
The Transplant Waiting List and Organ Allocation Process

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**2013 Douglas T. Miller Symposium
on Organ Donation and Transplantation
Thursday, April 25, 2013**

Presentation Objectives:

- Gain knowledge of state, regional, and national statistics related to the transplant waiting list and transplantation.
- Develop an understanding of the complexities surrounding being on the transplant waiting list and the medical reasons why a patient is added to the transplant waiting list.
- Hear and understand the emotional and physical constraints of being on a transplant waiting list, waiting for the call, and being given a second chance at life.

Waiting List Data and Statistics

- UNOS: United Network for Organ Sharing

- OPTN: Organ Procurement and Transplantation Network

Uniting people and information to help save lives

The Organ Procurement and Transplantation Network (OPTN) maintains the only national patient waiting list and feat comprehensive data available in any single field of medicine. [Learn More About the OPTN >>](#)

Give to UNOS
 Success at UNOS means more lives being saved. We face this challenge with your support.

[Give now >>](#)
[Learn more >>](#)

Data

Waiting list candidates 117,942 as of today 3:49pm

Active waiting list candidates 75,039 as of today 3:49pm

Transplants January - January 2013 2,313 as of 04/12/2013

Donors January - January 2013 1,150 as of 04/12/2013

Calendar

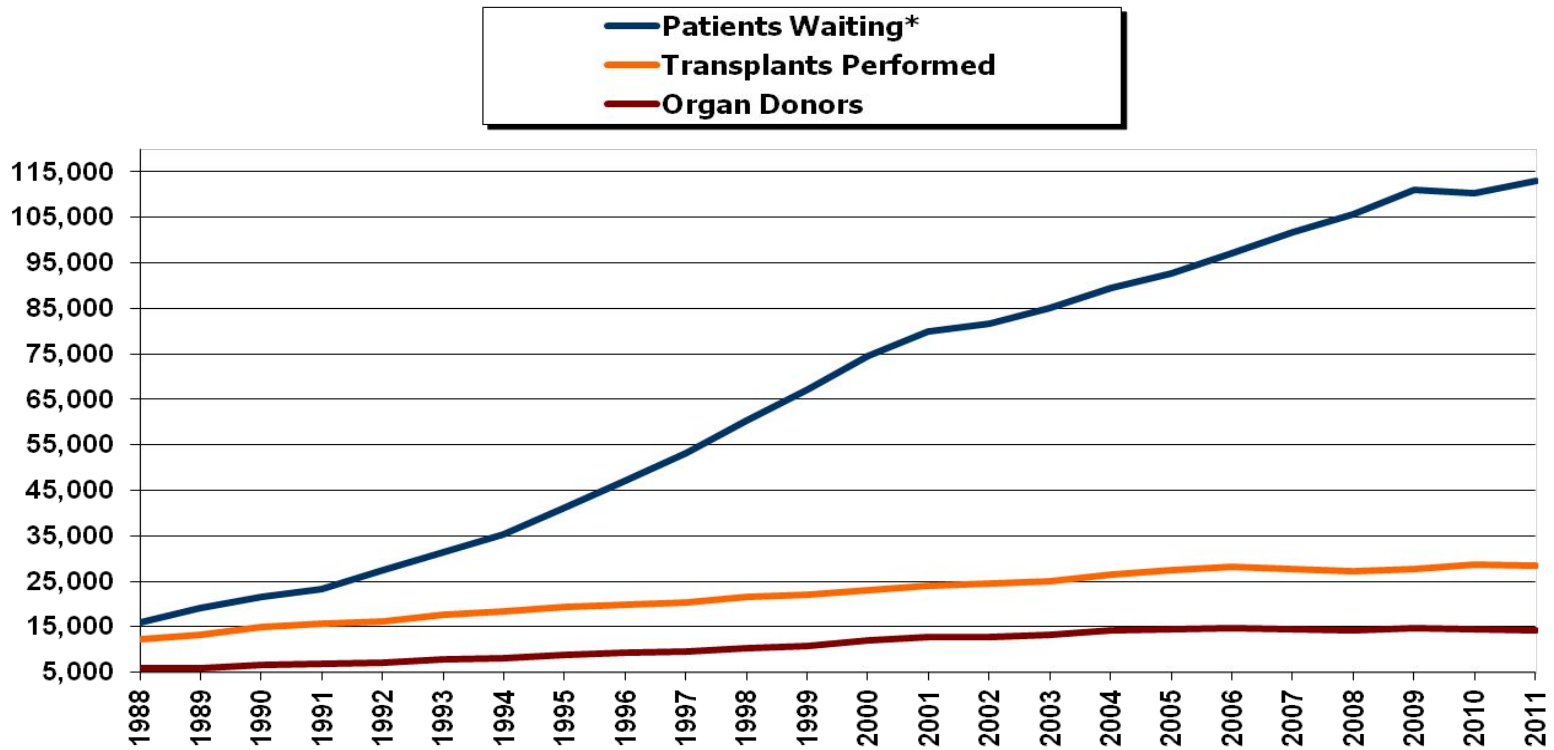
[April 14 - 20, 2013](#)

- OPTN/UNOS Policy Oversight Committee Meeting
- OPTN/UNOS OPO Committee Meeting
- 21st Annual UNOS Transplant Management Forum
- OPTN/UNOS Region 8 Meeting

Source: UNOS/OTPD.net, 4/5/13



“The Gap”



*Data based on snapshot of the UNOS, OPTN waiting list and transplants on the last day of each year.

Waiting Lists

- National
- Regional
- Local
- Center

U.S. Waiting List Data and Statistics

Overall by Organ

Current U.S. Waiting List

For Format = Portrait

Based on OPTN data as of April 5, 2013

Change Report (Optional) :

[Create a New Report](#)

Count

Registration

	All Organs	Kidney	Liver	Pancreas	Kidney / Pancreas	Heart	Lung	Heart / Lung	Intestine
Candidates	117,615	95,846	15,761	1,185	2,147	3,498	1,682	49	261

count flip print

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portrait landscape

Data subject to change based on future data submission or correction. Totals may be less than the sums due to patients included in multiple categories.

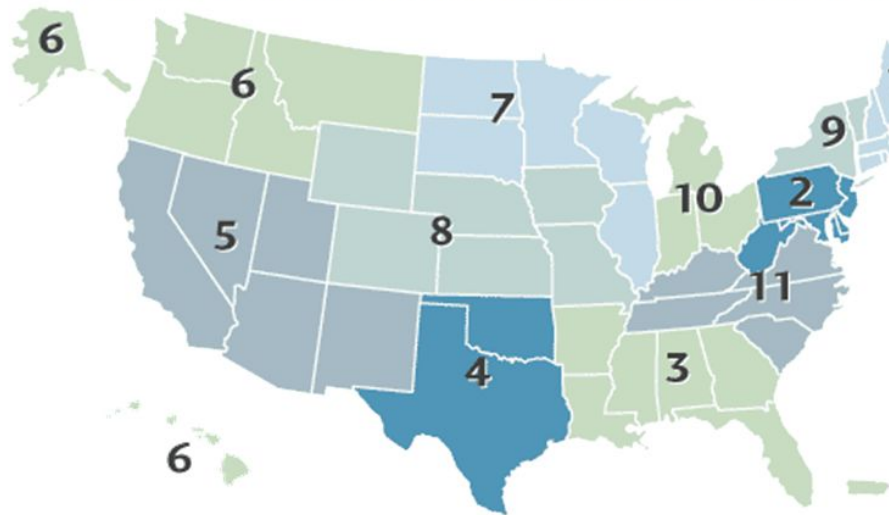
Regional Waiting List Data and Statistics

data
view data reports > regional data



Step 1: Choose a Region or click the map below :

Region 7 : Illinois, Minnesota, North Dakota, South Dakota, Wisconsin



Region 7		
State	OPO	TXC
Illinois	1	9
Minnesota	1	5
North Dakota	0	2
South Dakota	0	2
Wisconsin	2	5

OPO : Organ Procurement Org.
TXC : Transplant Center

Source: UNOS/OTPD.net, 4/5/13

Regional Waiting List Data and Statistics

Font Size:

Overall by Organ

Current U.S. Waiting List
 For Area = Region 7, Format = Portrait
 Based on OPTN data as of April 5, 2013

Page 1 of 1



Change Report (Optional) :

[Create a New Report](#)

Count Region

	All Organs	Kidney	Liver	Pancreas	Kidney / Pancreas	Heart	Lung	Heart / Lung	Intestine
Candidates	10,460	8,529	1,255	209	308	413	159	1	13

count flip print

Data subject to change based on future data submission or correction. Totals may be less than the sums due to patients included in multiple categories.

Source: UNOS/OTPD.net, 4/5/13

WI Waiting List Data and Statistics

Overall by Organ

Page 1 of 1

Current U.S. Waiting List
 For Area = Wisconsin, Format = Portrait
 Based on OPTN data as of April 5, 2013



Change Report (Optional) :

[Create a New Report](#)

Count State
 Registration Wisconsin Go

	All Organs	Kidney	Liver	Pancreas	Kidney / Pancreas	Heart	Lung	Intestine
Candidates	2,110	1,743	243	10	49	70	38	1

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Data subject to change based on future data submission or correction. Totals may be less than the sums due to patients included in multiple categories.

Source: UNOS/OTPD.net, 4/5/13



MI Waiting List Data and Statistics

Overall by Organ

Page 1 of 1

Current U.S. Waiting List
 For Area = Michigan, Format = Portrait
 Based on OPTN data as of April 5, 2013



Change Report (Optional) :

[Create a New Report](#)

Count State
 Registration ▼ Michigan ▼ Go

	All Organs	Kidney	Liver	Pancreas	Kidney / Pancreas	Heart	Lung	Intestine
Candidates	3,169	2,638	351	19	46	81	84	7

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landscape

Data subject to change based on future data submission or correction. Totals may be less than the sums due to patients included in multiple categories.

Source: UNOS/OTPD.net, 4/5/13

IL Waiting List Data and Statistics

Overall by Organ

Page 1 of 1

Current U.S. Waiting List
 For Area = Illinois, Format = Portrait
 Based on OPTN data as of April 5, 2013



Change Report (Optional) :

[Create a New Report](#)

Count State
 Registration ▼ Illinois ▼ Go

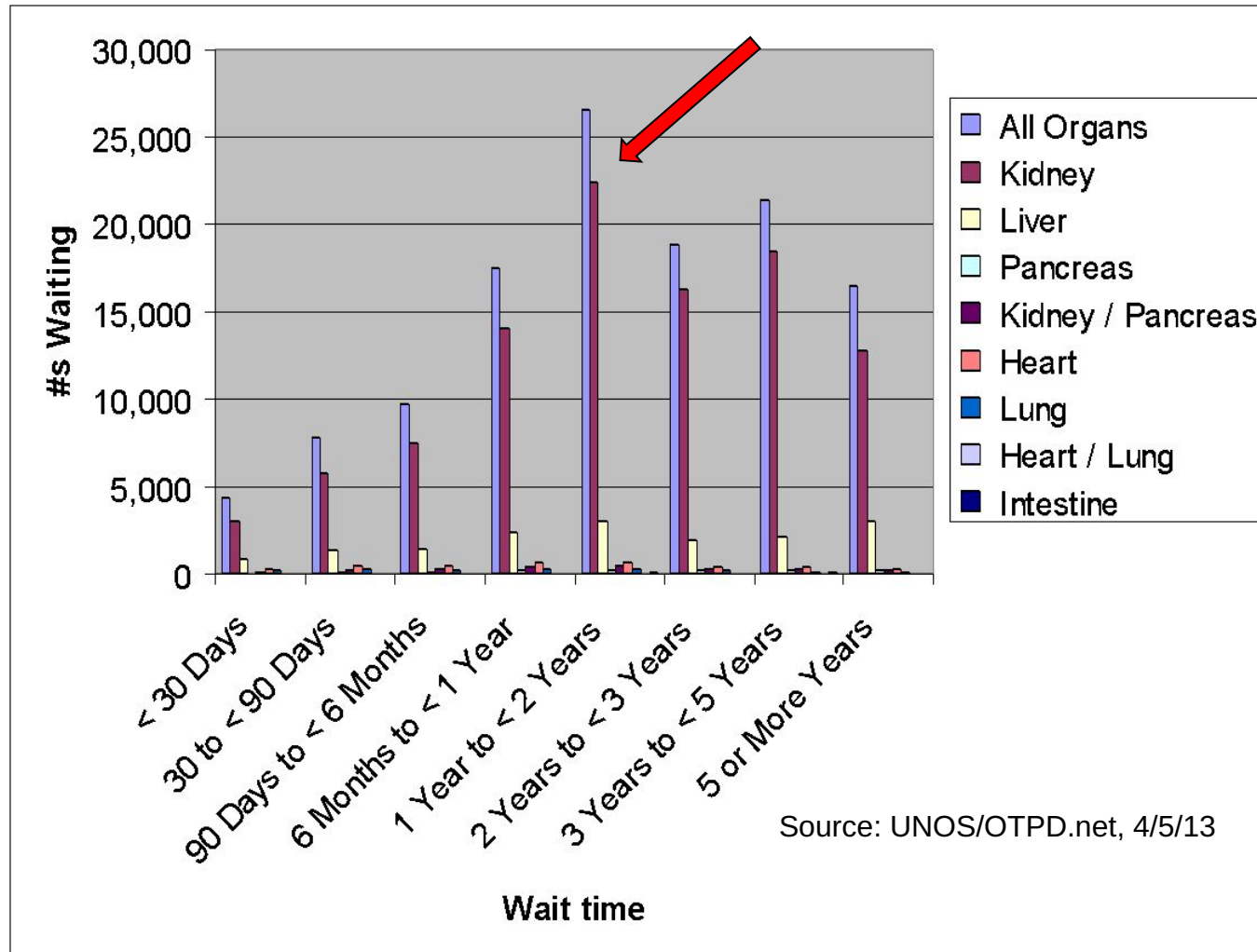
	All Organs	Kidney	Liver	Pancreas	Kidney / Pancreas	Heart	Lung	Intestine
Candidates	5,168	4,460	462	53	86	174	58	11

count flip print
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 landscape

Data subject to change based on future data submission or correction. Totals may be less than the sums due to patients included in multiple categories.

Source: UNOS/OTPD.net, 4/5/13

How long does the typical waitlisted patient wait for a transplant?



Source: UNOS/OTPD.net, 4/5/13

UW OTD's Laura Van Drese: Her Dad's Story



UW Average Waiting Times

Deceased Donor Kidney Transplants

- Wait Time by Blood Type
(Includes patients transplanted between 7/1/2010 - 6/30/2012)

ABO	Average days
A	315
AB	286
B	684
O	811

Necessary Steps to Getting on the Center Waiting List

- Your physician must give you a referral
- Contact a transplant hospital
- Schedule an appointment for an evaluation and find out if you are a good candidate for transplant
- If the hospital's transplant team determines that you are a good transplant candidate, they will add you to the national waiting list

Evaluation

- Schedule Evaluation Appointment
 - Surgeon
 - Social Work
 - Certified Dietician
 - Financial Counselor
 - Pre-Transplant Coordinator
- Further Testing
 - Chest X-ray
 - Blood Work
 - Other

Standard Evaluation Testing

- Colonoscopy age >50
- Mammogram and Pap Smear Annually
- PSA age>50
- Chest X-ray
- Dental Clearance
- Cardiac Testing
- Vascular Testing

Approval

- Multi-Disciplinary Committee Review
 - Significant Coronary Artery Disease
 - Significant Vascular Disease
 - Malignancy
 - Non-Compliance
 - Substance Abuse (Active)
 - Poor Social/Financial Support
- Insurance Approval

Two Types of Transplantation

- Deceased Donor: UNOS Waiting list, UWHC Waiting List
- Live Donor: can be related or non-related
 - related by blood or marriage
 - non-related directed donation
 - humanitarian non-directed donor donation
 - National Kidney Paired Exchange Program

Waiting: Complexities and Constraints

- Medical Preparation
 - stay healthy
 - keep your appts
- Practical Preparation
 - stay organized
 - phone/email tree
 - pack your bags
 - dependant care
 - transportation plan
- Educational Preparation
 - learn, read, find a support group
- Financial Preparation
 - create financial plan
 - talk to your family
 - POA
- Spiritual Preparation
 - seek spiritual help or counseling.
- Receiving “the call”
 - ALWAYS answer your phone
 - have directions to transplant center ready

Personal Constraints: Physical and Emotional

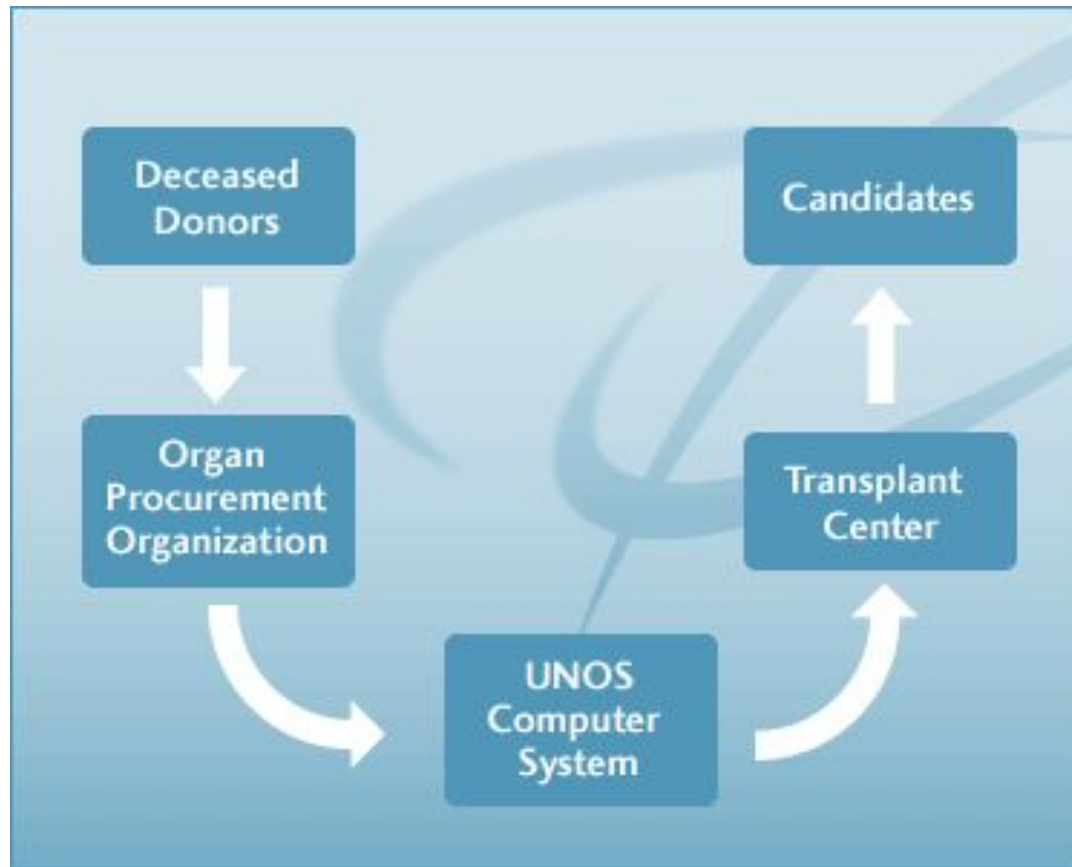
- “I was at the top of the liver waiting list, too sick to be home with my family. While at the hospital, my doctor said, ‘you have to eat’, but I couldn’t keep anything down, so they had to put a feeding tube in. Try taking twenty pills a day with a feeding tube down your throat. It was awful.”

Lee Belmas, Liver Recipient

- “My original diagnosis was Type 1 Diabetes. I just assumed I would die at a young age. After my transplant, I felt like the windows of my house blew wide open. I saw brighter colors, a sense of hope, light, and excitement.”

Nancy Garde, Kidney/Pancreas Recipient

Allocation: Matching Donor Organs With Transplant Candidates



Source: UNOS.org/TransplantLiving.org, 4/5/13

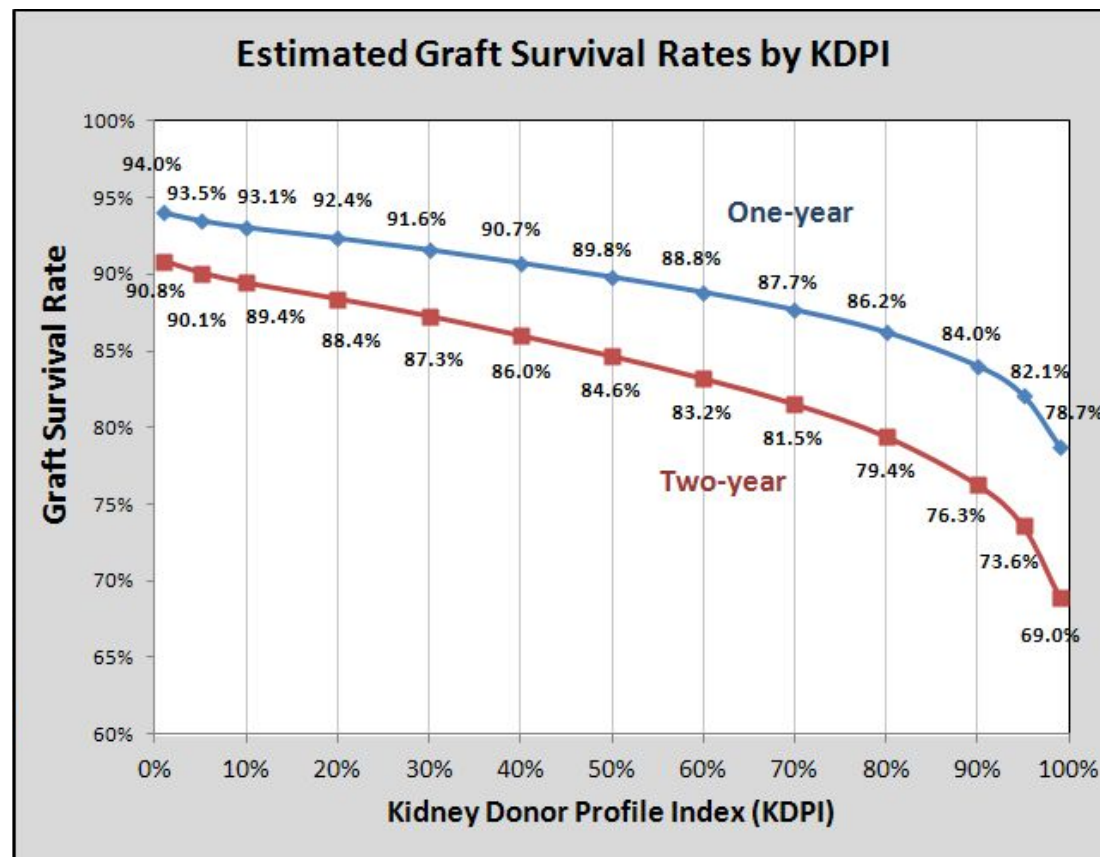
“Match Run”

- Factors affecting ranking may include:
 - tissue match
 - blood type
 - length of time on the waiting list
 - immune status - sensitization
 - donor organ quality
 - distance between the potential recipient and the donor
 - degree of medical urgency (for heart, liver, lung and intestines)

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®

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

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

Proposed Classifications: *Very Highly Sensitized*

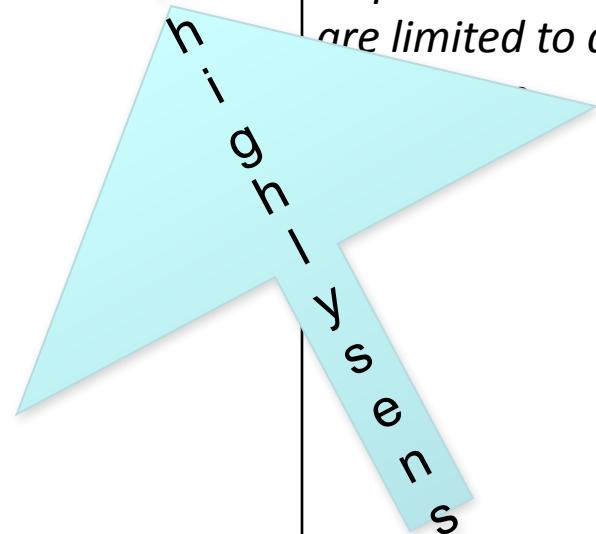
- Candidates with CPRA $\geq 98\%$ face immense biological barriers
- Current policy only prioritizes sensitized candidates at the local level.
- Proposed policy would give following priority

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

- To participate in Regional/National sharing, review & approval of unacceptable antigens will be required

category

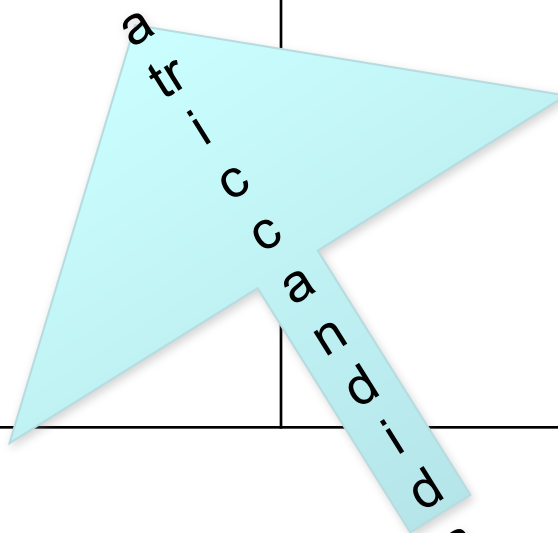
Sequence A KDPI <=20%	Sequence B KDPI >20% but <35%	Sequence C KDPI >=35% but <=85%	Sequence D KDPI>85%
<p>Highly Sensitized</p> <p>O-ABDRmm (top 20% EPTS)</p> <p>Prior living donor</p> <p>Local pediatrics</p> <p>Local top 20% EPTS</p> <p>O-ABDRmm (all)</p> <p>Local (all)</p> <p>Regional pediatrics</p> <p>Regional (top 20%)</p> <p>Regional (all)</p> <p>National pediatrics</p> <p>National (top 20%)</p> <p>National (all)</p>	<p>Highly Sensitized</p> <p>O-ABDRmm</p> <p>Prior living donor</p> <p>Local pediatrics</p> <p>Local adults</p> <p>Regional pediatrics</p> <p>Regional adults</p> <p>National pediatrics</p> <p>National adults</p>	<p>Highly Sensitized</p> <p>O-ABDRmm</p> <p>Prior living donor</p> <p>Local</p> <p>Regional</p> <p>National</p>	<p>Highly Sensitized</p> <p>O-ABDRmm</p> <p>Local + Regional</p> <p>National</p> <p><i>*all categories in Sequence D are limited to adult</i></p>



Modified Classification: *Pediatric*

- Current policy prioritizes donors younger than 35 to candidates listed prior to 18th birthday
- Proposed policy would
 - Prioritize donors with KDPI scores <35%
 - Eliminate pediatric categories for non 0-ABDR KPDI >85%
- Provides comparable level of access while streamlining allocation system

Sequence A KDPI ≤20%	Sequence B KDPI >20% but <35%	Sequence C KDPI ≥35% but ≤85%	Sequence D KDPI >85%
Highly Sensitized O-ABDRmm (top 20% EPTS) Prior living donor Local pediatrics Local top 20% EPTS O-ABDRmm (all) Local (all) Regional pediatrics Regional (top 20%) Regional (all) National pediatrics National (top 20%) National (all)	Highly Sensitized O-ABDRmm Prior living donor Local pediatrics Local adults Regional pediatrics Regional adults National pediatrics National adults	Highly Sensitized O-ABDRmm Prior living organ donor Local Regional National	Highly Sensitized O-ABDRmm Local + Regional National <i>*all categories in Sequence D are limited to adult candidates</i>



Modified Classification: *Local + Regional for High KDPI Kidneys*

- KDPI >85% kidneys would be allocated to a combined local and regional list
- Would promote broader sharing of kidneys at higher risk of discard
- DSAs with longer waiting times are more likely to utilize these kidneys than DSAs with shorter waiting times

Sequence A KDPI ≤20%	Sequence B KDPI >20% but <35%	Sequence C KDPI ≥35% but ≤85%	Sequence D KDPI >85%
Highly Sensitized O-ABDRmm (top 20% EPTS) Prior living organ donor Local pediatrics Local top 20% EPTS O-ABDRmm (all) Local (all) Regional pediatrics Regional (top 20%) Regional (all) National pediatrics National (top 20%) National (all)	Highly Sensitized O-ABDRmm Prior living organ donor Local pediatrics Local adults Regional pediatrics Regional adults National pediatrics National adults	Highly Sensitized O-ABDRmm Prior living organ donor Local Regional National	Highly Sensitized O-ABDRmm Local + Regional National <i>*all categories in Sequence D are limited to adult candidates</i>

P R I O R I T Y

Removed Classification: *Kidney Paybacks*

- Current payback policy was evaluated and found to be
 - Administratively challenging
 - Unfair in that it affected all candidates in an OPO even if only one center was responsible for accruing debt
 - Ineffective in improving outcomes of recipients
- Kidney paybacks would no longer be permitted.
- All payback credits and debts would be eliminated upon the implementation of the revised kidney allocation system.

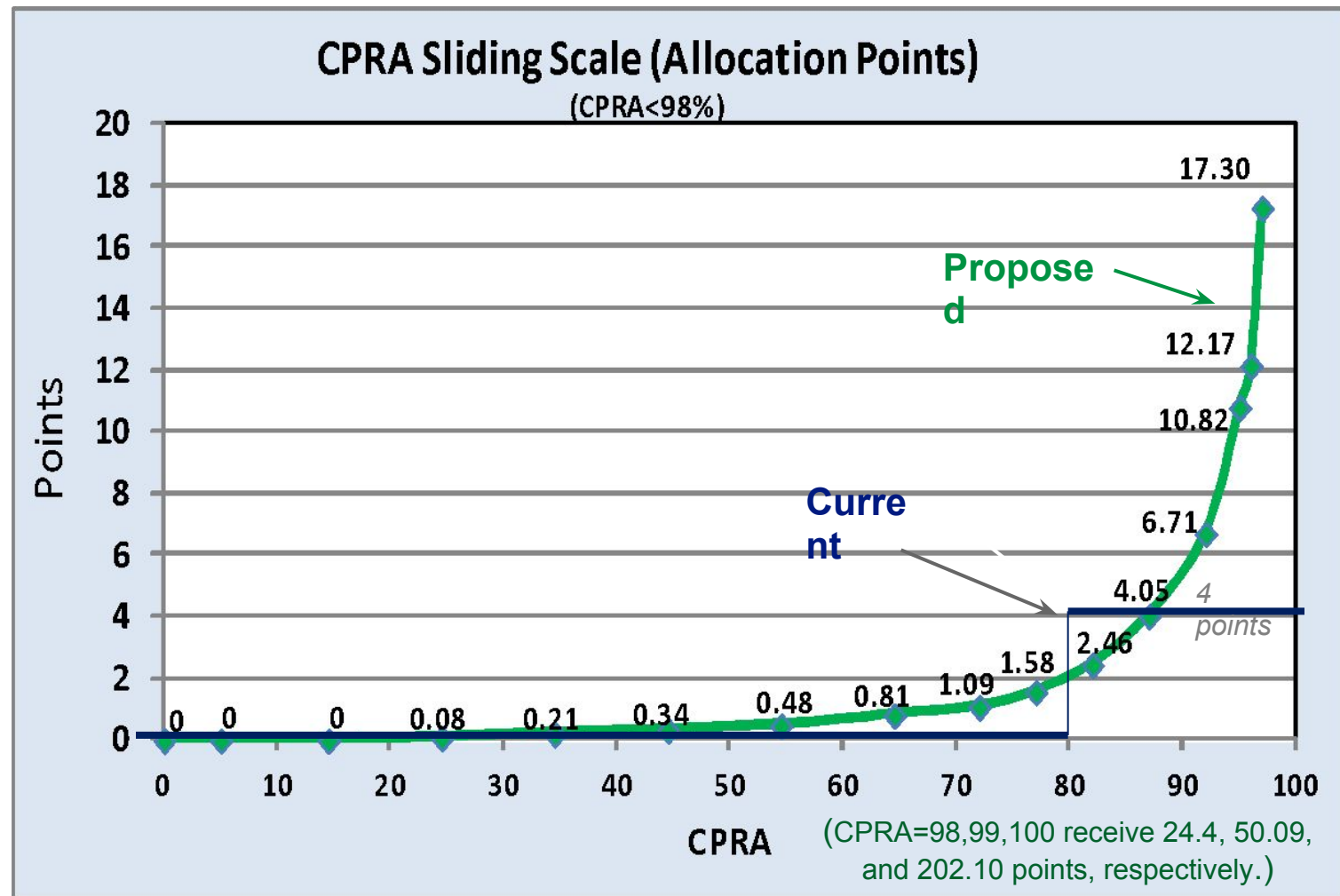
PRIORITY WITHIN CLASSIFICATIONS

Proposed Changes to Point System

- *Candidates are rank-ordered according to points within each classification.*

No proposed point changes for	Proposed point changes for
<ul style="list-style-type: none">• HLA-DR• Prior living organ donors• Pediatric candidates	<ul style="list-style-type: none">• Sensitized candidates• Waiting time

Proposed Point Changes: *Sensitization*



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

Proposed Point Changes: *Waiting Time*

- Current policy begins waiting time points for adults at registration with:
 - GFR \leq 20 ml/min
 - Dialysis time
- Proposed policy would also award waiting time points for dialysis time prior to registration
 - Better recognizes time spent with ESRD as the basis for priority
- Pre-emptive listing would still be advantageous for O-ABDR mismatch offers

SIMULATED POLICY RESULTS

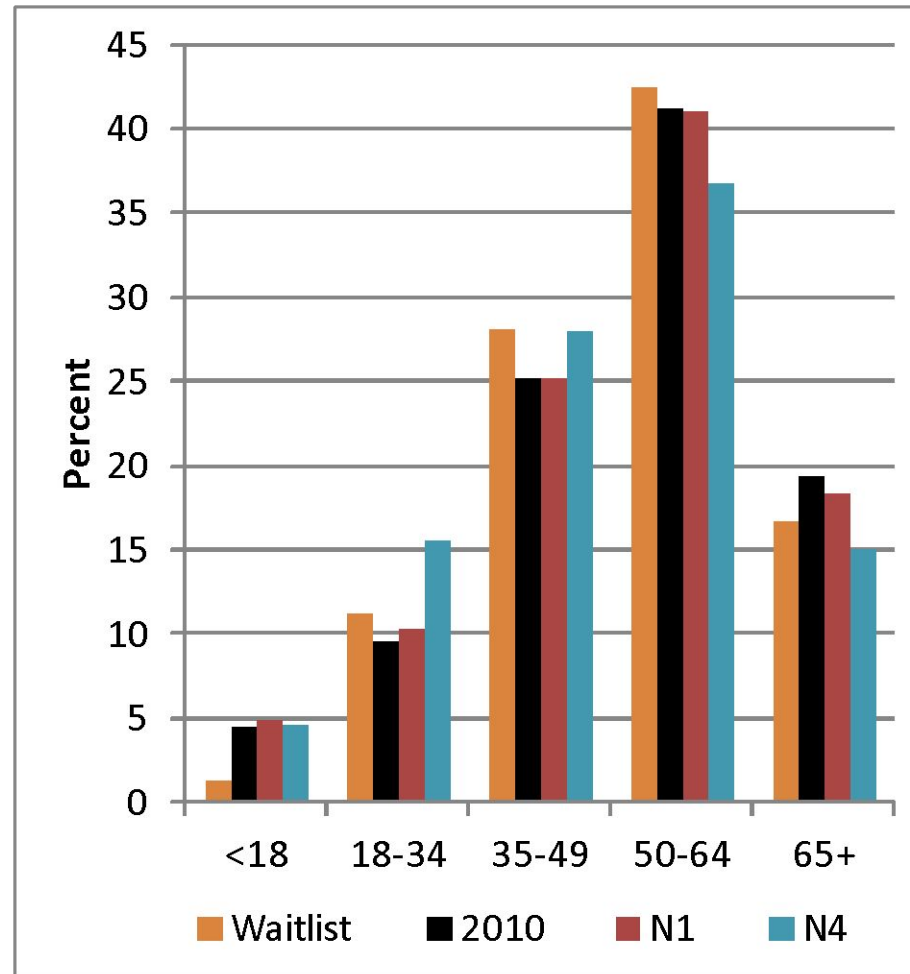
Evaluating Potential Policy Changes

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

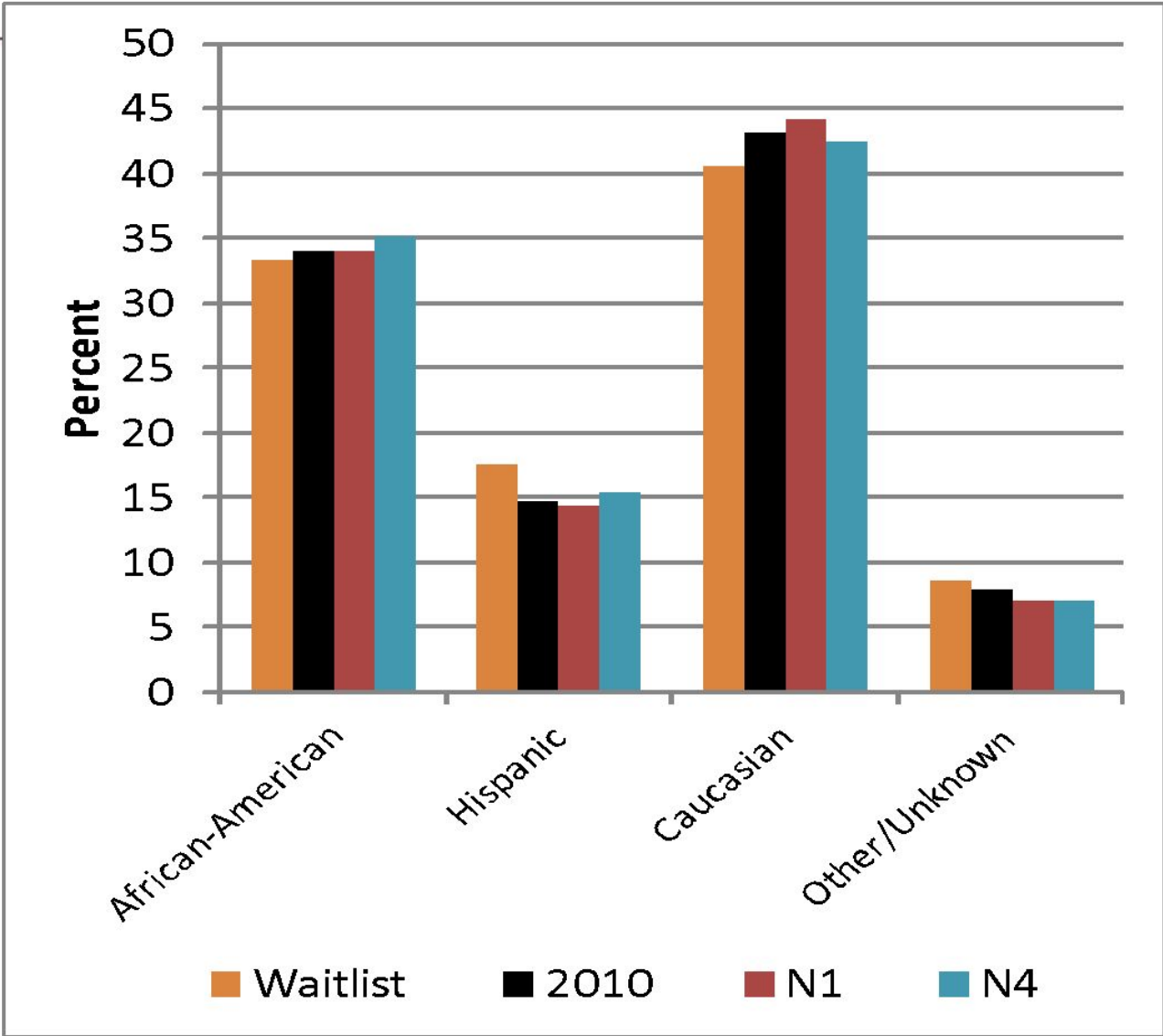
Preview of Expected Outcomes

- 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

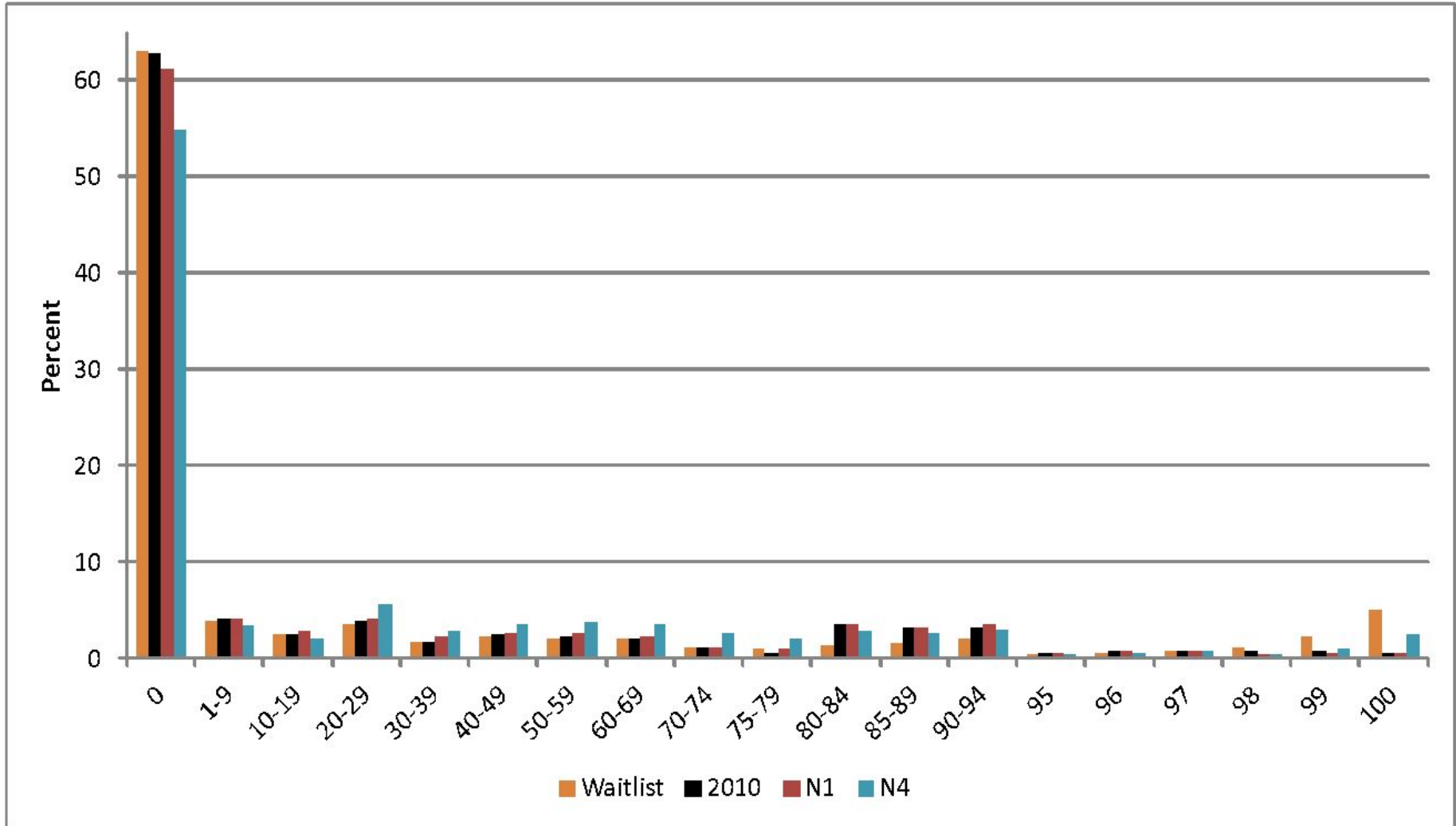
KPSAM results by candidate age



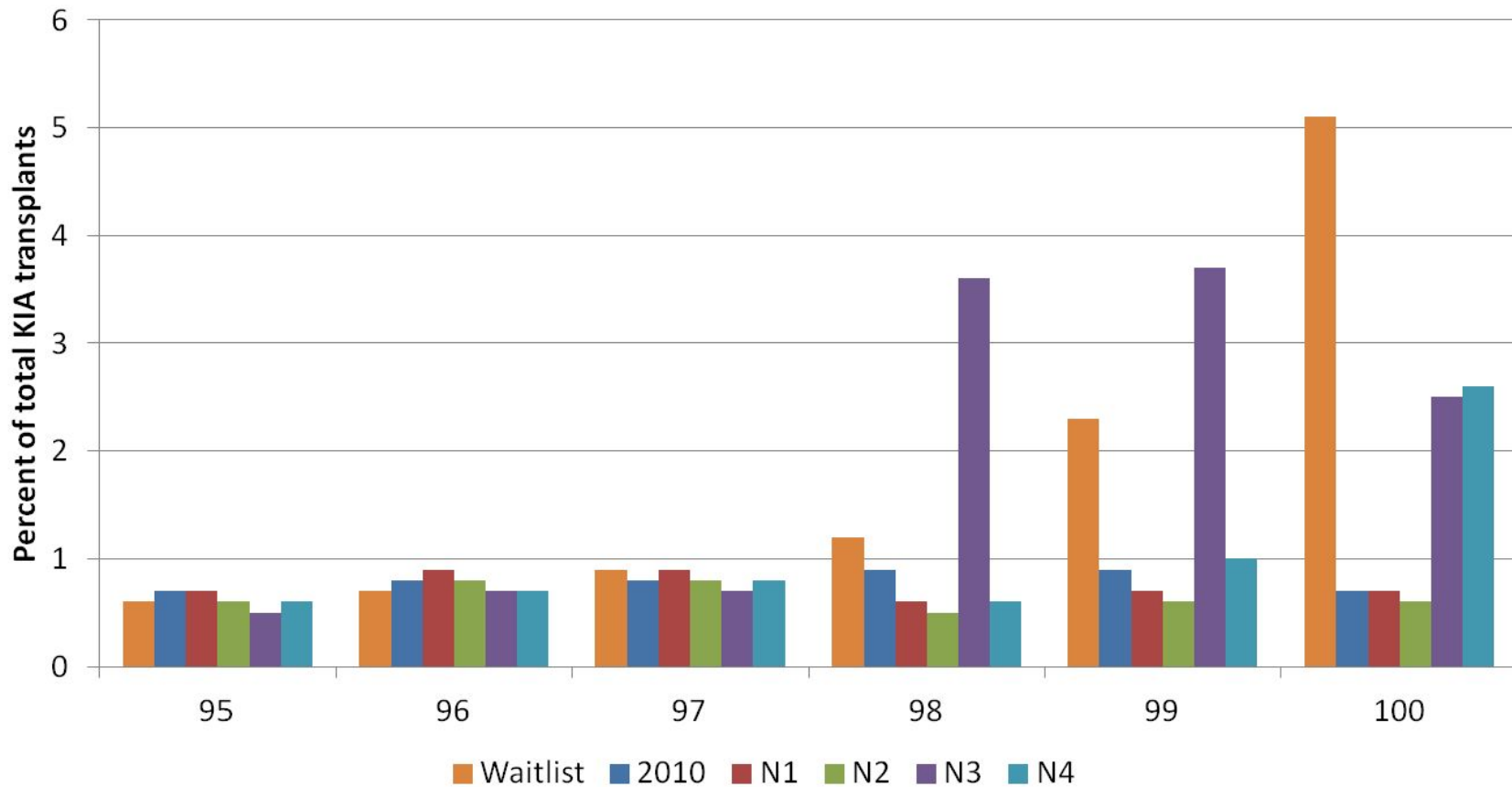
KPSAM results by ethnicity



KPSAM results by CPRA



KPSAM results by CPRA (95-100%)



Summary

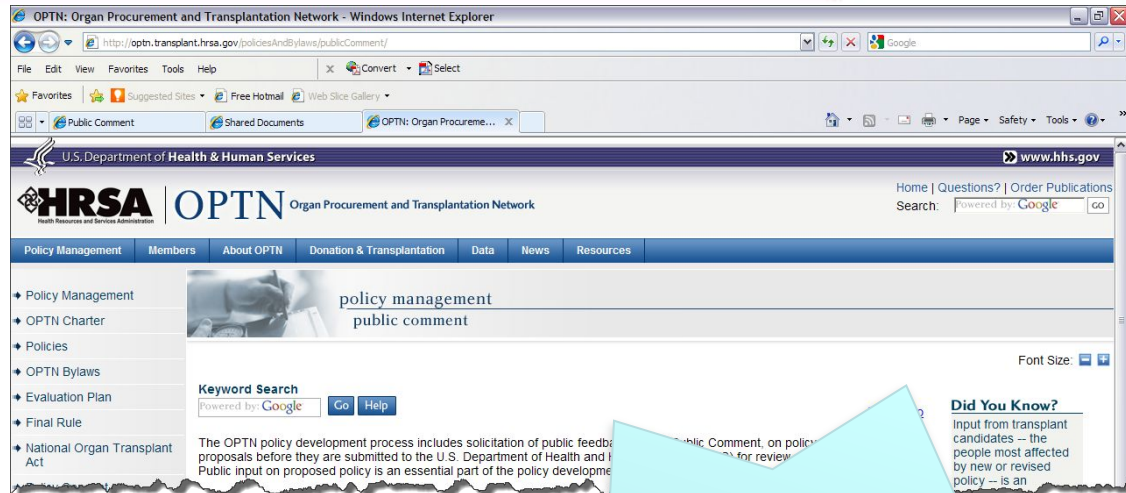
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 - Comparable levels of kidney transplants at regional/national levels

Participate in Policy Development

- Submit comments online:

optn.transplant.hrsa.gov

- Access webinar schedules
- Download educational materials



**Public
comment period
ends December 14**

Committee Leadership and Support

- **John J. Friedewald, MD**
Committee Chair
- **Richard N. Formica, Jr, MD**
Committee Vice Chair
- **Ciara J. Samana, MSPH**
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UW OTD Services

“Connect to Purpose Letter”



**Don't Take Your Organs to Heaven
Heaven Knows We Need Them Here**