

Kidney Paired Donation:
Community Perspectives
and
Best Practices

Hosted by the
American Society of Transplant Surgeons
Scientific Studies Committee
February 8, 2016
6:00 PM ET

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Webinar Content

- ✓ Overview of KPD Survey Results

- ✓ Best Practices Discussion
 - Setting patient expectations
 - Transplant Center Process
 - Communication
 - Logistics
 - Regional/Local Challenges
 - Starting & Maintaining a KPD Program
 - Financials of KPD
 - KPD in the US
 - Lessons Learned

- ✓ Q&A

KPD Survey

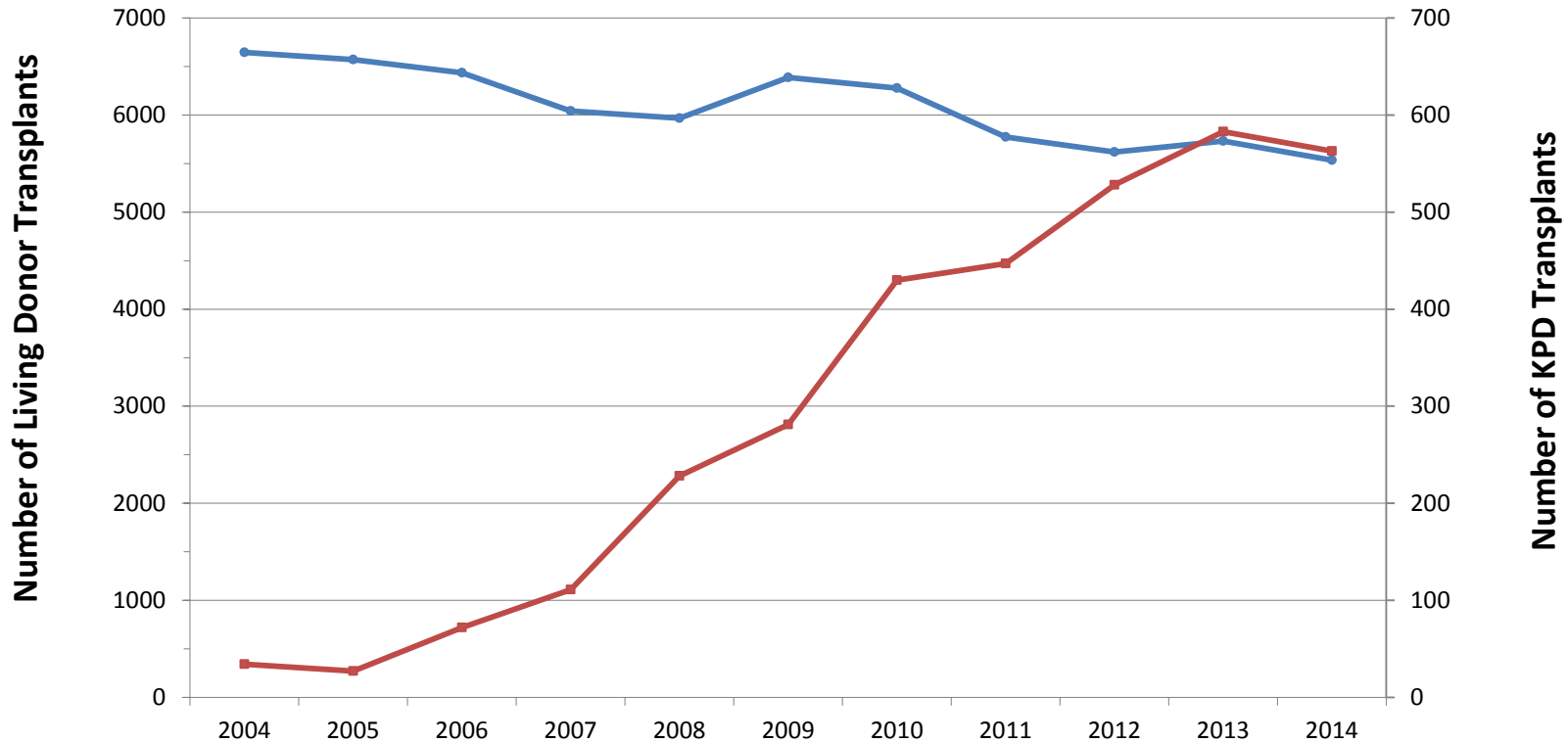
Purpose: to assess the transplant community's perceptions of and participation in Kidney Paired Donation (KPD), including how non-directed donors are utilized and potential solutions for barriers to increased participation in KPD

30 questions encompassing:

- Outline center's utilization of KPD
- Outline center's utilization of NDD
- Understand motivations related to donor and recipient participation
- Query the community's opinions on solutions to Histocompatibility Issues in KPD
- Query the community's opinions on allocation and KPD policy
- Obtain the community's opinions on solutions to KPD Financial Challenges
- Understand the perceptions of magnitude for known barriers to KPD
- Rank solutions in order of priority

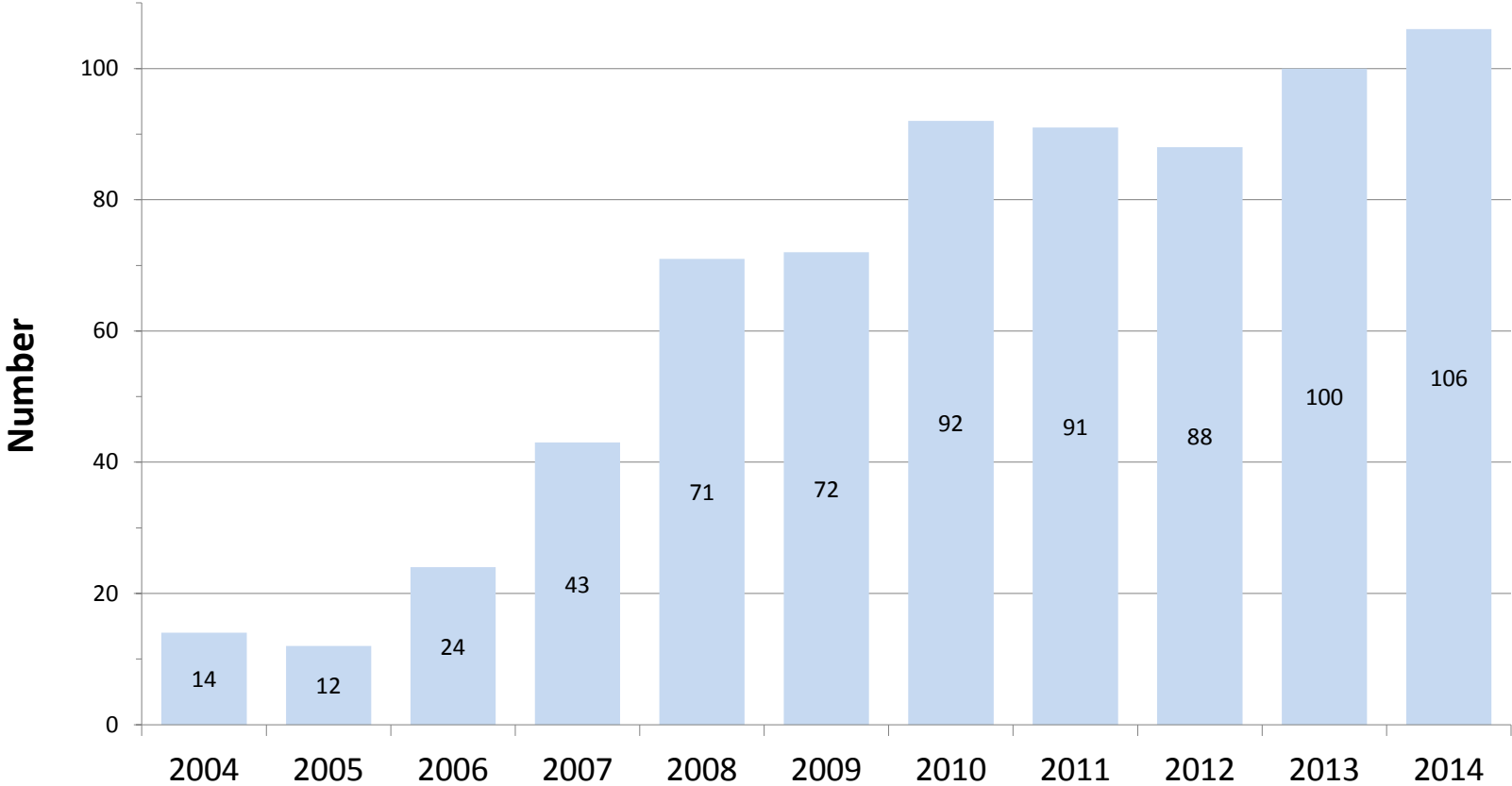
Delivered to all Kidney Program Directors, NATCO & ASHI in Mid 2014
UNOS Data Request for Program Specific Transplant Activity 2004-2013

Living Donor Kidney Transplant Activity

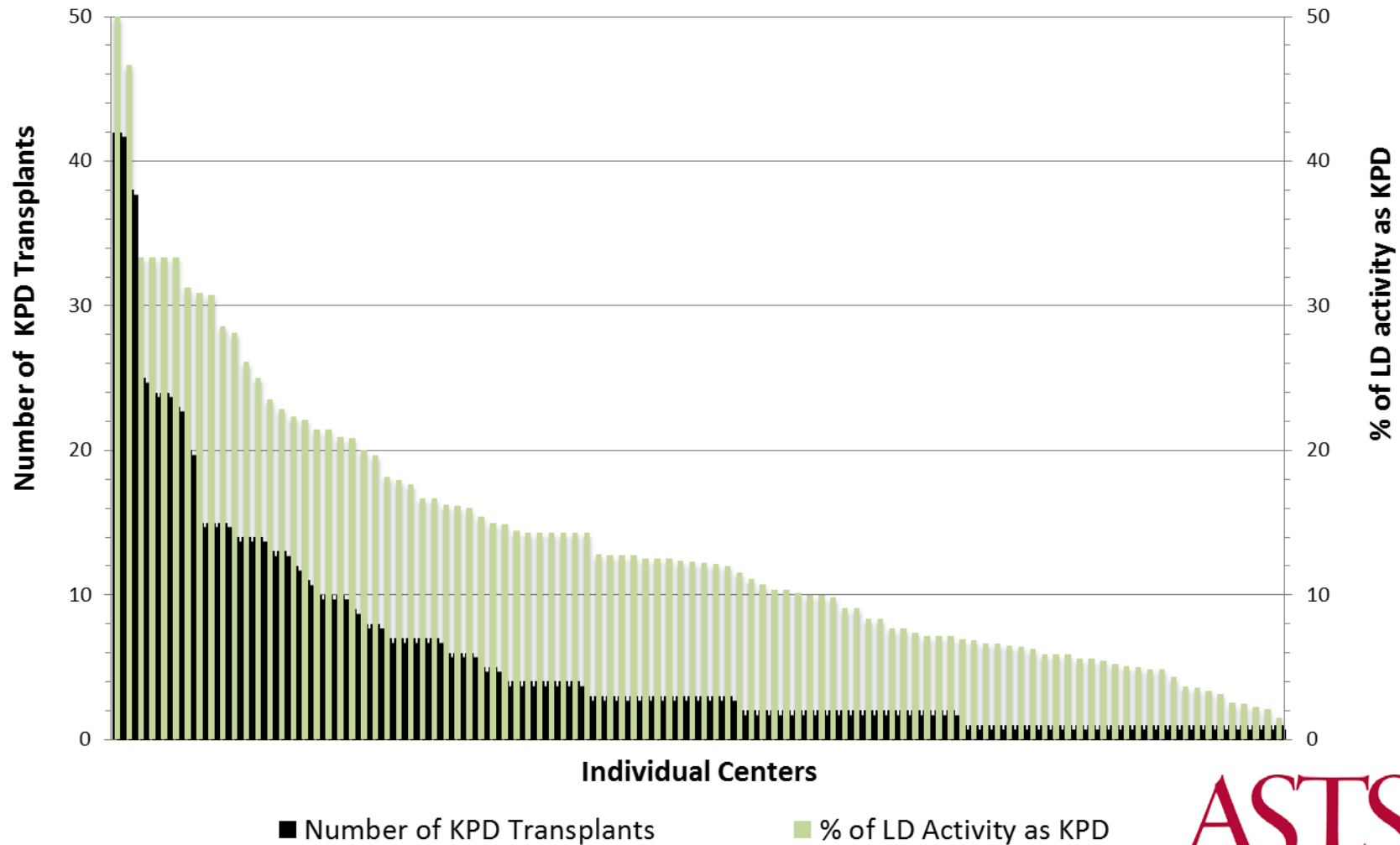


10.2% of all LD transplants

Centers Performing KPD Transplants



Active KPD Center 2013 Volumes



Survey

- 199 Responders
- 129 of 225 (57.3%) of Kidney Transplant Centers
- Responses per center (range 1-7, mean 1.54)
- 75% said their center used a NDD in 2013
- 81% (161 of 199) said their center was participating in a KPD program.
- 35% said all pairs are asked to participate in KPD

During 2013, in which KPD program(s) did your center participate?

Internal	78/161	48.4%
Regional	17/161	10.6%
UNOS	78/161	48.4%
APD	34/161	21.1%
NKR	86/161	53.4%
Multiple	88/161	54.6%

Survey Responses:

Primary Role

	N	%
Surgical Director	83	41.7
Medical Director	42	21.1
HLA Director	9	4.5
Program Director	10	5.0
Transplant Administrator	25	12.6
Coordinator	12	6.0
Other (Lab, Quality, Finance)	18	9.0



Survey Representation

Individual Center KPD Volume	Centers with Respondents/ Number of Centers	Number of Individual Responses to Survey	Total Number of KPD Transplants (2013)
> 15	5/7 (71%)	8	196
8-15	14/16 (87.5%)	25	191
1-7	50/77 (64.9%)	89	196
0	60/125 (48%)	77	0
Total	129/225 (57.3%)	199	583

Definitely agree	Probably agree	Neither agree nor disagree	Probably Disagree	Definitely disagree
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Do you feel that KPD is underutilized at your center?

30.2%	24.6%	18.6%	11.1%	15.6%
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Donor/recipient pairs should be routinely offered participation in KPD, irrespective of compatibility

19.9%	29.8%	9.9%	23.0%	9.3%
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Non-directed donor (NDD) should be offered participation in KPD

59.6%	22.4%	3.1%	1.2%	4.3%
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Chains should be closed by transplanting children on the waitlist

4.3%	9.3%	37.9%	23.6%	16.8%
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Why do Donors Participate in KPD?

On a scale of 0 (uncommon) to 10 (most common)	Mean
To facilitate living donor transplant for their HLA incompatible recipient	8.71
To facilitate living donor transplant for their ABO incompatible recipient	8.81
To help their compatible recipient obtain a better age/size match	3.13
To help their compatible recipient obtain a better HLA match	2.46
Altruism	3.66

Who leads your KPD program?

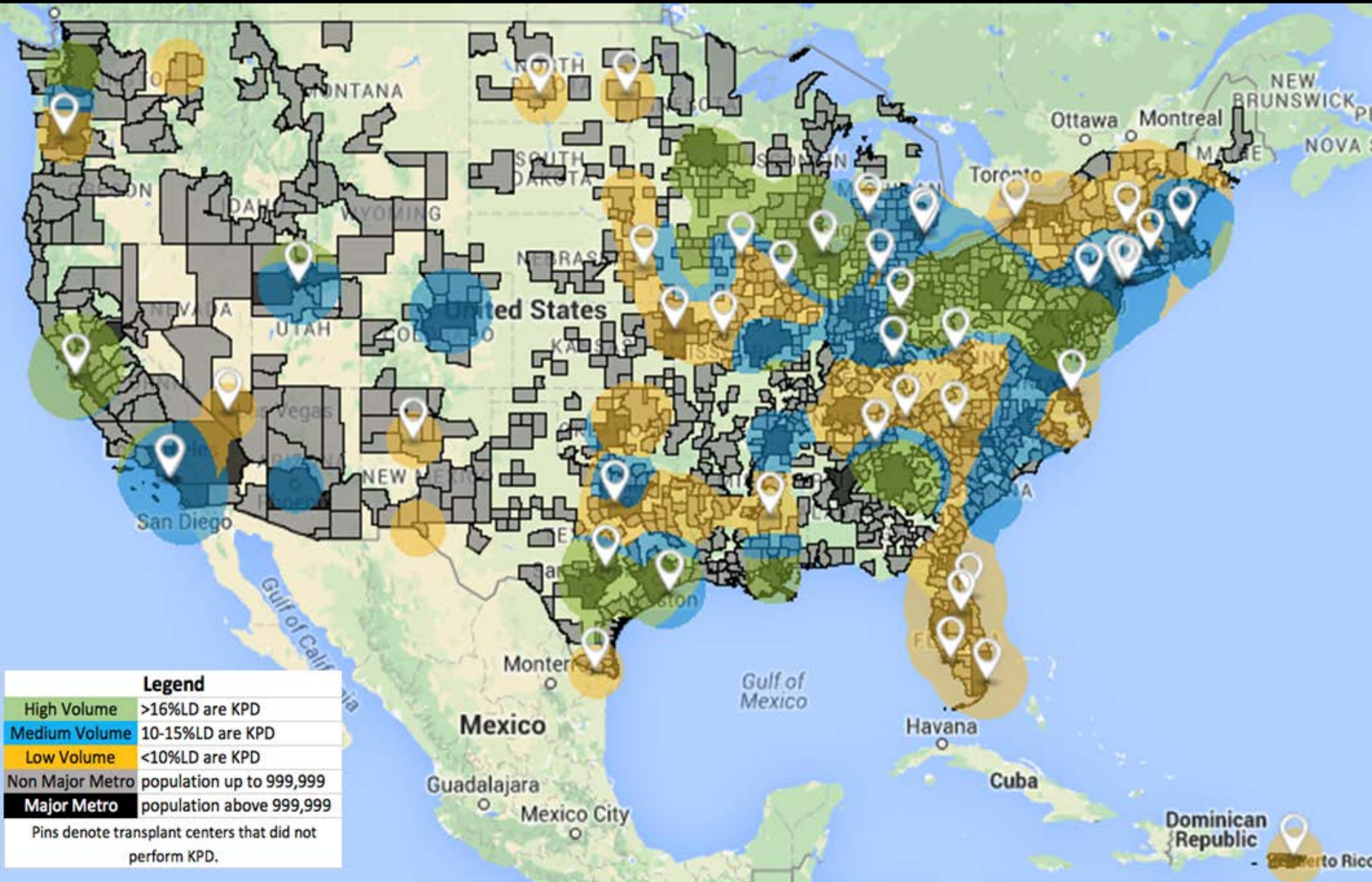
Nephrologist	13.7%
Surgeon	34.2%
Coordinator	21.1%
Committee	16.1%
Other	3.7%
Unanswered	11.2%

About how many FTE does your program dedicate to KPD?

0	24.8%
0.5	24.8%
1	23.6%
2 or more	9.3%
I don't know	6.2%
Unanswered	11.2%

Who is responsible for entering/updating a candidates unacceptable antigens in KPD programs?

Coordinator	39.1%
HLA Lab	44.7%
Transplant Physician	0.0%
Other - please specify	4.3%
I Don't Know	0.0%
Unanswered	11.8%



Legend	
High Volume	>16%LD are KPD
Medium Volume	10-15%LD are KPD
Low Volume	<10%LD are KPD
Non Major Metro	population up to 999,999
Major Metro	population above 999,999
Pins denote transplant centers that did not perform KPD.	

Dominican Republic
- Puerto Rico

#1 Barriers

Lack of buy-in from administration (cost, contractual issues)	20.7%
Lack of dedicated personnel (coordinator, HLA lab, etc)	23.7%
Lack of a physician champion	6.7%
Lack of patient interest	33.3%
Lack of organizational focus	15.6%

Potential solutions to financial challenges of KPD:

On a scale of 0 (Not Important) to 10 (Very Important)

Address the challenges of reimbursement for out-of-network donors to commercially insured recipients 7.51

Address the challenges of reimbursement for out of state donors for Medicaid recipients 7.62

Establish a National Standard Acquisition Charge for KPD 7.69

Create a standardized financial document (contract) for KPD exchanges. **8.02**

#1 Solutions

Decrease the cost/financial risk to the program/institution	23.7%
Optimization of ONE National KPD exchange program	27.4%
Increase patient education/awareness	21.5%
Increase efficiency (offer review and time to transplant)	9.6%
Dedicate the necessary resources for KPD at our center (coordinator, HLA, other)	17.8%

Best Practices Discussion Topics

Built from questions submitted by
registrants

Setting patient expectations

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Setting patient expectations

- ✓ Education: Living donation, exchange and compatible exchange should be part of the first patient visit. Educate and consent all patients even if a live donor has not been identified.
- ✓ Consent: The UNOS KPD program provides a framework for consent. We consent all patients for UNOS and add consent for our single center program.
- ✓ Compatible pairs: Discuss with donor and recipient and present possible advantages. Do not delay the compatible transplant. 60% agreement rate.

Setting patient expectations

✓ Timeline:

- KPD can be predictable based on donor and recipient ABO and HLA type and antibody profile.
- “Easy” cases will go within 3 months, “hard” cases will have to wait longer.
- Once matches are identified, expedite final evaluation and scheduling...the more pairs involved, the more chance of the unexpected. Keep patients informed.

Key Features of the San Antonio Methodist Hospital KPD Program

- ✓ Prospective education and consent of all donors and recipients regarding paired exchange transplantation
- ✓ Education and consent of all compatible pairs with non-HLA identical donors ≥ 45 years old
- ✓ Collection and storage of blood tubes from all consenting donors for crossmatch testing
- ✓ Comprehensive antibody analysis of all sensitized recipients including HLA A, B, C, DR, DRw, DQ, DP
- ✓ Comprehensive HLA testing of all donors including A, B, C, DR, DQA, DQB, DRw and DP for selected donors
- ✓ Daily entry of all data into a computerized matching database
- ✓ Multi-tiered approach to assignment of unacceptable antibodies
- ✓ Subtype all blood type A donors into A₁ and A₂ and assign A₂ donors as blood type O* in the database
- ✓ Weekly analysis of all potential exchanges
- ✓ Close communication between HLA laboratory and clinical team
- ✓ Early communication with incompatible pairs regarding KPD match results
- ✓ Counseling incompatible recipients about ways to limit further sensitization
- ✓ Timely evaluation of donor / recipient pairs
- ✓ Timely scheduling of transplants

Successful KPD Program

Team Approach

MD's, Coordinators, Administrators, Histocompatibility, OR, Preop, Recovery Room, Lab, *even the Janitors!*

Infrastructure

Coordinators do the bulk of the work and need support and time. Consider AA's for them.

Institutional Commitment

Communication with administration is key.

Transplant Center Process

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Transplant Center Process

- ✓ KPD must be build into the culture of the program
→institutional commitment
- ✓ Separate Living Donor/KPD program with dedicated FTE's, educational program, etc.
- ✓ KPD (including compatible pairs) must be introduced to BOTH donor AND recipient early in engagement
- ✓ On-line donor questionnaire that immediately includes info on KPD
- ✓ KPD Consent following results of blood type and XM
- ✓ Single-day donor eval or at convenience of donor

Transplant Center Process

- ✓ Process for both internal exchanges and for participation in national exchange programs (UNOS, NKR, APD)
- ✓ Regular and ongoing collaboration with HLA
- ✓ Subtype all blood type A donors and titers (anti-A, anti-B) for all recipients in KPD
- ✓ Recognition that negative x-match should not always be expectation
- ✓ 'Buy in' from multiple in-house collaborations
 - Nephrology/Hematology – TPE
 - OR/Anesthesia – availability and off hours cases
 - Consultants – intercede for late physical findings to maintain OR date
 - Hospital Admin – finances, logistics of patient confidentiality, etc.

Communication

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Communication

- ✓ Reviewing the match offer
 - Parameters used to accept certain offers
 - Who reviews
 - Potential donor data that is first analyzed
- ✓ Initial acceptance of the donor offer
 - Both centers perform a crossmatch
 - Entire donor chart is sent to the other center
- ✓ Conference call
- ✓ Agreement on a date for transplant surgery

Communication

- ✓ If patients are in multiple KPD programs
 - Recommend upon acceptance of an offer to put these patients on hold with other programs
- ✓ KPD using *compatible* pairs
 - Best time to introduce this option
 - Criteria: ABO, HLA, age and size matching
- ✓ Determining when and if donors and recipients through KPD should meet

Logistics

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Logistics

- ✓ HLA
 - Availability of frozen cells
 - Keys to transplanting the highly sensitized patient
 - Software programs
- ✓ Committee meetings
 - KPD committee meeting
 - Living donor committee meeting
- ✓ Transportation and tracking
 - How does the kidney get to the recipient center?

Regional/Local Challenges

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Regional/Local Challenges

✓ OR Availability:

- These are planned procedures
- Be prepared to work either very early or late in the day
- A wait of 1-2 hours for the recipient is acceptable
- This is NOT a barrier

✓ Transportation:

- These are planned procedures. Much longer planning than deceased donor organs
- CIT of 24 hours (highly unlikely) should be acceptable by all in LD txps
- Consider transportation by road in the absence of direct flights (up to 6 hours) or other issues like weather, etc.
- Consider flight charter or non profit flight i.e Angel Flight
- GPS tracking recommended
- This is NOT a barrier

Regional/Local Challenges

✓ Socioeconomic barriers:

- We serve Caucasians and Native Americans (MIDWEST)
- Counseling/Detailed information/Sharing of knowledge/Previous local center, regional and local experiences shared at FIRST visit
- Limiting factors:
 - Donor's desire to donate to a designated recipient
 - Timing based on family/employment/recipient situation
- In certain areas (Midwest) DD wait time is short and works against KPD culture
- Assistance:
 - Guidance provided by local center:
 - Local: Housing/Local Organizations like Dakota medical Foundation/Church/Fund raisers, etc.
 - Regional/National organizations: NLDAC, etc
 - Web search

Regional/Local Challenges

✓ Socioeconomic barriers:

- Southeastern US:
- High percentage of African American recipients (up to 90% of Pts on HD)
- Known lower transplant rates, poverty and low level of education
- Disease that caused ESRD; DM, HTN and obesity shared by most family members
- Limiting factors to donation:
 - Donor's desire to donate to a designated recipient
 - Timing based on family/employment/recipient situation
- Positive impact :
 - Education provided by transplant center center:
 - Donor "buddy" program
 - Outreach education to schools, churches and local donor organizations.
 - KPD program now accounts for 20 % of our LD volume

American Liver Foundation

75 Maiden Lane, Suite 603
New York, NY 10038-4810
Phone: (800) 465-4837, (800) GOLIVER
Email: webmail@liverfoundation.org www.liverfoundation.org

The American Liver Foundation, a national voluntary health organization, assist patients and families in fundraising efforts for liver transplant funds raised on behalf of patients to help pay for medical care and may include expenses related to a living liver donation.

American Organ Transplant Association

3335 Cartwright Road
Missouri City, TX 77459
Contact: Ellen Gordon Woodall, Executive Director
Phone: (281) 261-2682
Fax: (281) 499-2315
www.a-o-t-a.org

The American Organ Transplant Association is a private, non-profit and bus tickets to transplant recipients and their families. AOTA's services must be referred by their physician. The association funds and fund raising. No administrative fee is charged.

American Transplant Foundation – Denver Colorado

<http://www.americantransplantfoundation.org>
The Patient Assistance Program is designed for the most vulnerable. <http://www.americantransplantfoundation.org/programs/pap/>
600 17th Street, Suite 2515
South Denver, CO 80202
Phone: (303) 757-0959
Fax: (303) 757-2990

Angel Flight

American Medical Support Flight Team
P.O. Box 17467
Memphis, TN 38187-0467
Phone: 1-877-858-7788
Toll Free 1-901-332-4034
Local 1-901-332-4036
www.angelflightamerica.org

Angel Flight provides free air transportation on private aircraft for healthcare agencies, organ procurement organizations, blood bank Volunteers serving the public since 1983.

Children's Organ Transplant Association

2501 COTA Drive

National Living Donor Assistance Center (NLDAC)

2461 S. Clark Street, Suite 640
Arlington, VA 22202
Phone: 703-414-1600
Fax: 703-414-7874
Email: NLDAC@livingdonorassistance.org
www.livingdonorassistance.org

If you know someone who is considering becoming a living organ Donor Assistance Center (NLDAC) may be able to pay for up to a companion's travel and lodging expenses. The transplant center living donor's behalf. Visit the NLDAC Web site at www.livingdonorassistance.org about general eligibility requirements and how the program works.

National Transplant Assistance Fund

3475 West Chester Pike, Suite 230
Newton Square, PA 19073
Phone: (610) 353-9684
Toll free: (800) 642-8399
Fax: (610) 353-1616
Email: NTAF@transplantfund.org www.transplantfund.org

The National Transplant Assistance Fund has over 20 years of experience in their communities to cover uninsured medical expenses.

Nielsen Organ Transplant Foundation

580 W. 8th St.
Jacksonville, FL 32209
Phone: (904) 244-9823
Email: nielsen@notf.org www.notf.org
The Nielsen Organ Transplant Foundation provides financial assistance to the Northeast Florida area.

National Foundation for Transplants

5350 Poplar Avenue, Suite 430
Memphis, TN 38119
Toll Free: (800) 489-3863
Local: (901) 684-1697
Fax: (901) 684-1128
E-mail: info@transplants.org
www.transplants.org

The National Foundation for Transplants offers hope and help

- Providing fundraising expertise and advocacy
- Promoting organ and tissue donation, and
- Supporting innovative solutions for lifesaving treatment

Transplant Recipients International Organization, Inc.

Organizations that provide Financial Assistance for Kidney Transplant and for Living Donors

You should contact these organizations to update their support.

Your transplant coordinator or social worker may be able to

Air Care Alliance

1515 East 71st Street, Suite 312
Tulsa, Oklahoma 74136
Office Phone and Help Line: (918) 745-0384
Toll Free Help Line Number: (888) 260-9707
Email: mail@aircareall.org
www.aircareall.org

The Air Care Alliance is a nationwide league of humanitarian organizations dedicated to community service. Volunteer pilots perform public disaster relief, environmental support, and other missions of service. We are able to provide free or low cost flights for medical evaluations. Please see the website for details.

American Kidney Fund

6110 Executive Blvd., Suite 1010
Rockville, MD 20852
Phone: (800) 638-8299
Email: helpline@kidneyfund.org www.akfinc.org

The American Kidney Fund provides limited grants to needy living kidney donors to help cover the costs of health-related expenses. We provide information and support for kidney donation and transplant information on kidney disease.

American Liver Foundation

75 Maiden Lane, Suite 603
New York, NY 10038-4810



Starting/Maintaining a KPD Program

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Starting a KPD Program

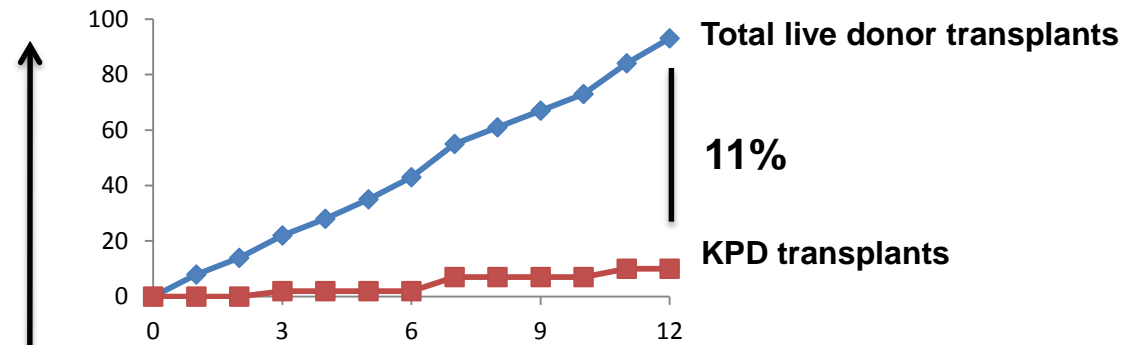
- ✓ Obtain institutional buy-in based on patient benefit, increased transplants and need to offer state-of-the-art care
 - ROI on LDKT very positive
- ✓ Identify a team: surgeon, nephrologist, HLA, coordinator
- ✓ Look for A/B swaps as a place to start
- ✓ Decide on approaches: UNOS, NKR, Alliance, single center, combination
- ✓ Develop policies and procedures, educational materials which may already be available
- ✓ Enroll patients
- ✓ Do not rule out ABO or HLA incompatibles without seeing patient at the center to explain options
- ✓ Emphasize most important thing for the recipient is to get a transplant, not which person give the kidney

Growth of KPD

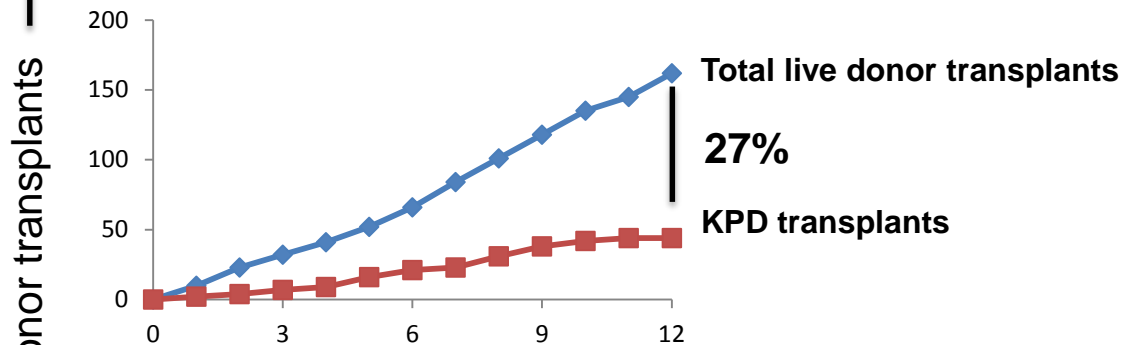
- ✓ Transplants will increase as pairs are added to database. Database must include favorable as well as difficult pairs.
- ✓ Non-directed donors provide opportunities for chains which should be extended as much as possible.
- ✓ Compatible pairs can facilitate exchanges

KPD transplants relative to total volume of live donor transplants

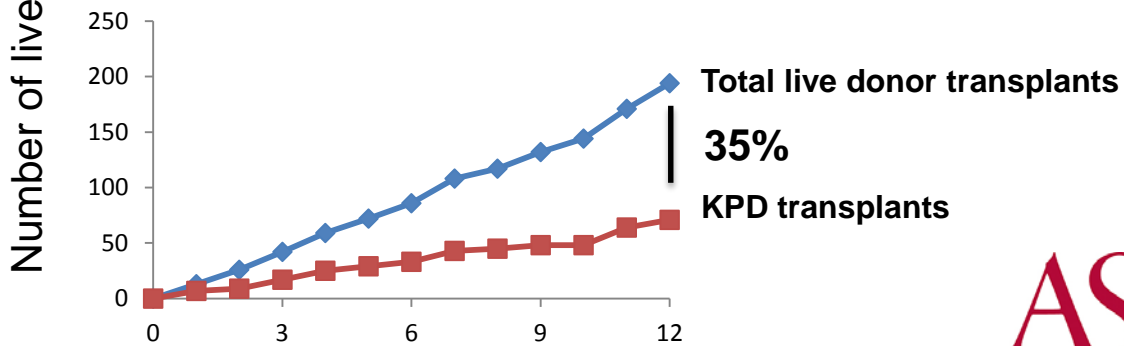
Year 1



Year 2



Year 3



Months

Culture of KPD

- ✓ KPD is becoming well-known and is an expected option by many patients, especially those seeking second or third transplants
- ✓ Every LD pair potentially a KPD pair
- ✓ KPD (and centers wishing to engage/increase KPD) can now draw on data accumulated over the last several years and make evidence/financially based decisions.
- ✓ High-risk transplants can potentially be avoided by KPD and the new KAS

Financials of KPD

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Financial Approach to KPD

✓ Dealing with the CFO

- Incremental Profit – Total Revenue Minus Variable Costs
- Registry Fees – Negotiate with 3rd Party Payers many are paying these.
- Cross match Negative Transplants are less costly and improve long term outcomes.

✓ Paying Donor Nephrectomy Costs

- In most cases the cost of living donor nephrectomy is less than the cost of a DD Kidney.
- Performing in-house exchanges may improve the revenue on a per case basis but may prevent other transplants because easy to match pairs are not in the pool to help your highly sensitized patients

Standardized Donor Nephrectomy Rates

- ✓ Not all centers have a Standard Acquisition Charge (SAC) for donors
- ✓ Most centers are willing to reimburse at Medicare cost to charge ratios if a SAC is unavailable
- ✓ Registries are working toward this ideal state

Billing

✓ STANDARD

- Physicians bill recipient's insurance directly
- Facility receives reimbursement from recipient facility
- Unless separate, extra-contractual agreements are made

✓ ISSUES

- Restrictive commercial plans that do not allow patients to receive services out of network/region
- Out of State Medicaid/Medical Assistance plans that donor centers cannot bill
- Provider Enrollment
- Contracting

✓ COMPLICATIONS

- Most payers will cover donation complications
- Any issues – centers work together to ensure proper reimbursement

Case

Female recipient with DSA to husband

Contract Case with Reimbursement of \$110,000.00 for transplant

Antibody Mediated Rejection within 2 weeks of transplant.
Admission for Several Rounds of IVIG and Pheresis.

Cost of Transplant \$50,000.00 more than contract rate.
Loss for Hospital

Decreased Chance of Positive Longterm Outcome

50K could pay registry costs for 7 transplants and increase revenue by between \$700K and \$1million.

KPD Activity in the US

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National Landscape

- ✓ Alliance for Paired Donation
- ✓ New England Organ Donor Bank
- ✓ UNOS Registry
- ✓ National Kidney Registry
- ✓ Center Specific Programs - Texas Transplant Institute

One Program vs. Multiple

✓ Pros

- Create one very large pool with more options
- Centralize Control of Paired Kidney Exchange
- Standardize Paired Kidney Exchange

✓ Cons

- Eliminate Competitive Pressure for Innovation
- One size does not fit all
- Decreased Patient Opportunities

Ethical Issues of KPD

- ✓ Real Time Swap Failures
 - How does a program respond when a donor has given a kidney and their recipient does not receive a kidney?
- ✓ Early graft failures/PNF?
- ✓ Donor Complications?
- ✓ Ethics of Performing Both Registry KPD and In House KPD
 - Greater Good – Easy to match pairs make registries work
 - CIT – The story still isn't complete
- ✓ International Donors

Lessons Learned

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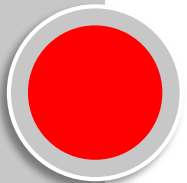
Emergency Bridge

When a chain breaks unexpectedly on the day of transplant



Salvaging an Anesthetic collapse

When a transplant is aborted once the living donor's kidney has been removed.



A two way swap breaks in the middle

When a Laparoscopic nephrectomy goes awry



Remember

If a living donor kidney is transplanted into an unintended recipient it must be reported to UNOS



Q&A





Thank you!

You will receive a follow up survey shortly after
the conclusion of this webinar via
SurveyMonkey