



# KAS Early Trending Update

*June 2015*

# Key Goals of KAS

- Make better use of available kidneys
- Increase transplant opportunities for difficult-to-match patients (increased equity)
- Increase fairness by awarding waiting time points based on dialysis start date
- Have minimal impact on most candidates

# KAS Monitoring Reports

## Kidney Allocation System

[Home](#) » [Learn](#) » [Professional Education](#) » Kidney Allocation System

### About Donation

- The Basic Path of Donation
- Living Donation for Patients
- Kidney Paired Donation for Patients

### About Transplantation

- How Organ Allocation Works
- The Transplant Team
- History
- Transplant Process
- Donor Matching System

### Patient Education

- Minorities
- Children & Teens
- Older Adults

### Professional Education

The new kidney allocation system (KAS) began in December 2014. Here are professional resources to help inform you about the changes, and materials for you to share with your patients.

#### FEATURED REPORTS

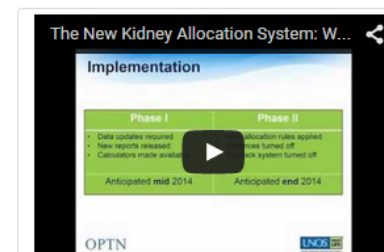
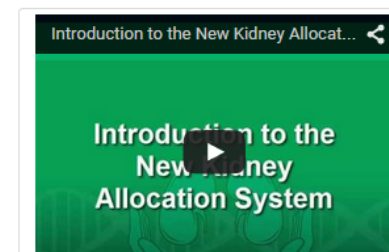
[KAS Monitoring Report - April 2015](#)  
(PDF - 748 KB)

[KAS Monitoring Report - March 2015](#)  
(PDF - 2.5 MB)

[KAS Monitoring Report - February 2015](#),  
(PDF - 422 KB)

[KAS "Out of the Gate" Monitoring Report - January 2015](#),  
(PDF - 392 KB)

#### FEATURED VIDEOS



**Organ Donation & Transplantation Can Save Lives**



Every 10 minutes, someone is added to the national transplant waiting list.



On average, 22 people die each day while waiting for a transplant.



Early  
KAS  
reports  
available  
online

## OPTN COMMITTEE DATA ANALYSIS | Request Form

Date Form Submitted to HRSA: February 27, 2015

Requesting Committee: KAS Implementation Subcommittee of the Kidney Transplantation Committee

Date(s) Committee Met: January 28, 2015 and February 18, 2015

Date of Next Meeting: March 12, 2015

OPTN staff member referring Committee's requests: Darren E. Stewart, MS; Anna Y Kucheryavaya, MS

Chair Approval? Yes

*If not, why not?*

### ANALYSES REQUESTED:

- **Descriptive Statistical Requests (responsibility of OPTN contractor)**

*Data Request: Evaluate the Impact of KAS After the First Six Months*

*Background:*

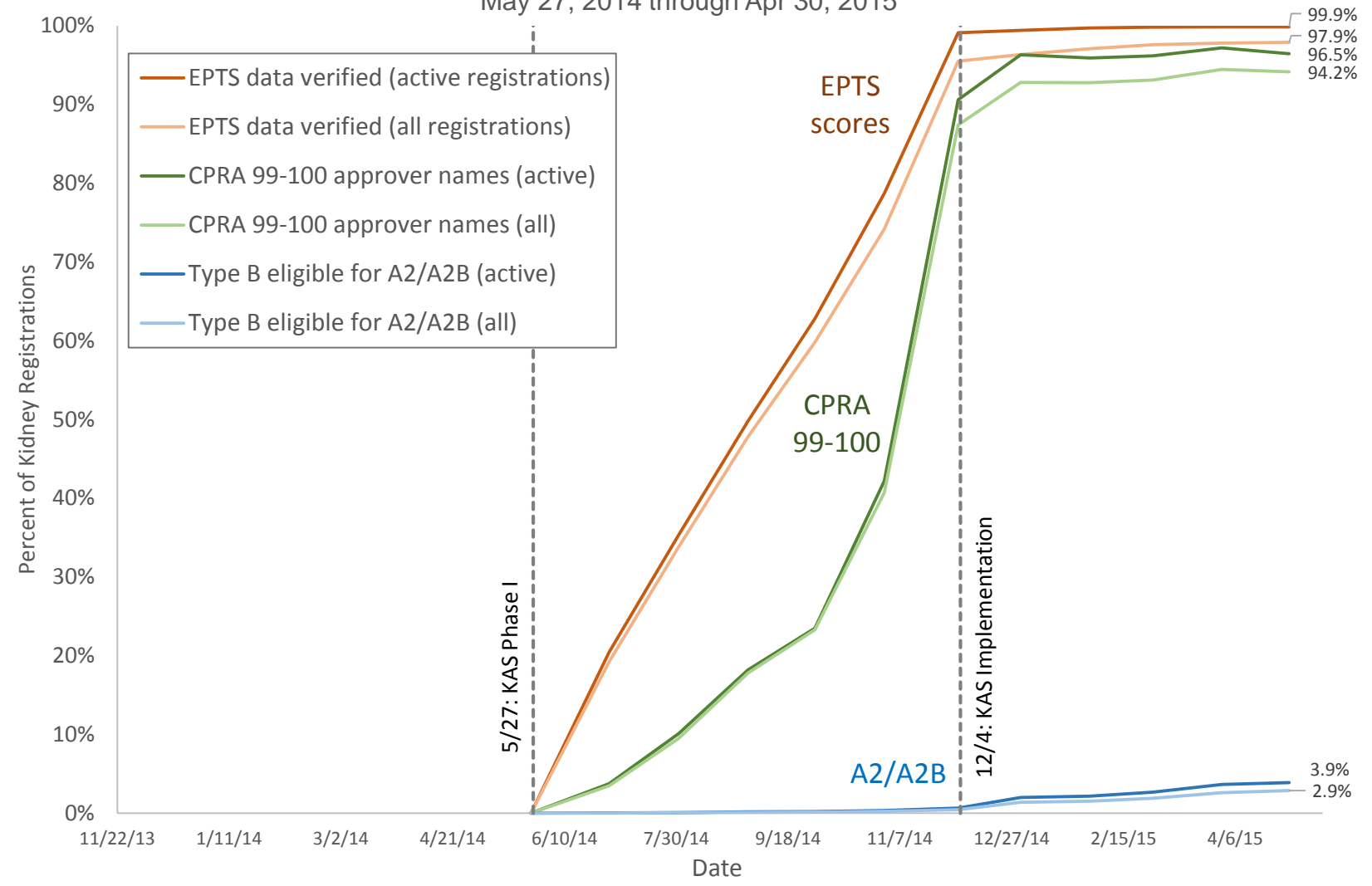
In June of 2013, the OPTN Board of Directors approved a new kidney allocation policy (KAS), which was implemented on December 4, 2014. The proposal that was distributed for public comment included a list of elements (\* see last two pages of this document) that would be tracked to monitor the impact of the new policy. This tracking would happen at pre-defined intervals: 6-months, 1-year, and 2 years post-implementation.

This data request reflects both this initial data monitoring plan, as well as refinements and additions made by the Kidney Transplantation Committee's KAS Implementation Subcommittee during discussions on

A more comprehensive, 6-month analysis to be performed for the committee in August.

Figure 1: KAS Readiness Monitoring

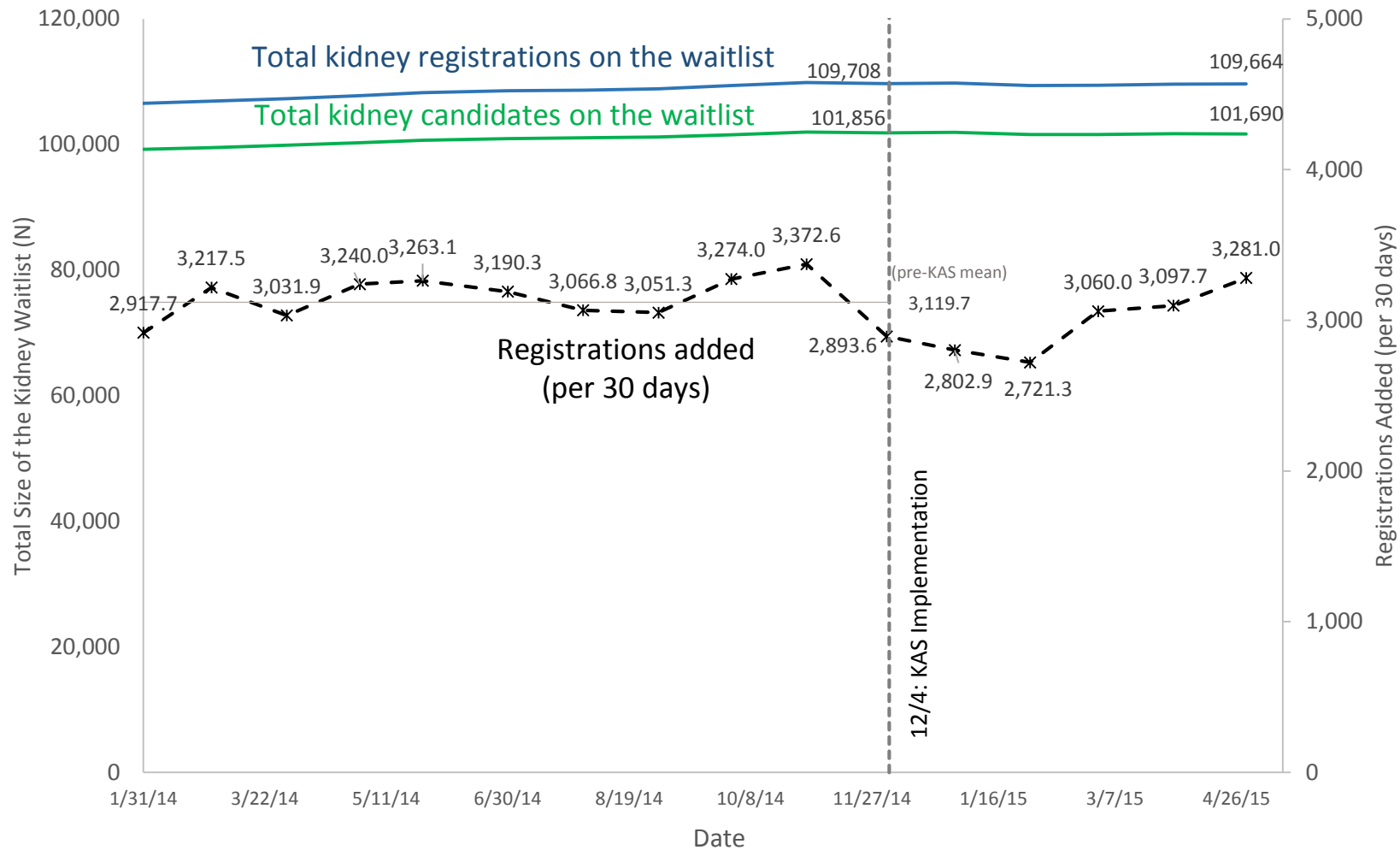
May 27, 2014 through Apr 30, 2015



Pre-KAS preparation highly successful; room for growth in A2/A2B eligibility.

Figure 2: Pre/Post-KAS Growth in the Kidney Waiting List

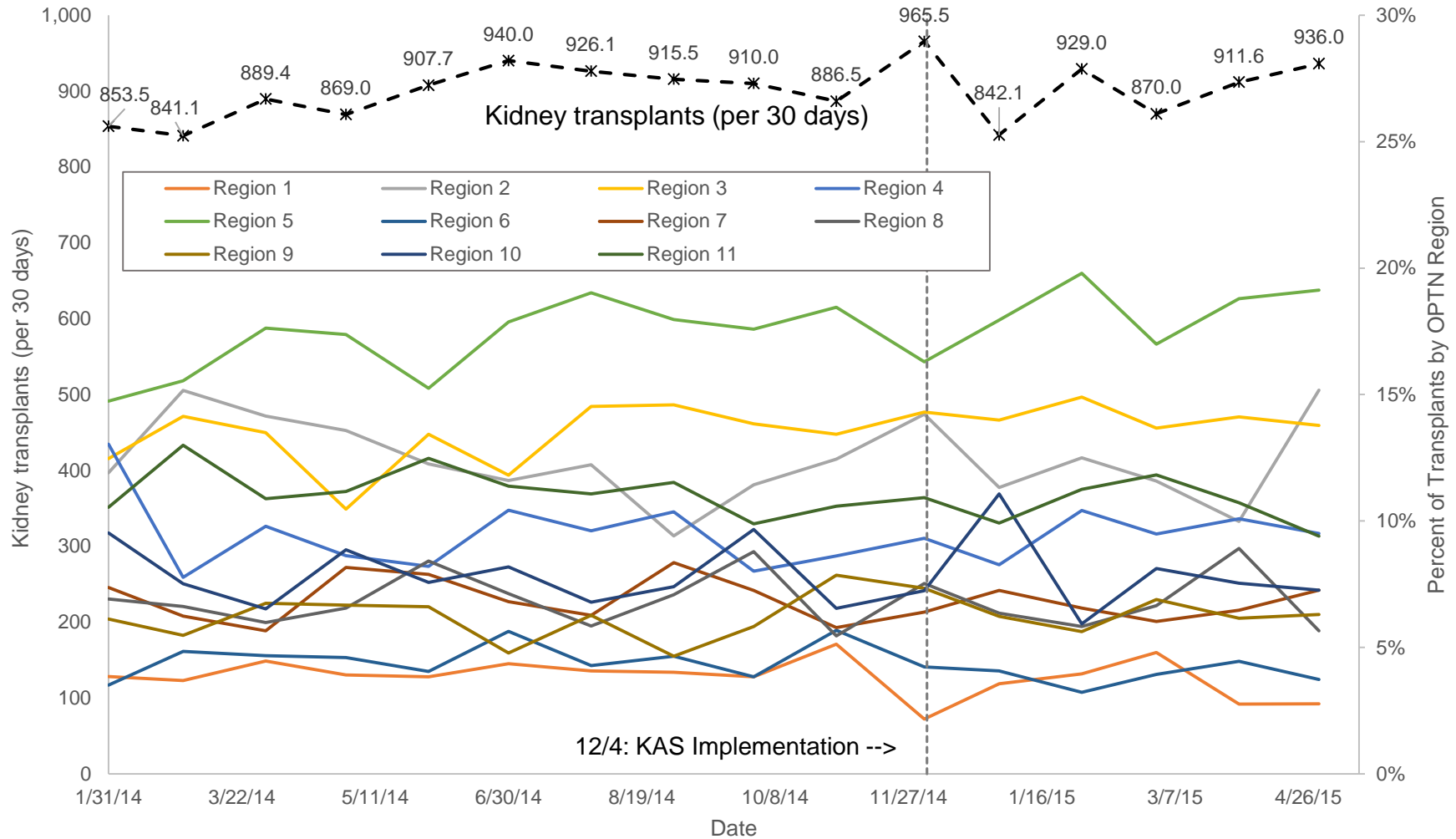
December 1, 2013 through Apr 30, 2015



Plateau in kidney waiting list. Slightly fewer than expected kidney registrations in last three months.



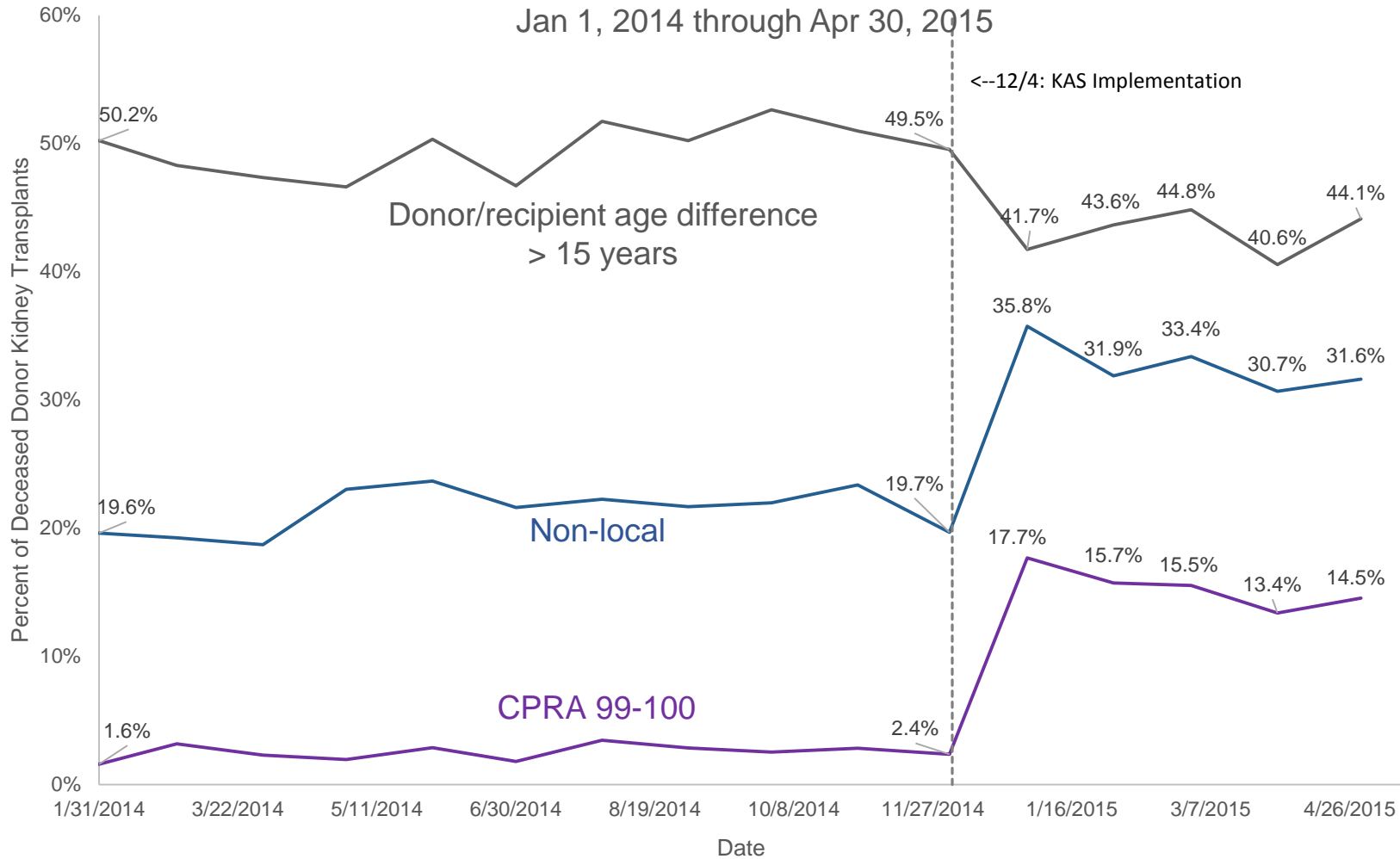
Figure 3: Pre vs. Post-KAS Deceased Donor Kidney Transplant Volume, Overall and % by Region  
Jan 1, 2014 through Apr 30, 2015



Proportion of transplants by Region statistically unchanged

# kidney transplants per month remains at pre-KAS level.  
Changes in % by OPTN region not statistically significant.

Figure 4a: Pre vs. Post KAS Deceased Donor Kidney Transplant Recipient Characteristics

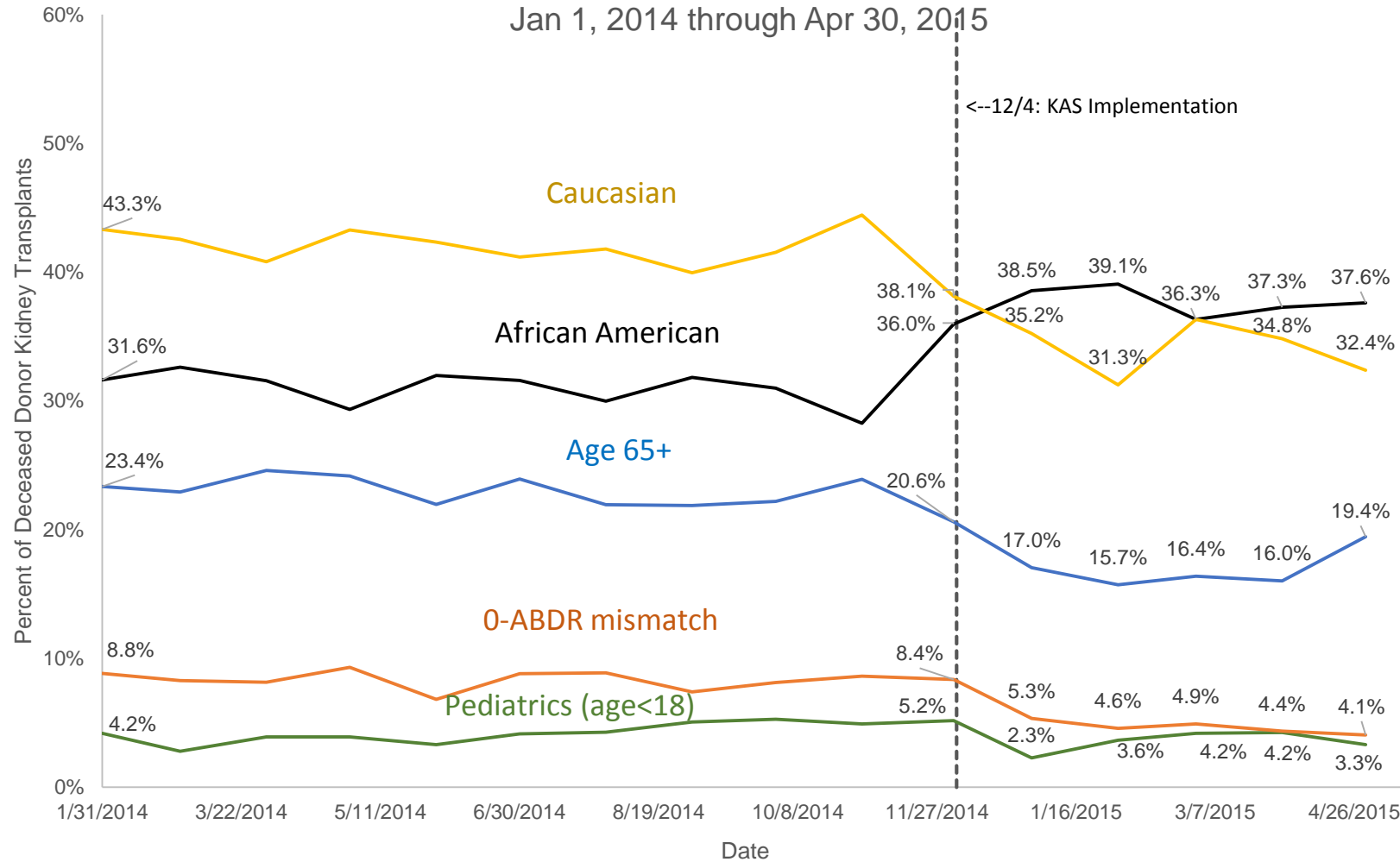


Three salient and statistically significant changes thus far: longevity matching; increased sharing; high CPRA.



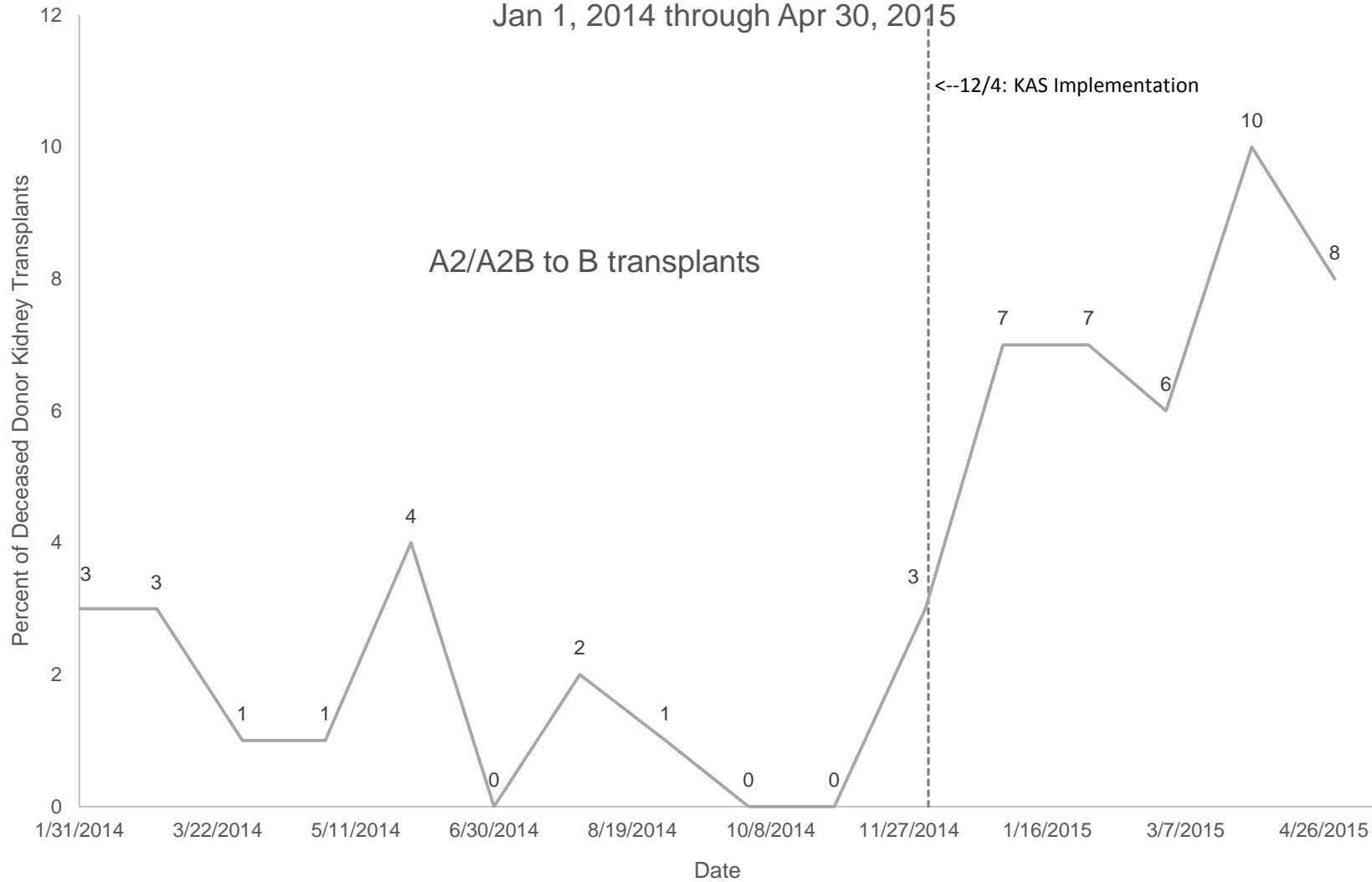
Figure 4b: Pre vs. Post KAS Deceased Donor Kidney Transplant Recipient Characteristics

Jan 1, 2014 through Apr 30, 2015



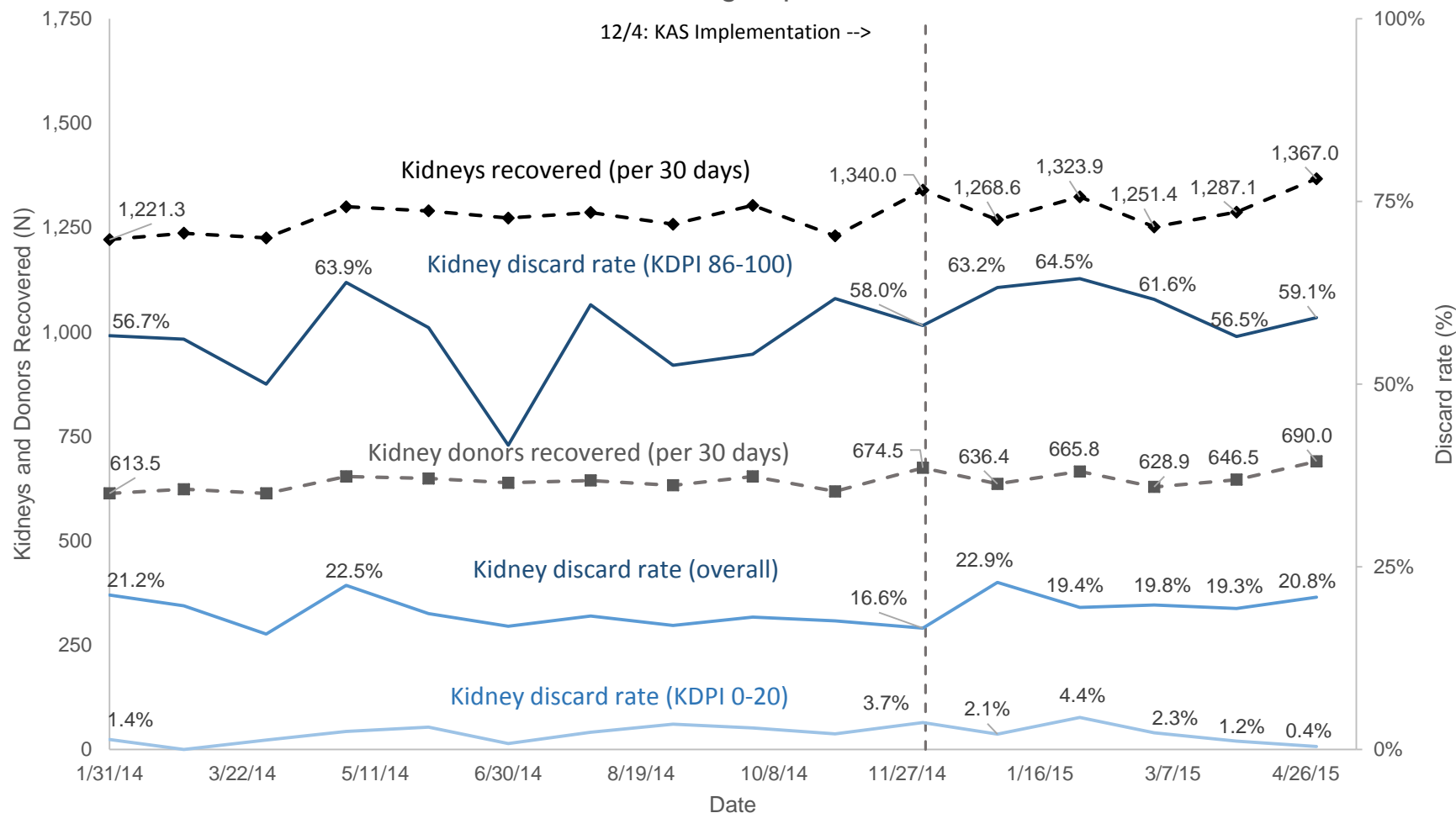
More transplants to African Americans, younger patients, and fewer zero-mismatches. Possibly slight drop for peds; more data needed.

Figure 4c: Pre vs. Post KAS Deceased Donor Kidney Transplant Recipient Characteristics  
Jan 1, 2014 through Apr 30, 2015



Sharp jump in A2/A2B→B transplants,  
though counts are still small.

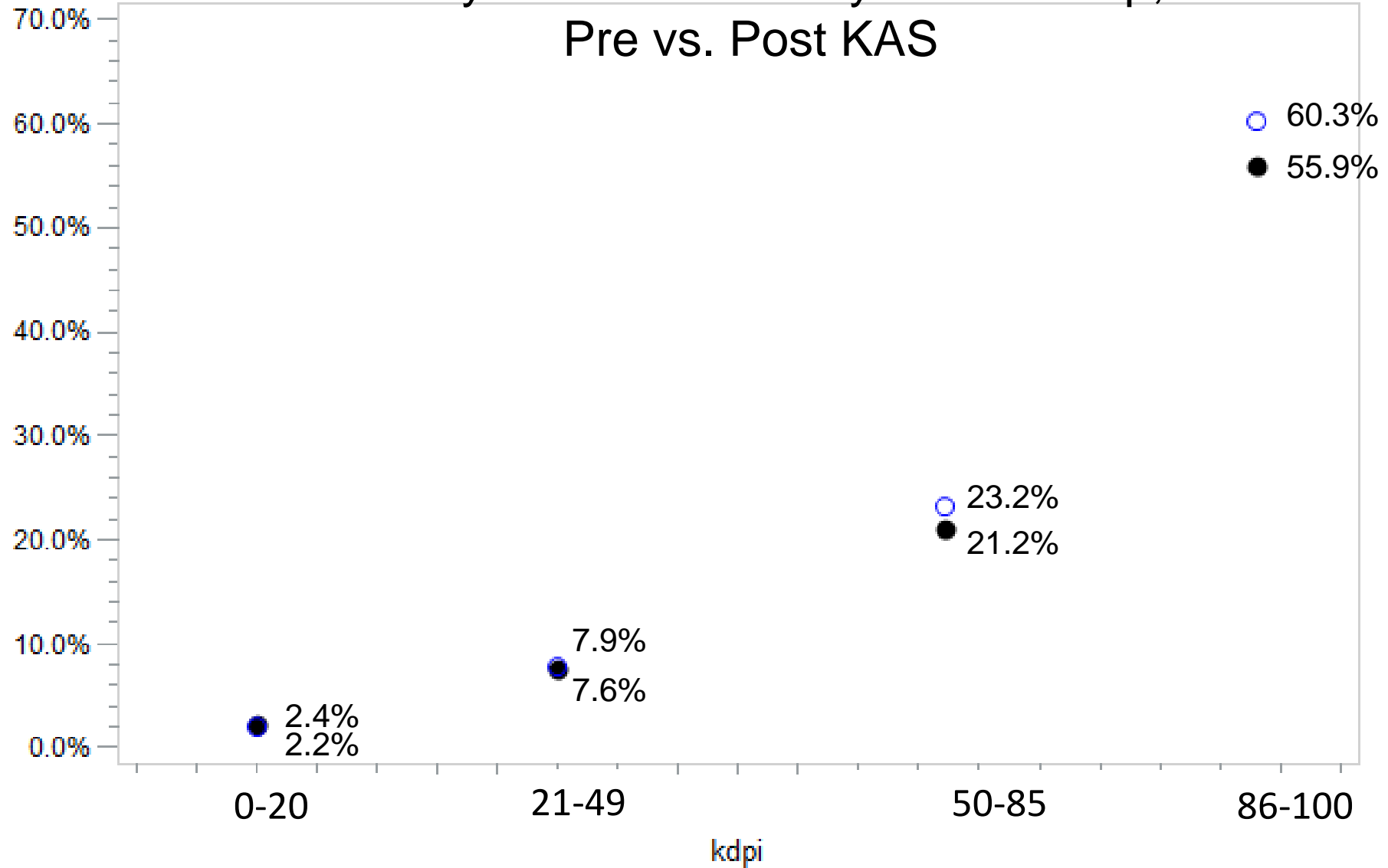
Figure 5: Pre vs. Post-KAS Kidney Recovery and Discard Rates  
Jan 1, 2014 through Apr 30, 2015



Kidney discard rate somewhat higher post-KAS (18.5% vs. 20.4%), a 2.3% drop in the utilization rate. However, more kidneys being recovered.

Discard Rate

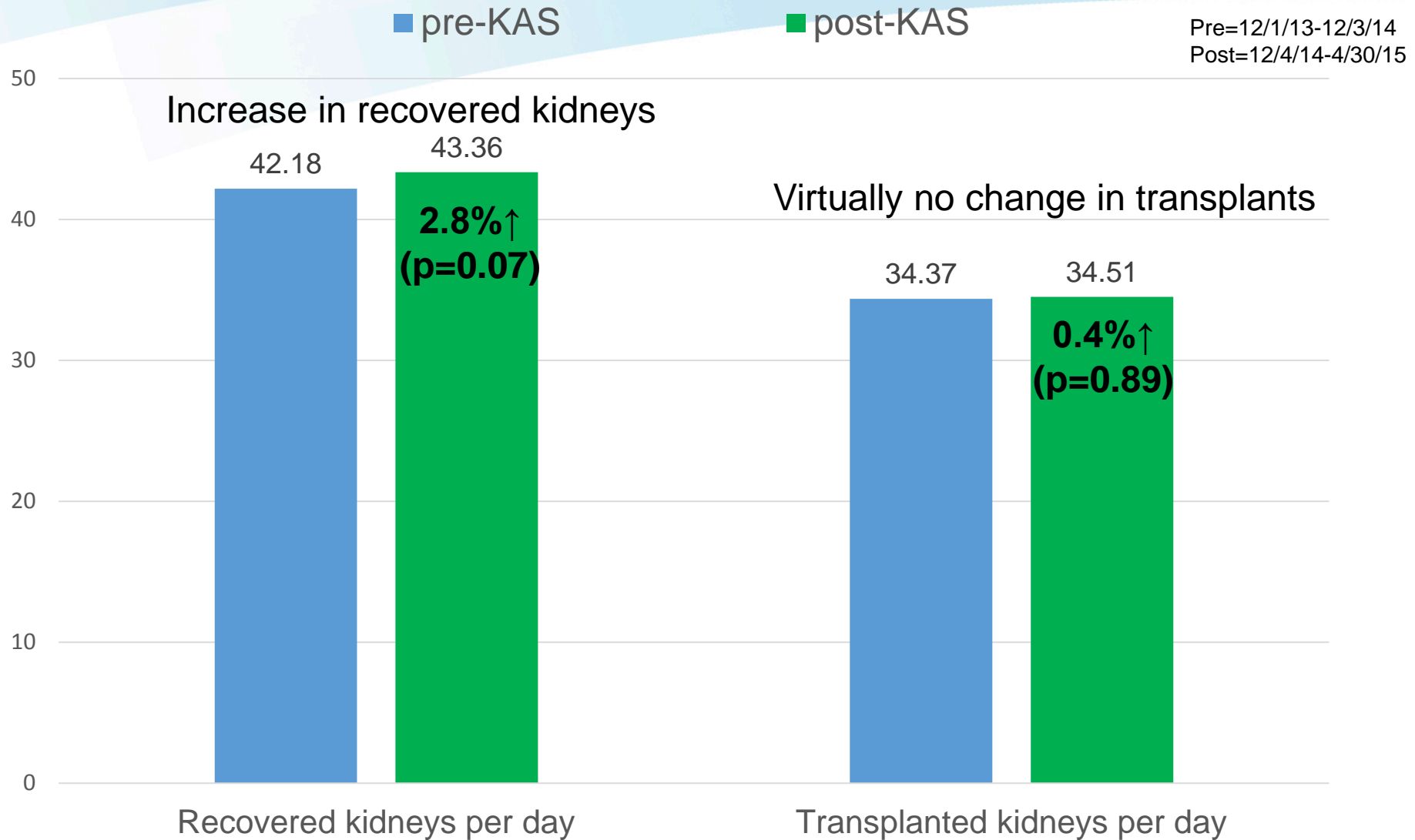
# Kidney Discard Rates by KDPI Group, Pre vs. Post KAS



Discard rate increase is largest for high KDPI kidneys; further investigation underway.

- Pre-KAS (Dec 4, 2013 - Dec 3, 2014)
- Post-KAS (Dec 4, 2014 - Apr 30, 2015)

# Recovered & Transplanted Kidneys (per day), Pre vs. Post-KAS



Slight increase in recovered kidneys has negated increase in discard rates, leading to virtually no change in rate of transplants.

# Member Concerns

## Logistical Inconsistencies for Shipping Kidneys

- Shipping blood for crossmatch in advance of kidney
- Performing virtual vs. physical crossmatch prior to kidney being shipped
- CIT increase due to logistical issues

## Organ Allocation Order

- Inconsistencies of when local backup is granted when intended recipient cannot be transplanted
- Multi-organ combinations

## Anecdotal Reports of Negative Impact on Transplant Centers



# Kidney Transplantation Committee Efforts

- Working with OPO Committee on developing guidance/new policies as necessary to work on issues
- Updating KAS FAQ
- KAS Implementation Subcommittee monitoring data
- UNOS Research publishing monthly “out of the gate” reports

# KAS Early Trend Conclusions

- Overall – KAS is meeting key goals
- Increasing the number of transplants among sensitized patients
- Increasing access for African Americans
- Fewer longevity mismatches
- Increase in sharing organs outside of DSA of recovery
- Slight increase in # of transplants, but increase in discard rates must be further investigated. Impact on other populations must be monitored.

# Extras

# Transplant Rates

$$\begin{aligned} \# \text{ transplanted kidneys} &= (\# \text{ recovered kidneys}) * (1 - \text{discard rate}) \\ &= (\# \text{ recovered kidneys}) * (\text{utilization rate}) \end{aligned}$$

Relatively flat  
(0.4% ↑)

Modest increase  
(2.8% ↑)

Modest decrease  
(2.3% ↓)

Despite an early increase in the discard rate, the number of deceased donor kidney transplants has remained relatively flat due to more kidneys being recovered post-KAS.

<b>Sequence A</b> <b>KDPI ≤20%</b>	<b>Sequence B</b> <b>KDPI &gt;20% but &lt;35%</b>	<b>Sequence C</b> <b>KDPI ≥35% but ≤85%</b>	<b>Sequence D</b> <b>KDPI &gt;85%</b>
Highly Sensitized 0-ABDRmm (top 20% EPTS) Prior living donor Local pediatrics Local top 20% EPTS 0-ABDRmm (all) Local (all) Regional pediatrics Regional (top 20%) Regional (all) National pediatrics National (top 20%) National (all)	Highly Sensitized 0-ABDRmm Prior living donor Local pediatrics Local adults Regional pediatrics Regional adults National pediatrics National adults	Highly Sensitized 0-ABDRmm Prior living donor Local Regional National	Highly Sensitized 0-ABDRmm Local + Regional National