

Kidney Paired Donation

Spring 2009

OPTN/UNOS Board Approval

- In June 2008, the OPTN/UNOS Board of Directors unanimously approved a national kidney paired donation pilot program to be administered by the OPTN (27-0-0)

KPD PILOT PROGRAM

OPTN

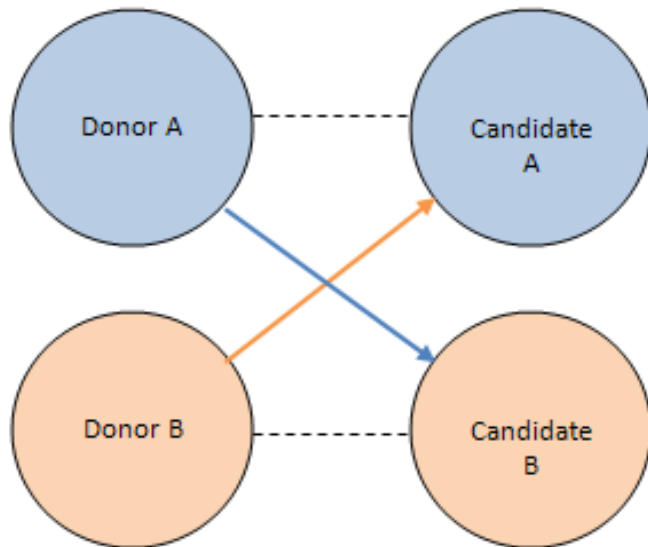


Specifics on KPD: Optimization

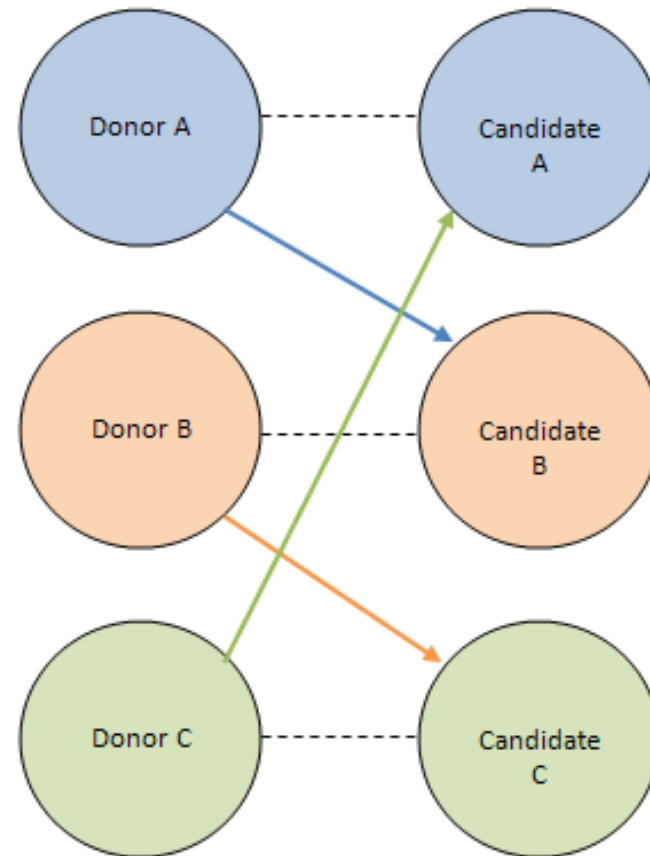
- An optimization protocol:
 - looks at every possible matching (or set of matches) from the list of potential donor/candidate pairs,
 - compares the possible matchings using predetermined weights based on any objectives established for the program, and
 - selects the matching with the greatest number of points.

Specifics on KPD: Matching

Two-Way Exchange



Three-Way Exchange



Specifics on KPD: Match Cycle

- 12 match runs per year
- Only eligible pairs will be included in a match run

Specifics on KPD: Prioritization

Priority Points Per Candidate As approved by the Board of Directors in June 2008

Base match per candidate (based on 200 points for a 2-way match)	100 points
Zero antigen mismatch with the matched donor	200 points
Highly sensitized candidate (CPRA \geq 80%)	125 points
Prior living donor status of the candidate	150 points
Pediatric candidate (age <18 years)	100 points
Waiting time accumulated within the KPD program	50 points per cycle
Geographic proximity with the matched donor (i.e. transplant center, local, regional)	75,50,25 points, respectively

Specifics on KPD: Histocompatibility

- Will use CPRA to determine level of sensitization
- Unacceptable antigens- antigens for which the candidate already has antibodies
- Low stringency antigens- Antigens that **will** cause a positive crossmatch between the candidate and donor
- High stringency antigens- Antigens that **will** cause a positive crossmatch between the candidate and donor **plus** antigens that **may** cause a positive crossmatch between the candidate and donor

Specifics on KPD: Requirements for Participation

- The transplant center must be approved by UNOS to perform kidney transplants (and when applicable, living donor kidney transplants)
- Candidate must be registered on the deceased donor waiting list
- The transplant center must have a designated contact for kidney paired donation
- The transplant center must agree to all rules associated with the KPD Pilot Program

Specifics on KPD: Requirements for Participation

- The KPD Pilot Program will operate within the current OPTN policies and bylaws
 - Transplant Centers
 - Living Donors
 - Candidates and Recipients
- Any changes to the policies or bylaws will also affect the KPD Pilot Program

Living Donor Committee Recommendations

- Living donors in the KPD system are consented based on recommendations that have been developed by the Living Donor Committee and approved by the Executive Committee
- Recommendations for the medical and psychosocial evaluation of the potential kidney donors will be used for the evaluation of living donors in any national KPD system

DONOR CHAINS

OPTN

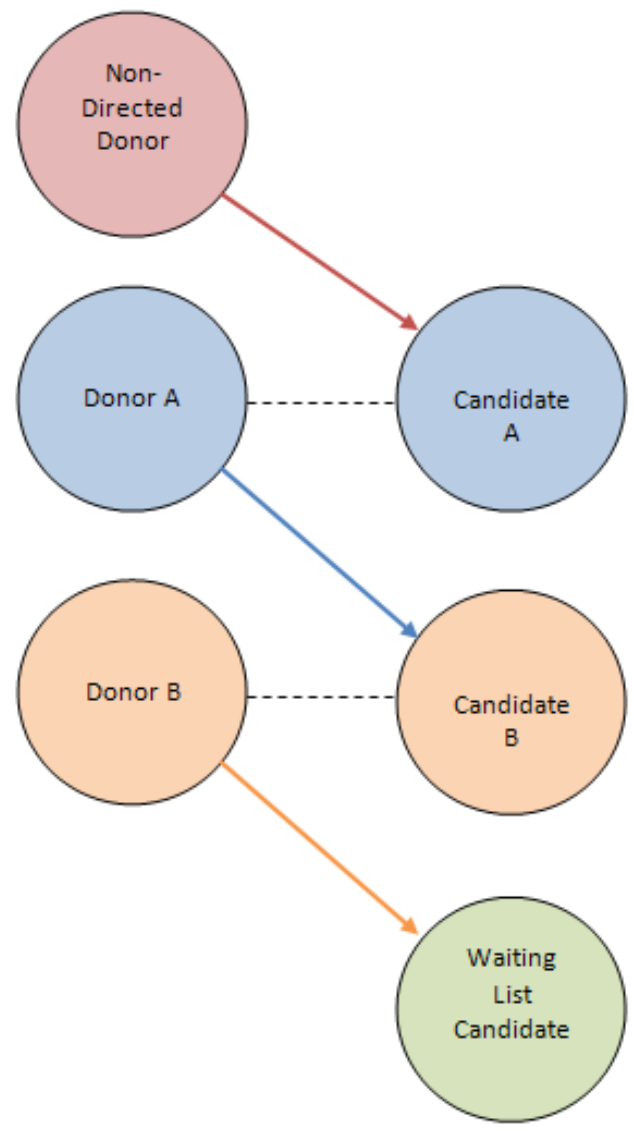


Donor Chains Proposal

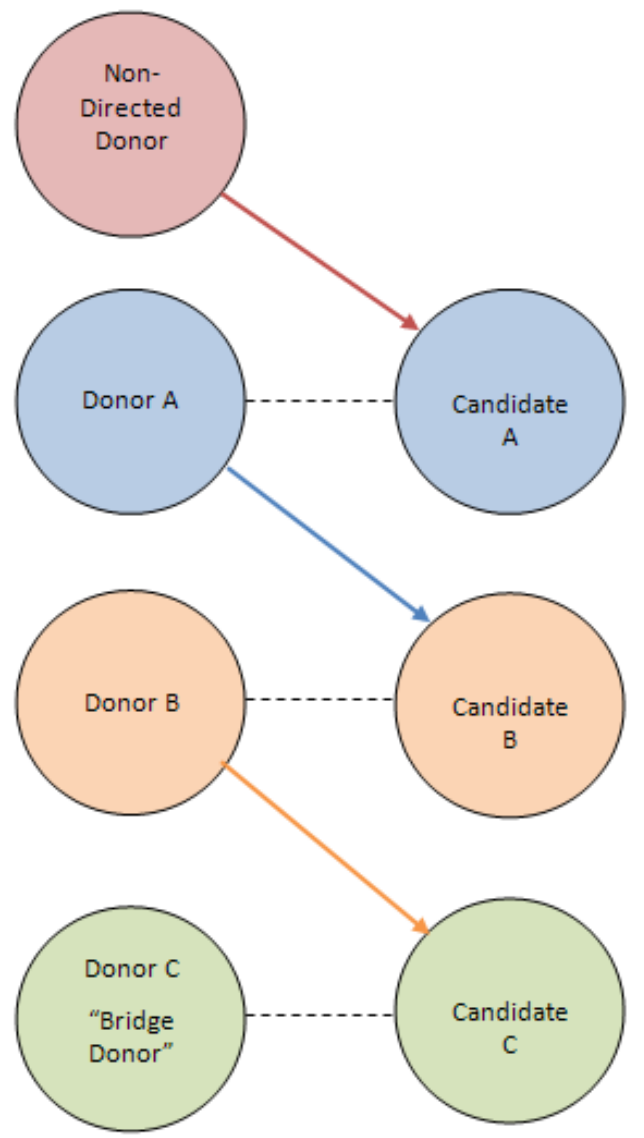
- Donor chains were not included in the original public comment proposal, so they were not approved by the Board with the rest of the system.
- Existing systems have shown that donor chains can increase the number of matches in a KPD system.
- Donor chains are being sent out for public comment in June 2009.

Donor Chains

Closed Chain



Open Chain



IMPLEMENTATION

OPTN



Test Run of the KPD Program

- September 2009
- This system will use the same optimization algorithm as the full implementation, but there will not be any ties into the current UNOS software (UNetSM)
- The data entry and communications protocol will follow the same business process as for the full implementation, but the data entry methods will be different.

Purpose of the Test Run of the KPD Program

- To implement a test pilot program to help staff gain experience with KPD before rolling out a full system in 2010
- To test the KPD business processes before they are programmed in the full system
- To implement a limited KPD system on an expedited timeframe

Test Run of the KPD Program

- Will be open to only 2-4 groups initially
- As experience with the test run grows, UNOS staff and the KPD Work Group will assess whether other groups can be accommodated in the system

Request for Proposal

- The KPD Work Group will send out a request for proposal this summer for groups wishing to participate in the test run.
- This RFP will include
 - requirements for groups wishing to participate, such as experience with KPD, and
 - The criteria the KPD Work Group will use when evaluating responses, such as the number of pairs the group can enter

Full Implementation of the KPD Program

- December 2010
- Will be open to all OPTN/UNOS approved kidney transplant programs
- Fully automated and interfaced with UNetSM