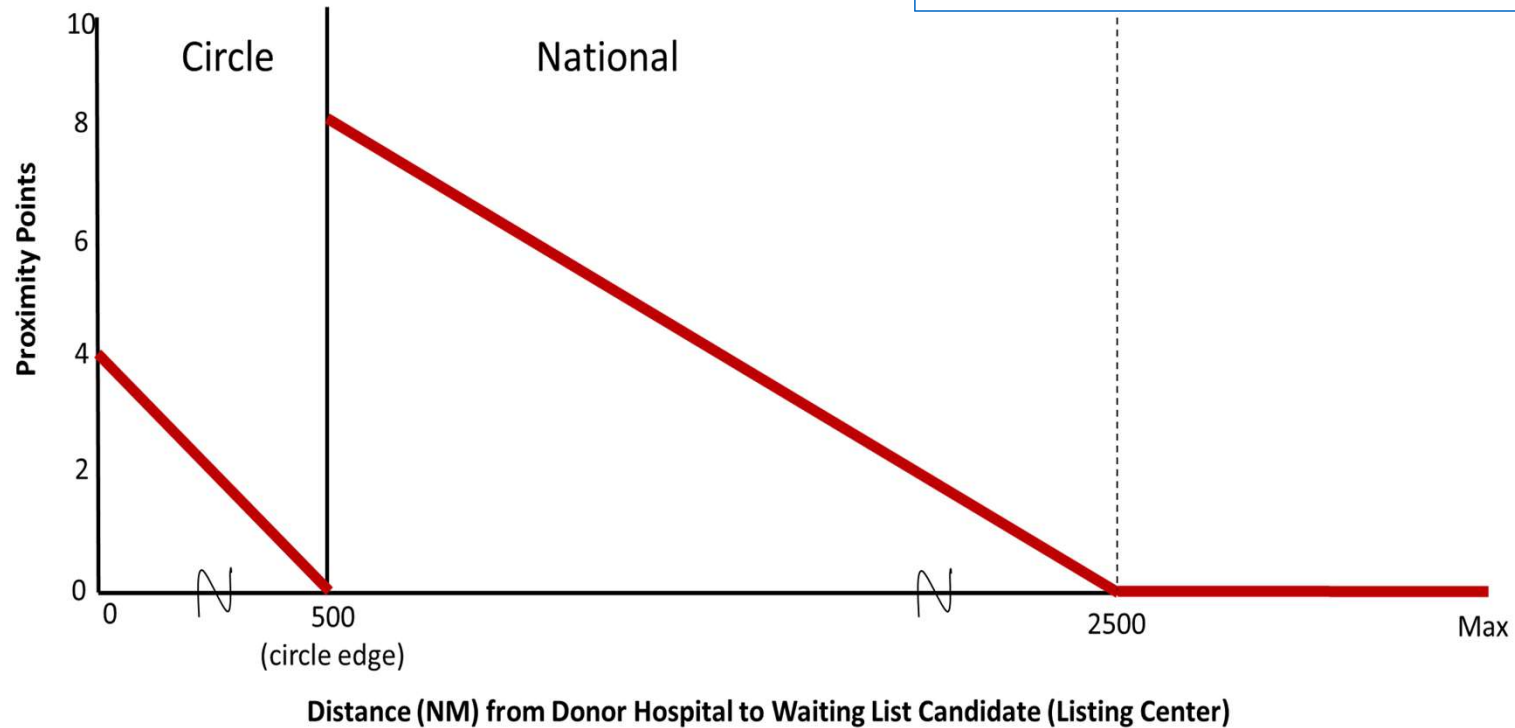
1. DSA and Region not optimized for organ distribution
 - Final Rule: geography shall not impact candidate access to transplant, except to the extent necessary (e.g. avoid unnecessary organ loss / promote efficient management of organ placement)
2. Geographic disparity in access to transplant
 - DSA largest factor related to disparity in kidney allocation

Hybrid Framework

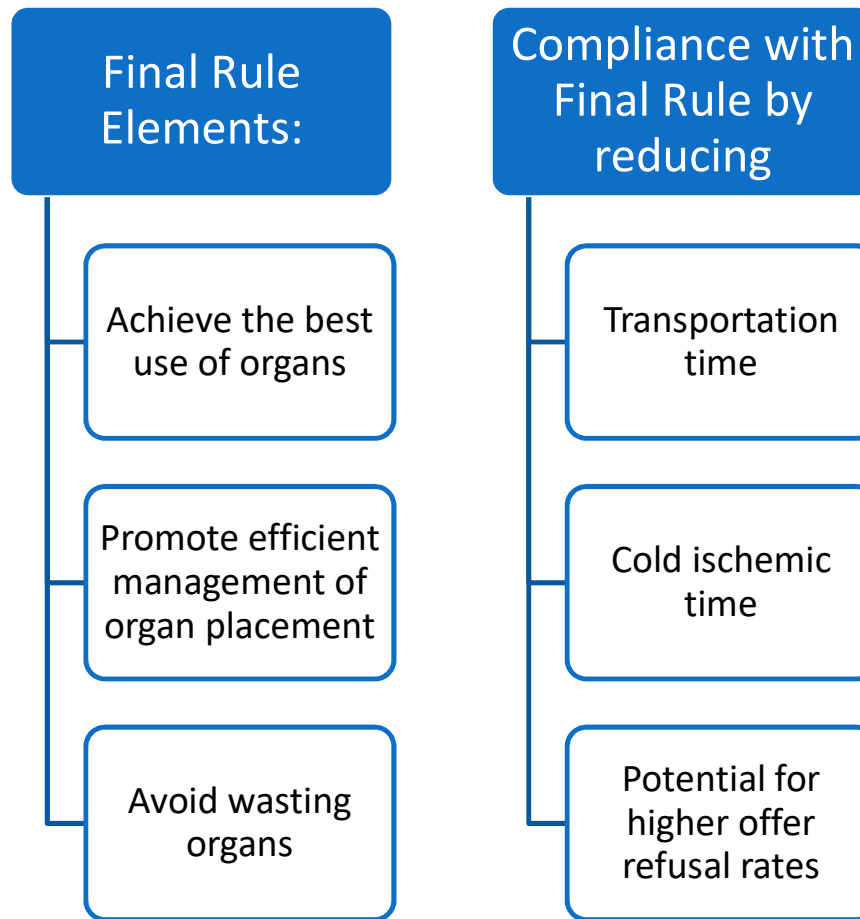
- What is the “hybrid” framework?
 - Single fixed-distance circles with proximity points
 - The single fixed-distance circle is based on the distance from the donor hospital to the candidate’s place of listing
 - One proximity point is equivalent to one year of waiting time
 - Proximity points only affect rank-ordering of candidates *within* classifications
- Committee modeling focused on “hybrid” framework
 - Reflects public comment feedback (preference for hybrid)
 - Inclusion of proximity points promotes efficiency within broader distribution
 - Smaller proximity points values eliminated from consideration after showing negligible effect in first KPSAM modeling

Proximity Points

Candidates outside the circle cannot receive organ offers before candidates inside the circle (except for mandatory national shares)



Proximity Points and the Final Rule

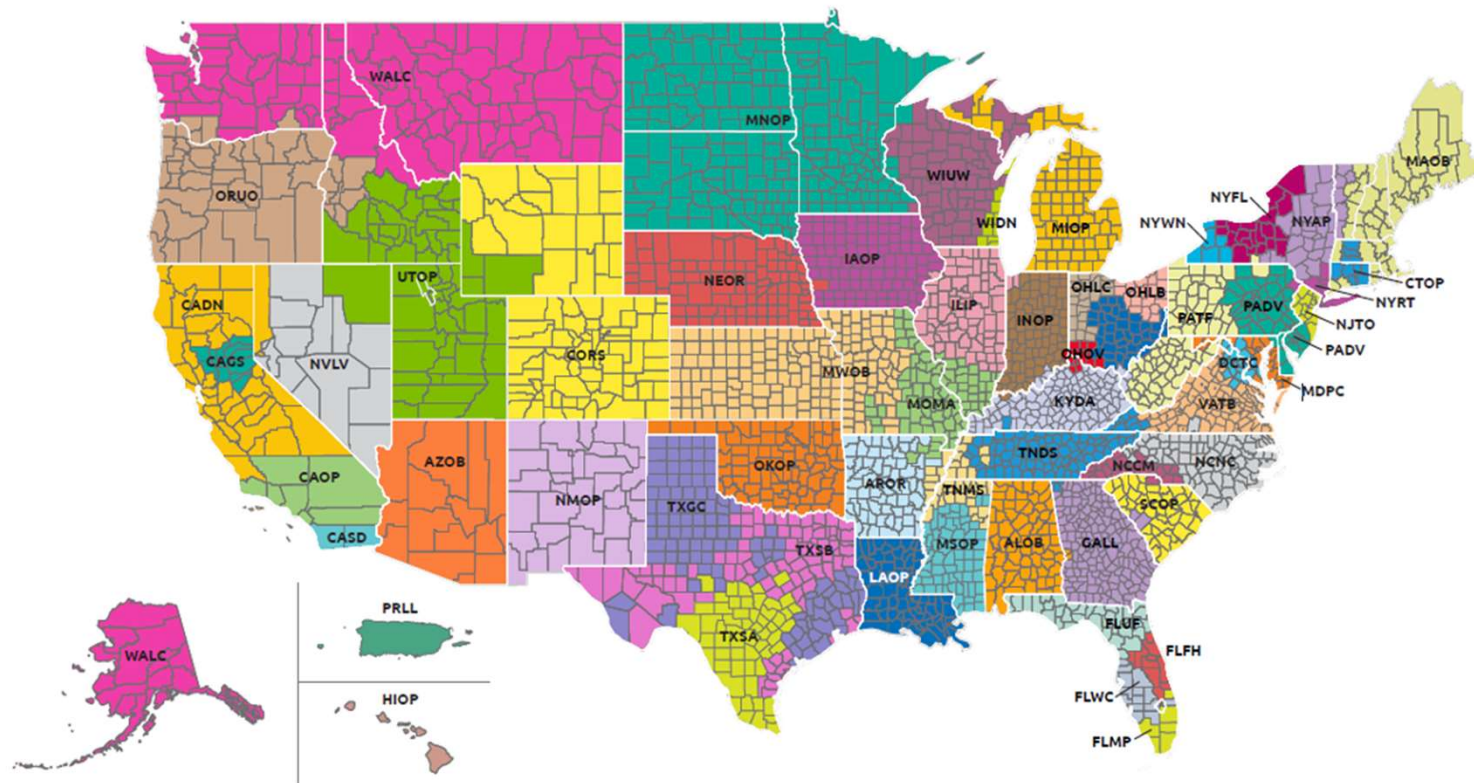


Overview: Proposed Solution

- Hybrid Framework with proximity points
- 500 NM fixed circle around the donor hospital
- Maximum of four proximity points inside the circle
- Maximum of eight proximity points outside of the circle
- Added medical urgency classification and review process
- Import match run: New match run would be based on a 150 NM circle

DSAs Were Drawn as Boundaries for OPOs to Recover Organs, not for Equitable Organ Distribution Purposes

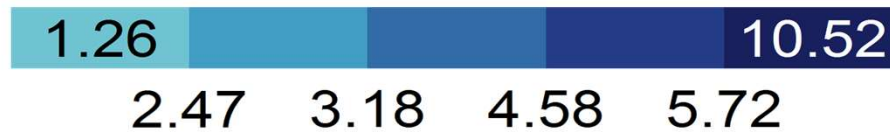
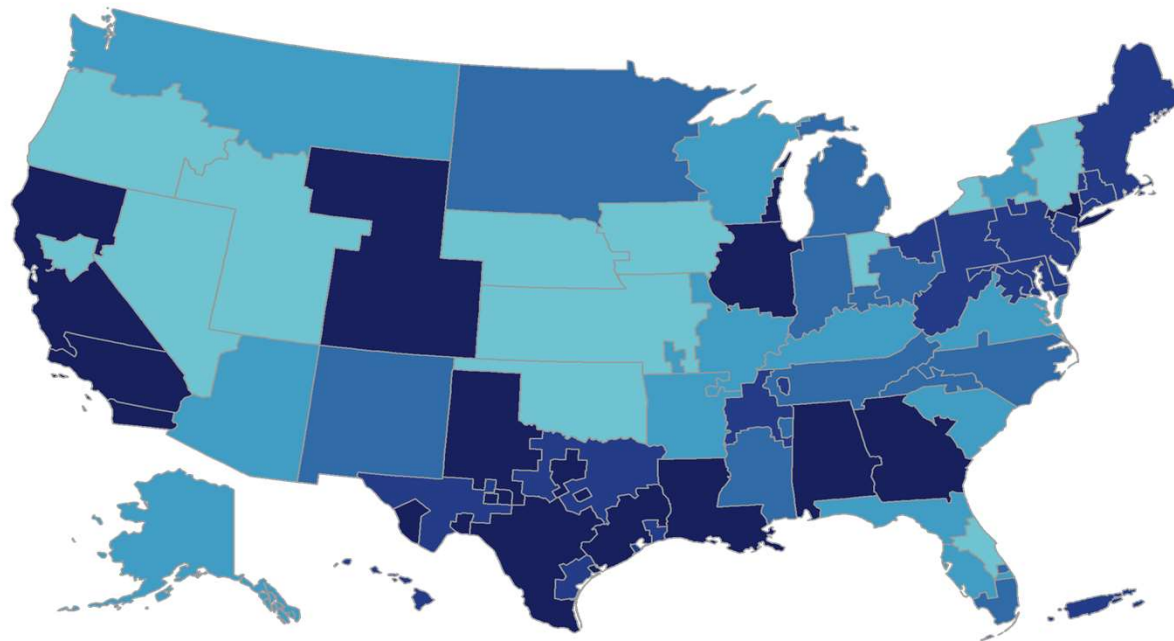
Donation Service Areas



Regions Vary in Geographic Size, and are not Consistently Applied or Rationally Determined Units of Distribution



Disparities in Adjusted Median Waiting Time (Kidney)



KPSAM Modeling (2nd Round)

Model Number	Scenario	Circle Size: KI	Circle Size: KP/PA	Inner Circle Maximum Points	Outside of Circle Maximum Points
BL-ped	BL-ped (Baseline)	Local/Regional/National	L/R/N	NA	NA
2	500.500.0.8	500	500	0	8
3	500.500.4.8	500	500	4	8
4	500.150.0.8	500	150	0	8
5	250.250.2.4	250	250	2	4
6	250.250.0.8	250	250	0	8
7	250.150.0.8	250	150	0	8
8	150.150.0.8	150	150	0	8
9	150.150.0.20	150	150	0	20
10	500.500.step150	500	500	4* (flat from 0-150NM)	8
11	500.500.step250	500	500	4* (flat from 0-250NM)	8

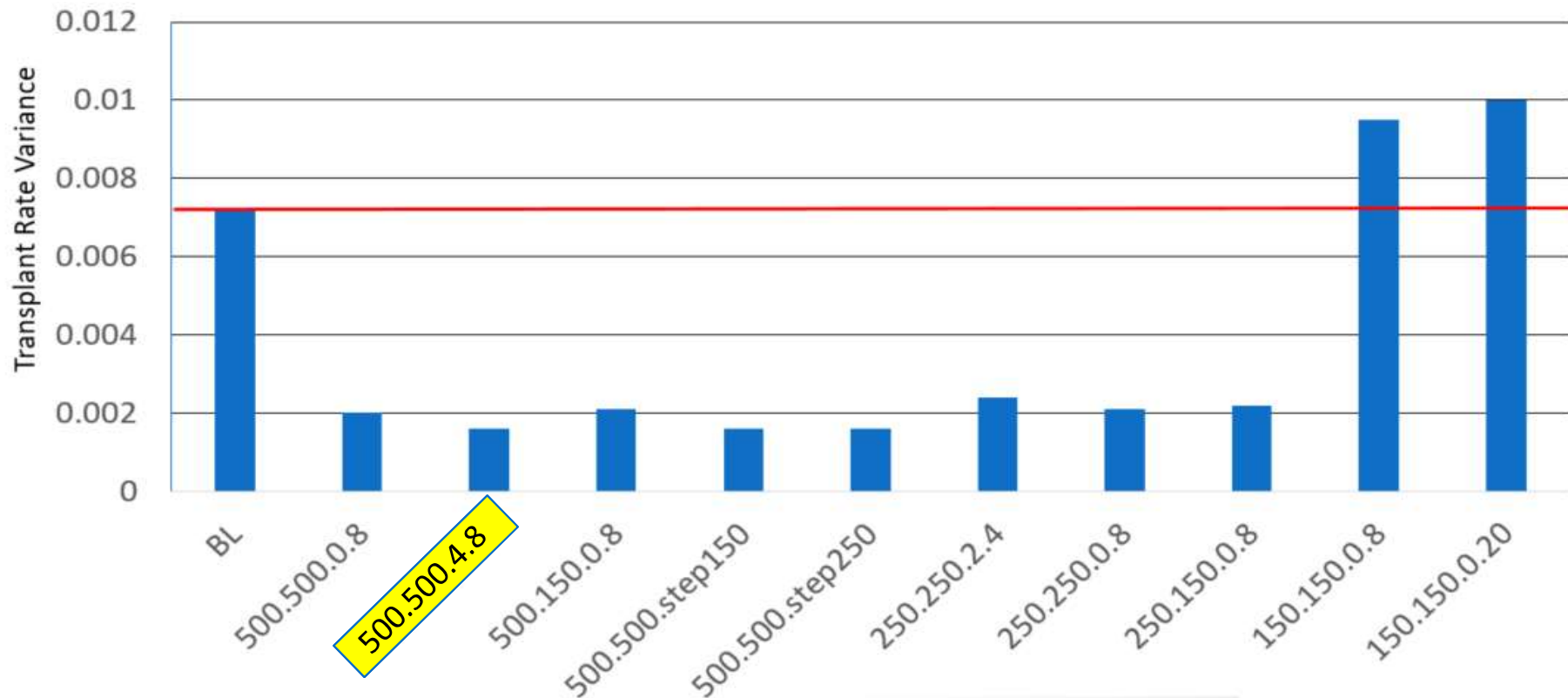
Acceptance Model Update

- Initial KPSAM report included local (DSA) indicator in offer acceptance models, potentially impacting change in transplant count/rate
 - Including DSA as a key predictor of acceptance behavior may result in inaccurate predictions for a future system that does not rely on DSAs for organ distribution.
- SRTR identified alternative acceptance models without local indicator for Committee to evaluate
- Committee determined acceptance model should include donor only criteria

Increased Pediatric and Prior Living Donor Priority

Sequence A KDPI 0-20%	Sequence B KDPI 20-34%	Sequence C KDPI 35-85%	Sequence D KDPI 86-100%
100% Highly Sensitized	100% Highly Sensitized	100% Highly Sensitized	All Highly Sensitized
Inside circle prior living donor	Inside circle prior living donor	Inside circle prior living donor	0-ABDRmm
Inside circle pediatrics	Inside circle pediatrics	98-99% Highly Sensitized	Inside circle safety net
98-99% Highly Sensitized	98-99% Highly Sensitized	0-ABDRmm	Inside circle
0-ABDRmm	0-ABDRmm	Inside circle safety net	National
Inside circle top 20% EPTS	Inside circle safety net	Inside circle	
0-ABDRmm (all)	Inside circle adults	National	
Inside circle (all)	National pediatrics		
National pediatrics	National adults		
National (top 20%)			
National (all)			

Variation in Kidney Transplant Rates by DSA

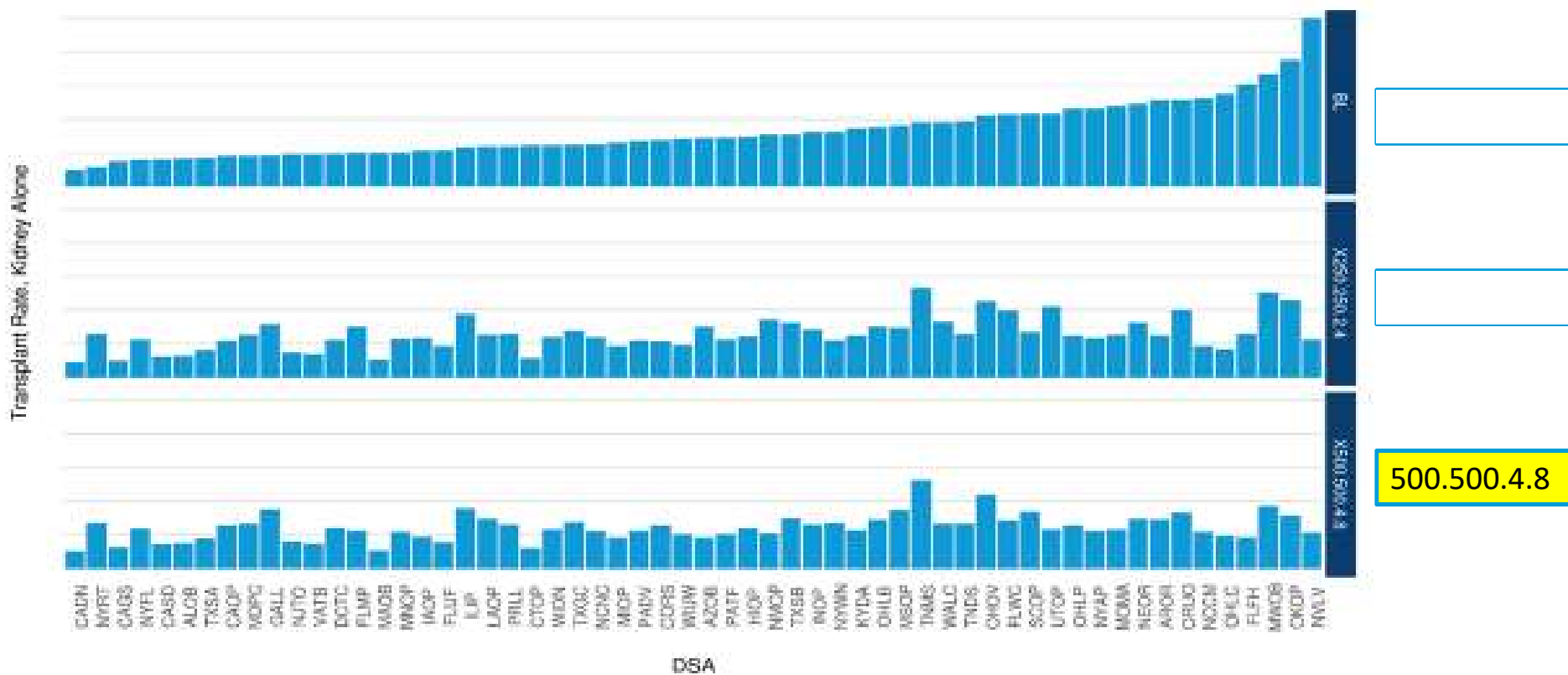


Committee removed 150 NM circle hybrid variations from consideration based on this projected increased variation across DSA

Overall Transplant Counts

Variation	KI Transplant Counts	KP Transplant Counts	Total KI Transplants (KI & KP)	KI Change from BL	KP Change from BL	Total KI Change from BL
BL- Current KAS	13062	822	13884			
BL- Peds Priority	13080	815	13895			
500.500.0.8	12748	1111	13859	-2.5%	36.3%	-0.3%
500.500.4.8	12766	1122	13888	-2.4%	37.3%	-0.1%
500.150.0.8	12965	937	13902	-0.9%	15.0%	0.1%
250.250.2.4	12830	1056	13886	-1.9%	29.6%	-0.1%
250.250.0.8	12832	1052	13884	-1.9%	29.1%	-0.1%
250.150.0.8	12945	945	13890	-1.0%	16.0%	0.0%
150.150.0.8	12915	970	13885	-1.3%	19.0%	-0.1%
150.150.0.20	12946	966	13912	-1.0%	18.5%	0.1%
500.500.step150	12720	1118	13838	-2.8%	37.2%	-0.4%
500.500.step250	12727	1124	13851	-2.7%	37.9%	-0.3%

Reducing Disparities Across DSA (Kidney)



Medical Urgency and Import Back Up

- **Medical Urgency**
 - Create a new “Medically Urgent” classification in existing allocation tables
 - Create a prospective review process with a four (4) day turnaround on review. Reviewed by new Kidney Committee subcommittee
- **Import Backup**
 - Host OPO can choose to delegate “Import Backup”
 - New match run utilizing a fixed 150 NM circle around the original intended recipient’s transplant program
 - Proximity points utilized only outside of 150 NM fixed circle

Review: Proposed Solution

- Removes DSA and region from kidney allocation policy as measures of distribution while striking an appropriate balance with the Final Rule requirements
 - Limits geography as factor in organ allocation
 - Considers efficiency concerns by including steep proximity points
 - Promotes access for vulnerable populations
- Framework represents a step in the direction of continuous distribution

What Else Did The Committee Consider?

- Fixed Distance Circles
 - Community preferred a hybrid approach in the first round of Public Comment
- Alternative Hybrid Variations (Smaller Circles, Less Proximity Points)
 - Modeling revealed more variability in access across DSA with smallest allocation circles
 - Smaller maximum proximity points had minimal effect in efficiency