

Kidney Transplantation Committee Update

John Friedewald, MD
Chair

Board of Directors
Atlanta, GA
November 15, 2011

Major Efforts

- Kidney Allocation System Revisions
- Variance Review
- Kidney Paired Donation Pilot Program

KIDNEY ALLOCATION SYSTEM

OPTN



Current System Limitations

- Mismatch between potential survival of the kidney and the recipient
- Variability in access to transplantation by blood group and geographic location
- High discard rates of kidneys that could benefit candidates on the waiting list
- Reduce differences in transplant access for populations described in NOTA (e.g., candidates from racial/ethnic minority groups, pediatric candidates, and sensitized candidates).

Path Forward for KAS

- Introduction of elements of allocation
 - Longevity matching
 - Improved waiting time
 - Improved CPRA points
 - Improved access for minority candidates
 - Improved efficiency in placement of kidneys at highest risk of discard
 - Broader sharing for most highly sensitized and for certain types of donated kidneys

Committee Decisions



- ~~age matching~~



- Longevity matching for top 20%
- A2/A2B nationally
- ESRD time in addition to waiting time
- KDPI
- sliding scale for CPRA points

Previously
proposed
and
supported



- expedited placement for high KDPI kidneys
- broader sharing for the most highly sensitized candidates (CPRA $\geq 98\%$)

New
concepts

Prior Concepts Proposed

- Utilize a kidney donor profile index (KDPI) to better characterize donor kidneys and to provide additional clinical information for patients and providers to consider during the transplant evaluation process and organ offer process.
- Allocate the majority of organs (80%) by age matching so that candidates within 15 years (older and younger) of the donor are prioritized.
- Allocate some kidneys (20%) by a kidney donor profile index (KDPI) and estimated recipient post-transplant survival.

Feedback Received

- General agreement with longevity matching for some kidneys
- Concerns over use of age matching (+/-15 years)
- Support for use of KDPI as a clinical tool and in allocation

Current Working Model

Patients rank ordered by

- Waiting /ESRD time
- DR matching
- Sliding scale CPRA

System features

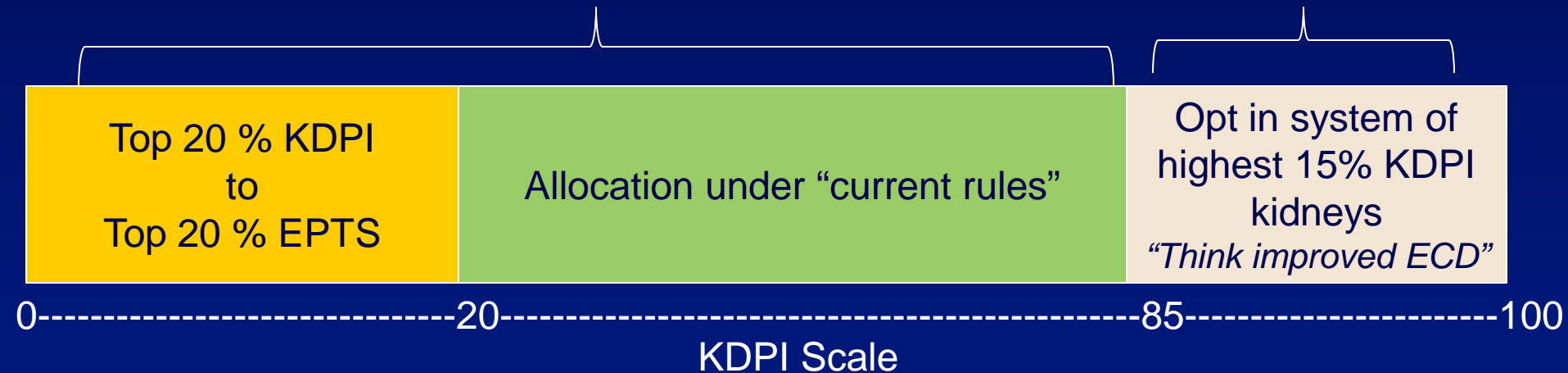
- A2 -> B

Patients rank ordered by

- Waiting/ESRD time

System features

- Regional sharing
- A2 -> B



Addressing System Limitations

Stated Limitation of the Current System	Applicable Concepts
Mismatch between potential survival of the kidney and the recipient	Longevity matching
Variability in access to transplantation by blood group and geographic location	A2/A2B, broader sharing
High discard rates of kidneys that could benefit candidates on the waiting list	KDPI, expedited placement,
Reduce differences in transplant access for populations described in NOTA (e.g., candidates from racial/ethnic minority groups, pediatric candidates, and sensitized candidates).	ESRD time, broader sharing, CPRA sliding scale, maintain peds priority

Highlights

- Allocation based on longevity matching is accepted and sustains legal scrutiny
- The majority of kidneys are still allocated very similarly to current rules
- Waiting time remains the primary determinant of kidney allocation with a more inclusive definition
- Improve “ECD” system addresses concerns of older recipients
 - “Opt in” preserves choice
 - Allows trade off of a kidney with more longevity for more rapid transplantation
 - Regional allocation might improve recovery and placement
 - Allocation on time alone makes it predictable and allows list management.

Results from Run 37

Excerpted from November 2009
Report to the Board

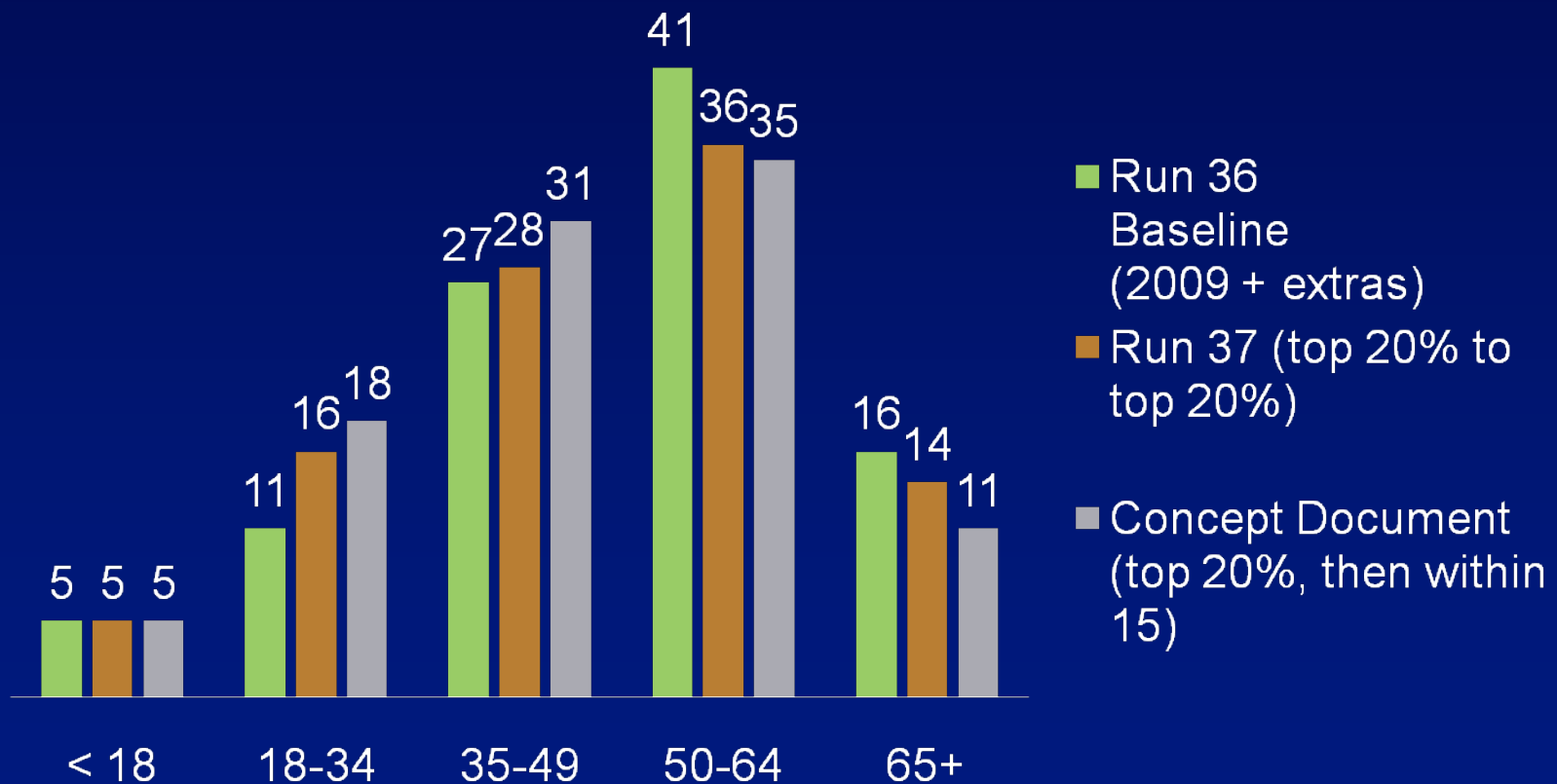
Run 37 vs. Considered

	Run 37	Considered
Top 20%	X	X
A2/A2B Nationally	X	X
ESRD Time	X	X
HLA-DR Points	X	X
KDPI	X	X
CPRA Sliding Scale		X
expedited placement for high KDPI kidneys		X
broader sharing for the most highly sensitized candidates (CPRA \geq 98%)		X

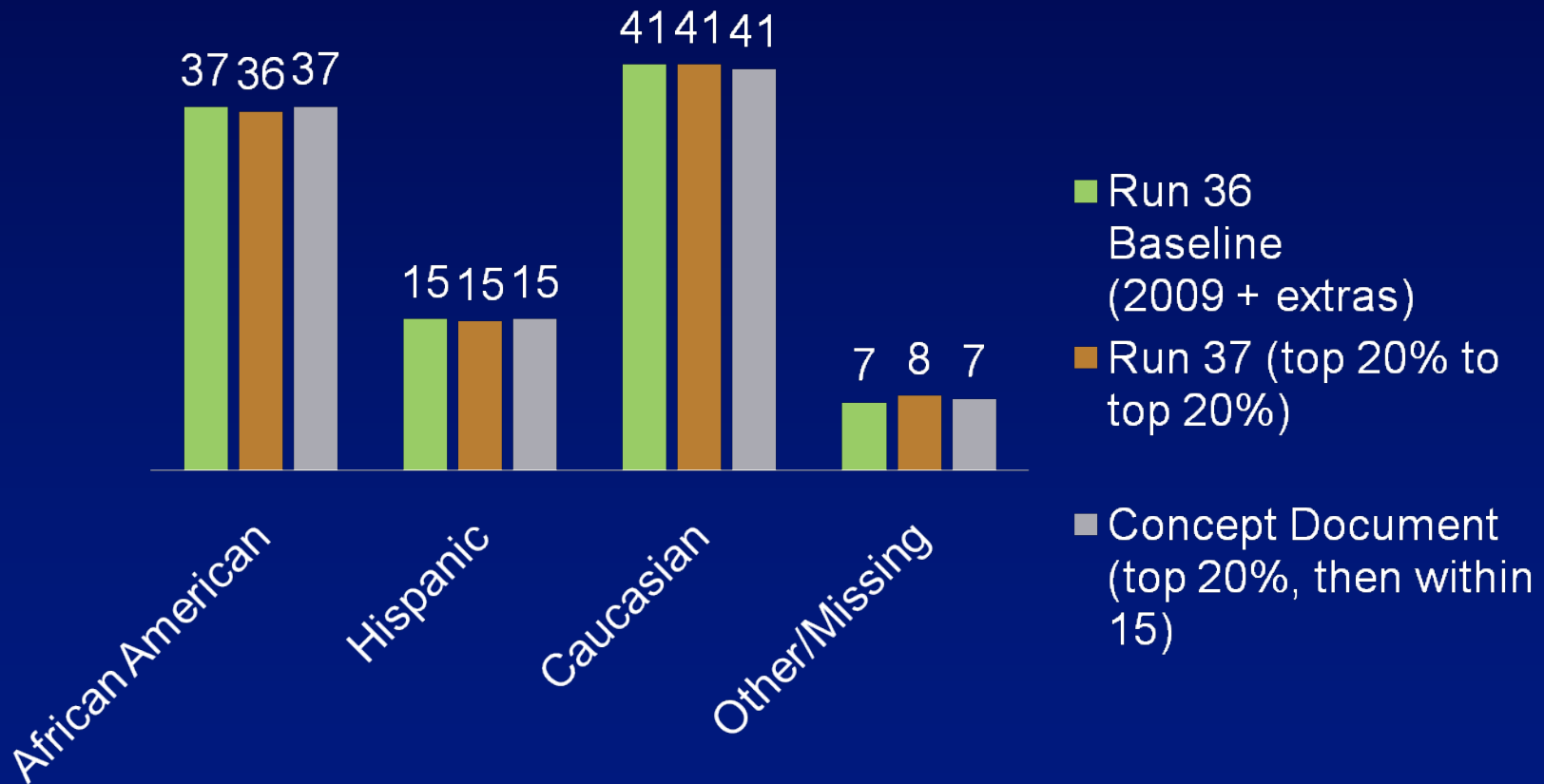
Survival Benefit Due to Tx

	Run 36 Baseline (2009 + Extras)	Run 37 (top 20% to top 20%)	Concept Document (top 20%, then within 15)
Number of transplant recipients	10652	10608	10930
Total lifespan after tx	119392	137931	140686
Total graft years of life	81600	87677	97045
Change in lifespan after transplant	(ref)	18540	15,223
Change in graft years of life	(ref)	6077	4,847
Change in extra years	(ref)	6290	5,112

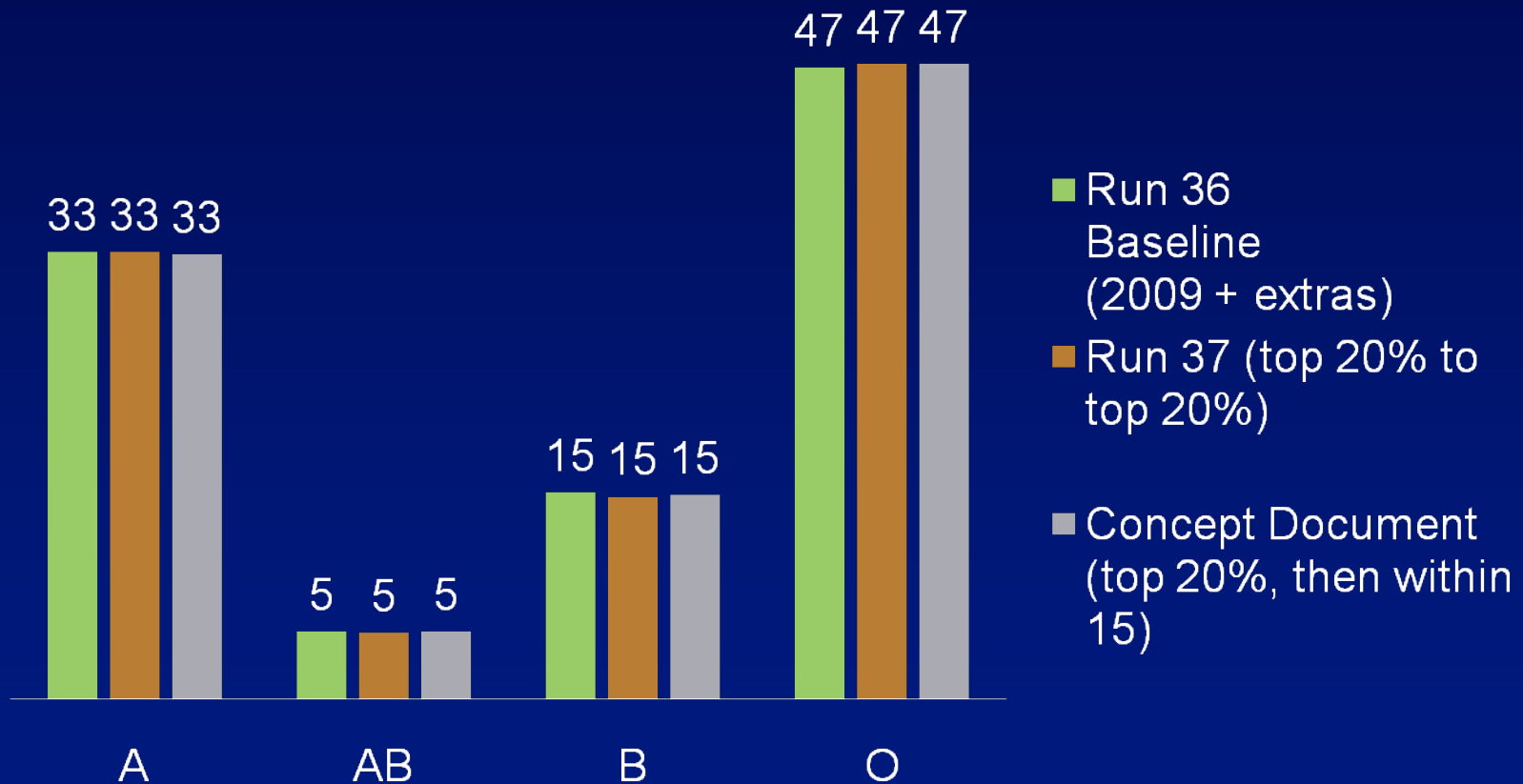
Percentage Transplants by Age



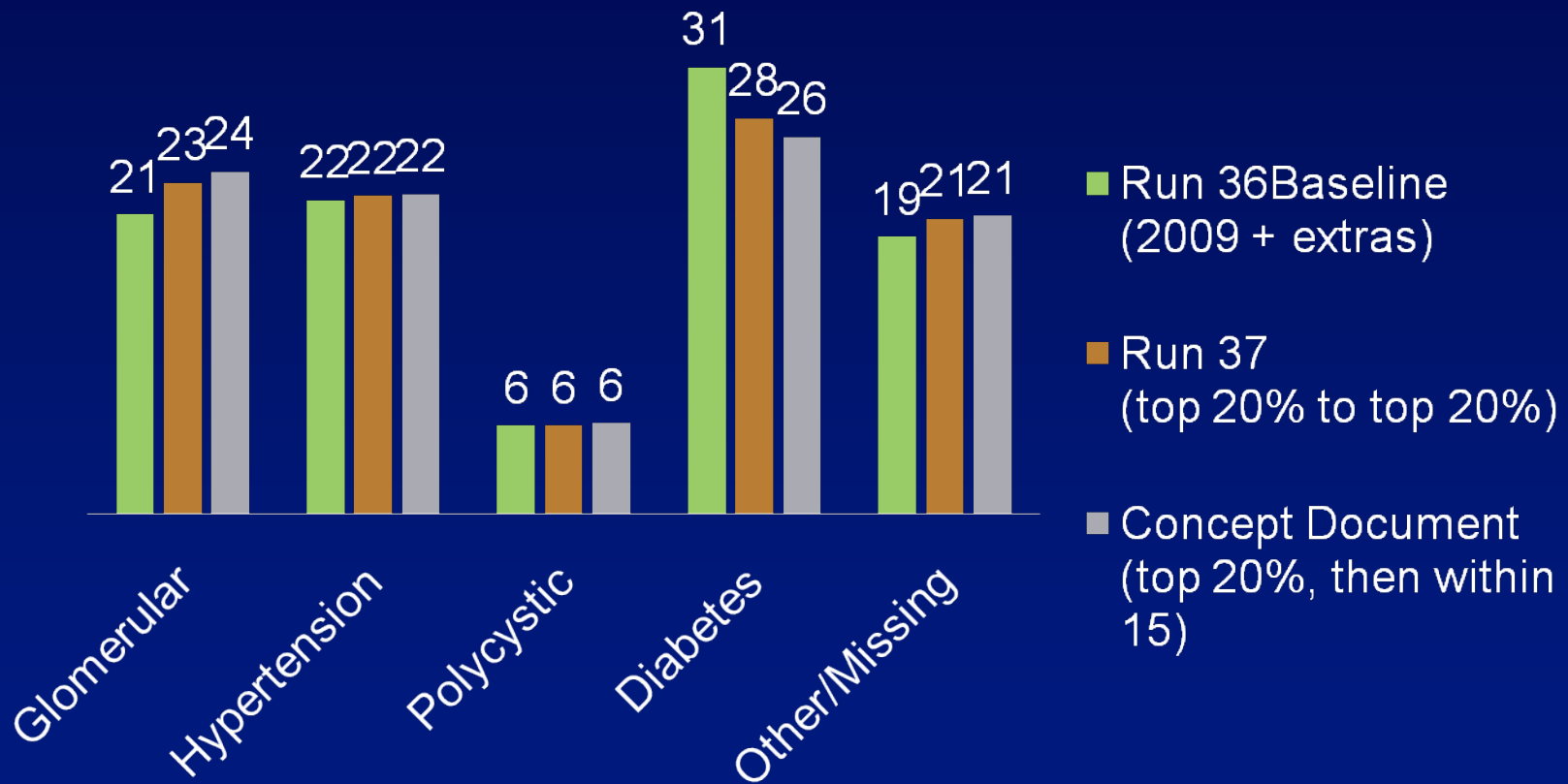
Percentage Transplants by Race



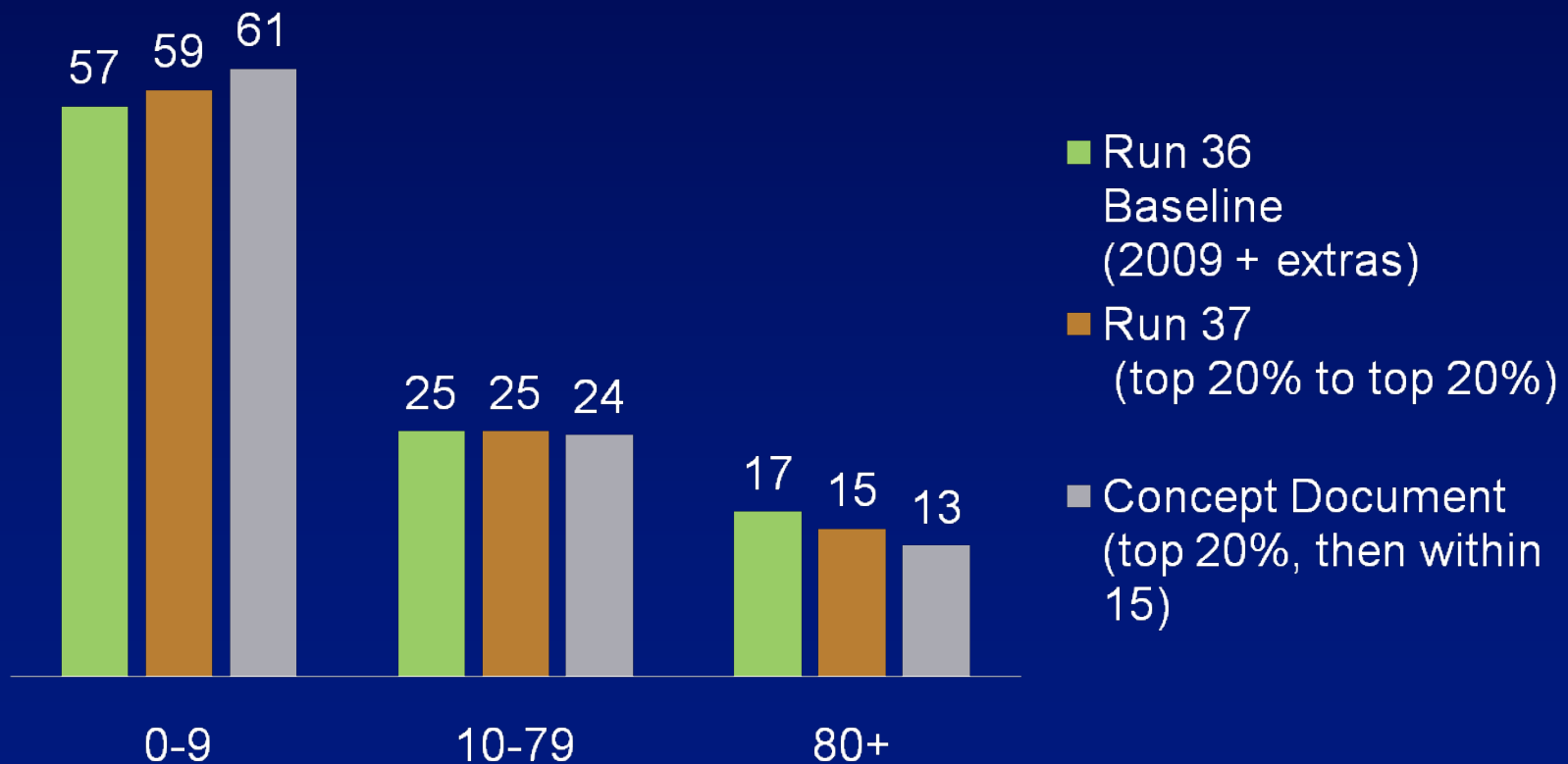
Percentage Transplants by ABO



Percentage Transplants by Diagnosis



Percentage of Transplants by PRA



VARIANCE REVIEW PROCESS

Process to date

- Review of existing variance according to Final Rule requirements
 - Research design
 - Time limited
 - Designed to test potential policy modifications before national implementation

Kidney Committee reviewed all existing variances and identified those that it believed would be could be beneficial if implemented as part of a national kidney allocation policy.

Next Steps

- Committee will send letters to each OPO regarding its recommendations.



Letter #1: Recommendations for national policy
OPOs that wish to propose that its variance be reconsidered for national allocation policy will be asked to submit a brief (no more than 2 page) rationale.



Letter #2: Recommendations for ALUs/Sharing arrangements
OPOs wishing to maintain variances due to unique geographical constraints will be asked to submit a rationale.

Recommendations to Board

- The Committee will review any responses to its letters before making final recommendations to the Board of Directors to either:
 - incorporate the variance into national kidney allocation policy
 - acknowledge that the OPO has a permanent need for an alternative arrangement and codify in policy
 - discontinue the variance.

Questions



Kidney Paired Donation Pilot Program Update

August 2011 Match Run Results

Participants included in the match

149 candidates

158 total donors

4 NDDs (1 blood type O, 2 blood type B, 1 blood type AB)

42 centers from 11 regions had at least one eligible pair.

Results

20 candidates from 7 regions matched

Chain with 12 links (1 NDD, 11 pairs, and 1 waiting list candidate)

Two 3-ways and one 2-way

7 highly sensitized candidates matched

Overall Match Run Results

Match Run Date	Candidates	Donors	Candidates Matched	Candidates Transplanted
October 27, 2010	43	45	7	2
December 8, 2010	60	62	12	0
January 19, 2011	66	69	11	0
February 23, 2011	76	78	0	0
March 23, 2011	88	90	3	0
April 28, 2011	106	109	6	3 scheduled for November
May 26, 2011	117	124	7	0
June 21, 2011	132	142	19	3
July 20, 2011	145	157	19	3
August 17, 2011	149	158	20	1; 5 scheduled for November
September 14, 2011	139	148	8	0
October 18, 2011	130	141	11	3 in crossmatch

Candidate Characteristics

Candidates entered in August 2011 Match Run

Characteristic	Candidates
Total	149
Blood Type O	69.8% (104)
CPRA \geq 80%	63.1% (94)
Ethnicity- Black	16.1% (24)
Ethnicity- Hispanic	8.7% (13)
Age over 50	38.3% (57)
DD Waiting Time > 1 year	75.2% (112)
Previous Kidney Transplant	58.4% (87)
Willing to accept a shipped kidney from any center	91.3% (136)

Donor Characteristics

Donors entered in August 2011 Match Run

Characteristic	Donors
Total	158
Blood Type O	38.0% (60)
Age over 50	27.8% (44)
BMI over 30	17.1% (27)
Willing to ship a kidney	97.5% (154)
Willing to travel to any center	37.3% (59)
Non-directed donor	2.5% (4)

KPD Work Group Activities

Operational Subcommittees

Subcommittee	Description
Strategic Planning	<ul style="list-style-type: none">•Create a vision, mission, set of values, measurable goals, and evaluation plan for the KPDPP•Look at the internal and external barriers to the program’s success, develop strategies to overcome these barriers, and develop a road map to reach these goals – both short and long term.
HLA	Review unexpected positive crossmatches and recommend ways to prevent unexpected positive crossmatches in future match runs.
Financial	In the short term, the subcommittee is developing KPD financial best practices and templates. The subcommittee is also discussing recommendations for the overall structure of financing for KPD.

Revisions to KPD Operational Guidelines

- In September, the Kidney Committee approved the following changes:
 - Incorporation of previously approved donor chain language into Operational Guidelines
 - Chain Cap Revision
 - DP typing optional
 - What to do when a chain breaks

KPD Policy

- The KPD Work Group is drafting KPD policy
- Some sections will apply to KPD in general; other sections will only apply to the OPTN program.
- The goal is to have a proposal out for public comment in spring 2012.

KPD Automated Solution Update

Pre-Match Data Entry Screens

- Enter KPD application from UNetSM
- Add and maintain donors and candidates
- Search for donors and candidates
- Verify ABO
- Print records

Progress on Pre-Match Data Entry Screens

- Training will occur in December 2011.
- The system will be available to KPD Pilot Program participants by the end of 2011.

QUICK SEARCH

[Click here to search for a KPD candidate or donor](#)

Announcements

No announcements to display

KPDSM RESOURCES

[Click here to access KPD Pilot Program documentation, templates and FAQs](#)



ABO Pending Candidates

To verify the ABO, click the candidate's KPD ID below. The ABO must be verified by a second user before the candidate can be eligible for KPD match runs.

COUC-TX1-University of Colorado
Hospital/HSC

Total: 5

KPD Candidate ID	Name	SSN	Center	Add Date
200135	Bunny, Bugs	555-44-7777	COUC-TX1	9/23/2011
200129	Man, Bat	555-44-5555	COUC-TX1	9/15/2011
200127	Simpson, Homer J	333-22-1111	COUC-TX1	9/13/2011

Candidate name: Simpson, HomerJ

KPD candidate ID: 200127

Waitlist ID: 683809

Candidate Summary

Details

Candidate Choices

HLA and Unacceptables

Title

INSTITUTION

Home transplant center:

COUC-TX1

KPD CANDIDATE CHOICES

Candidate willing to travel? *

Yes No

If so, to which center(s) is the candidate willing to travel? R

Available options:

All centers
Any center within 50 miles
Any center within 100 miles
Any center within 250 miles
Any center within 500 miles
ALUA-Univ of Alabama Hospital
ARBH-Baptist Medical Center
ARCH-Arkansas Children's Hospital
ARUA-UAMS Medical Center
AZCH-Phoenix Children's Hospital

Add

Remove

You

CC
CC
CC
CC

Future Functionality

- Eligibility processing
- Display of match results
- Tracking of matches
- Candidate and donor history
- Post-match reports
- Integration with other applications

Questions

