

Kidney Allocation Policy Proposal

November 7, 2012
2:00 p.m. – 3:15 p.m. (EDT)

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Objectives

- State the importance of **making the most of every donated kidney while maintaining access** for all groups of candidates
- Describe the use of the **Kidney Donor Profile Index (KDPI)** and the **Estimated Post-Transplant Survival Formula (EPTS)**
- Identify ways to help **increase access** for type B transplant candidates, many of whom are minorities, through blood type subgroup matching

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Objectives

- Describe how highly sensitized candidates will be given **more equitable access** based on a sliding scale and increased priority for those that are hardest to match
- Relate waiting time priority to a **defined stage** of kidney function
- Explain the rationale for **eliminating** the payback system
- State the need for a **single national kidney allocation system** that is modifiable over time

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Today's Speaker and Panelist



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OVERVIEW OF THE PROPOSAL

John J. Friedewald, MD
Chair, OPTN/UNOS Kidney Transplantation Committee

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Proposal Summary

- **Existing** kidney allocation system needs to be improved
- **Proposed** improvements expected to:
 - enhance the long-term benefit of kidney transplantation,
 - make better use of available kidneys,
 - increase transplant opportunities for hard-to-match candidates.

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Proposal Summary

- Candidates should see benefits of better long-term kidney function or a possible reduction in waiting time for a transplant.
- Proposed system would continue to provide transplants for people of all ages.

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Current Allocation System Limitations

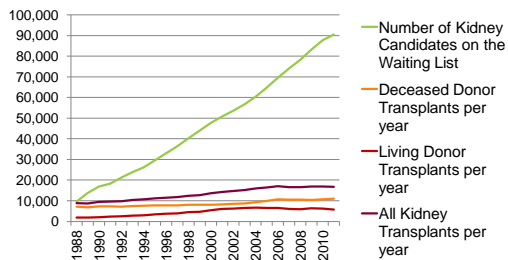
- High discard rates of kidneys that could help individuals on dialysis
- Mismatch in patient/graft survival
- Access variability due to geography and biology

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The Growing Waiting List

Kidney Waiting List and Transplants



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OPTN data as of September 1, 2012



Goals of Proposed Changes

- Improve the length of time kidney recipients may have a functioning transplant
- Make better use of available kidneys through improved and fair distribution
- Improve the chance of receiving a transplant for people who are hard to match with most donors

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Overview of Proposed Changes

- Revised kidney classifications
- Inclusion of longevity matching for some candidates
- Modifications to blood type subgroup matching
- Revisions to immune sensitivity matching
- Revisions to waiting time definition
- Elimination of kidney paybacks and variances

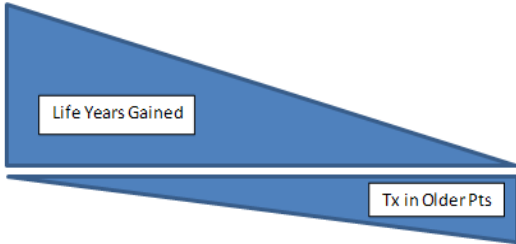
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The Course of Policy Development

Date	Sentinel Event
2003	Board requests review of kidney allocation system; public hearings held
2004	Board directs investigation of benefit use in a kidney allocation system
2007	Public Forum held in Dallas; main topic LYFT
2008	RFI released: main topics KDPI/LYFT
2009	Public Forum held in St. Louis; main topics LYFT/KDPI
2009	Donor/recipient age matching reviewed as possibility
2011	Concept document released: main topics EPTS/age matching/ KDPI
2011	Age matching no longer under consideration
2012	Public comment proposal

Determining a Balance: Equity and Utility



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Evolution of Proposal

	National Sharing +LYFT	LYFT	Age Matching+ Longevity Matching	Age Matching	Longevity Matching
Gain in life years	34,026	25,794	15,223	14,044	8,380
Proportion of kidneys transplanted into recipients >50 years old	10	29	46	45	52

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Revised Kidney Classifications

- **Current** kidney donor classification:
 - Standard criteria donor (SCD)
 - Expanded criteria donor (ECD)
- **Proposed** system includes the Kidney Donor Profile Index (KDPI)
 - Continuous measure of expected kidney function

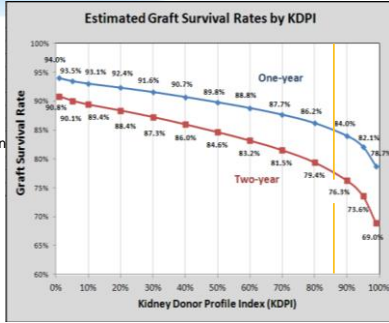
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Kidney Donor Profile Index (KDPI)

KDPI Variables

- Donor age
- Height
- Weight
- Ethnicity
- History of Hypertension
- History of Diabetes
- Cause of Death
- Serum Creatinine
- HCV Status
- DCD Status



KDPI values now displayed with all organ offers in DonorNet®



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Inclusion of Longevity Matching

- **Current system** does not include measure of potential longevity with transplant
- Longevity matching for some candidates could reduce the need for repeat transplants

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Inclusion of Longevity Matching

- Four medical factors used to calculate Estimated Post Transplant Survival (EPTS)
 - Age
 - History of diabetes
 - Length of time on dialysis
 - History of a prior transplant

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Modifications to Blood Type Subgroup Matching

- Blood type B candidates face biological challenges
- Many of these candidates are ethnic minorities
- Allow access for blood type B candidates to additional kidneys from donors with specific subtypes of blood type A

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Changes to Immune Sensitivity Matching

- Sensitized candidates wait substantially longer due to biological challenges
- Some candidates are so sensitized, they require access to a larger pool of kidneys to find a match
- Proposed system priority

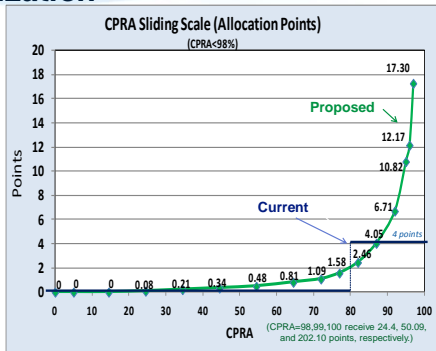
CPRA=100%	National
CPRA=99%	Regional
CPRA=98%	Local

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Proposed Point Changes: Sensitization

- Current policy: 4 points for CPRA>=80%
No points for moderately sensitized candidates.
- Proposed policy: sliding scale starting at CPRA>=20%



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Revised Waiting Time Definition

- **Current policy:** waiting time points for adults at registration with:
 - GFR<=20 ml/min
 - On Dialysis
- **Proposed policy:** waiting time points for dialysis time prior to registration
 - Pediatric and adult candidates
 - Better recognizes time spent with ESRD as the basis for priority
- Pre-emptive listing still advantageous for 0-ABDR mismatch offers

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Elimination of Kidney Paybacks and Variances

- Current payback policy evaluated and found to be
 - Administratively challenging
 - Ineffective in improving outcomes of recipients
- Kidney paybacks would no longer be permitted
- Proposal also recommends eliminating a number of local allocation variances

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Evaluating Potential Policy Changes

- Scientific Registry of Transplant Recipients (SRTR) simulates proposed policy changes
- Kidney-Pancreas Simulated Allocation Model (KPSAM)
- 50+ KPSAM runs conducted throughout policy development

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Summary of Findings

- New system forecasted to result in:
 - 8,380 additional life years gained annually
 - Improved access for moderately and very highly sensitized candidates
 - Improved access for ethnic minority candidates
 - Comparable levels of kidney transplants at regional/national levels

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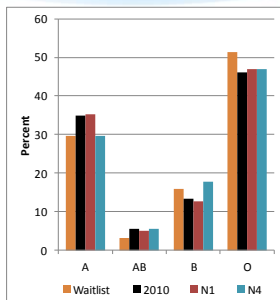
Simulation Modeling Results Key

- WL** Actual proportion of candidates on waitlist
- 2010** Actual proportion of transplants in 2010
- N1** Simulated proportion of transplants in 2010
- N4** Simulated proportion of transplants with proposed rules

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KPSAM Results by Blood Type



The simulation results show an increase in the number of transplants for candidates with blood type B, many of whom are minorities.

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Summary

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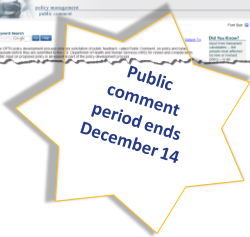
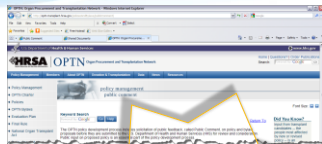


Participate in Policy Development

- Submit comments online:

optn.transplant.hrsa.gov

- Access webinar schedules
- Download educational materials



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