

# Living Kidney Donation

Presented by Nebraska Medicine



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# Agenda

- Treatment options for end stage renal disease (ESRD)
- Living donor vs. deceased donor
- The multidisciplinary team
- The living donor surgery and risks
- Kidney transplant surgery and risks
- Kidney transplant outcomes
- Living donor options
- Required living donor follow-up



# Treatment Choices for ESRD

- Hemodialysis
- Peritoneal dialysis
- Deceased donor kidney transplant
- Living related kidney transplant
- Living unrelated kidney transplant

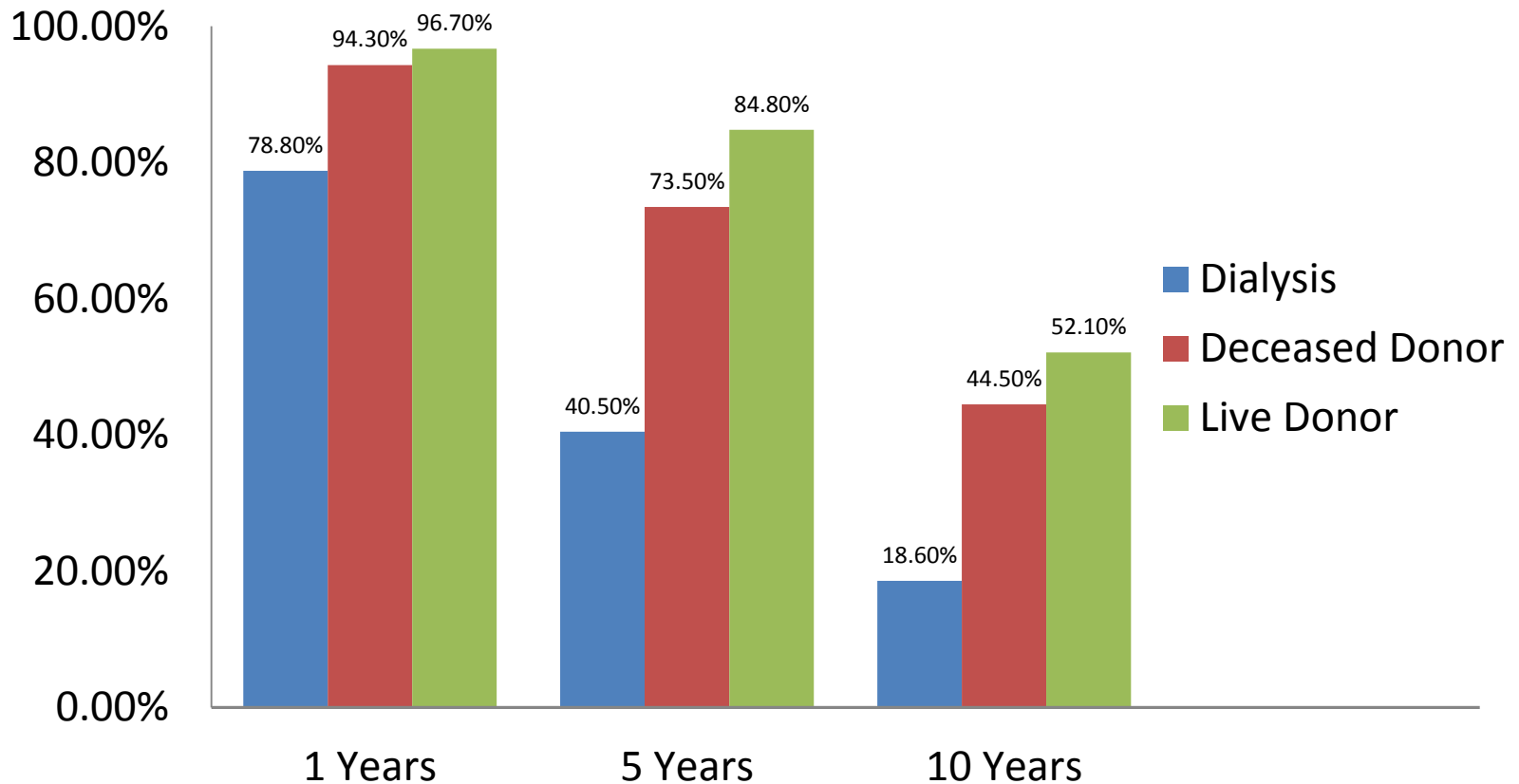


# What is the Best Option?



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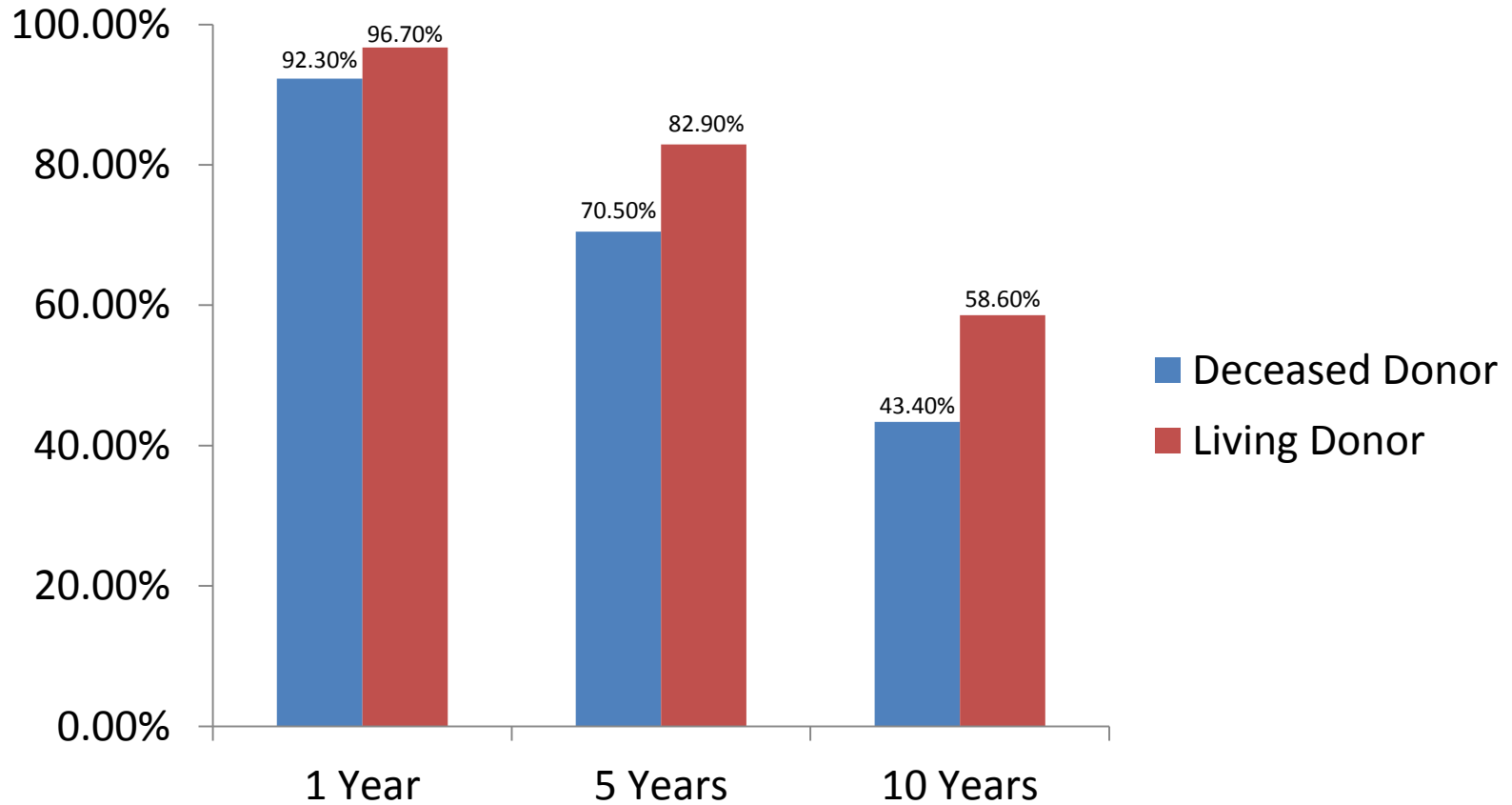
# 1, 5, and 10 Year Patient Survival Rates



Data from the USRDS 2014 Annual Data Report; 1-year data are from 2011, 5 year data are from 2007, and 10-year data are from 2002



# 1, 5 and 10 year Graft Survival Rates



Data from the USRDS 2014 Annual Data Report; 1-year data are from 2011, 5-year data from 2007, and 10-year data are from 2002.



# Kidney Transplantation

- 16,000 transplants each year in the U.S.
- Over 120,000 people on the waiting list to receive a kidney
- The number of individuals needing a transplant is growing compared to the number of transplants being performed.
- There continues to be a shortage of organs
- Twenty two people die each day
- Patients may receive a kidney transplant from a deceased donor or a living donor



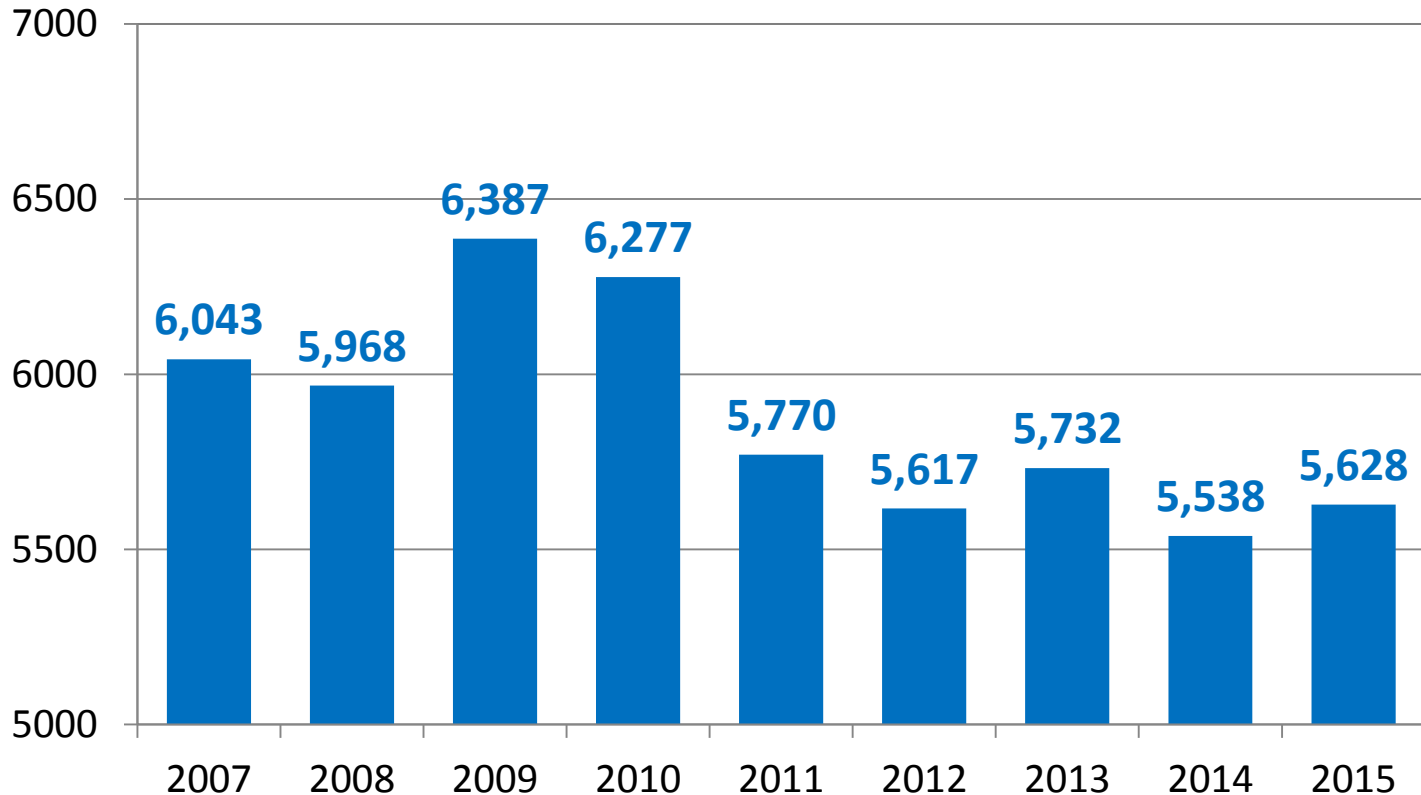
# Living donor vs. Deceased donor

- The patient survival and graft survival is better with living kidney donation. In other words, patients who receive a living donor kidney transplant live longer and have healthier kidneys that last longer.
- The kidney is from a fit and healthy individual person who has undergone a rigorous medical evaluation.
- The surgery can happen when it is most convenient for the living donor and the recipient.
- The wait time for recipient to receive a kidney is less.
- The surgeries happen at the same time.
- The longer a person is on dialysis, the higher rate of medical complications. Living donation can happen sooner than waiting on a list therefore decreasing medical complications.





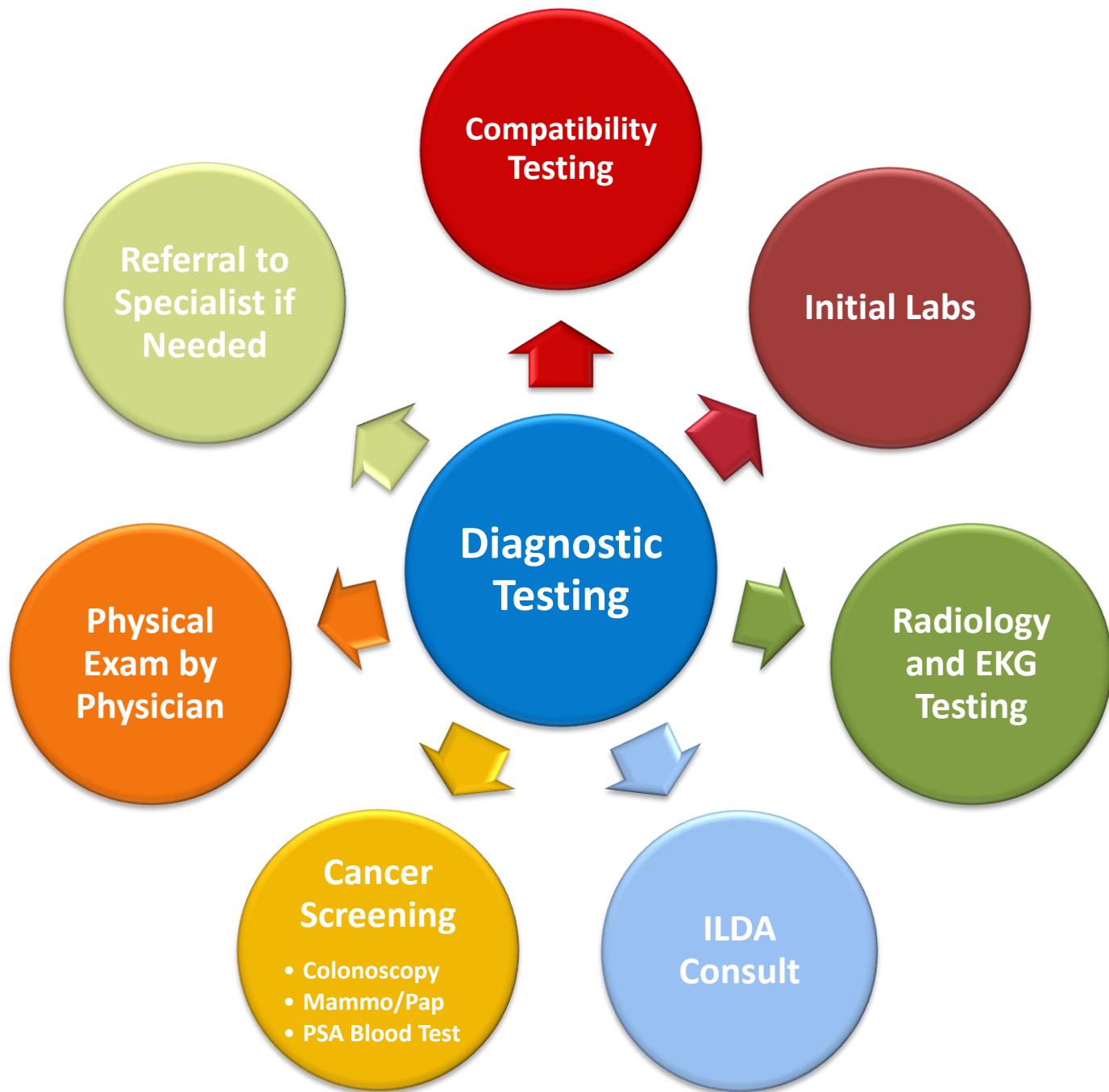
# Living Donor Kidney Transplants (OPTN)



# Steps in the living donor evaluation



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# Why a Multidisciplinary Approach?

What is the role of each team member



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# The Living Donor Team



# The Nurse Coordinator

- Interviews the potential donor to assess motivation to donate
- Directs and coordinates the evaluation process
- Schedules the living donor surgery when it is convenient for the living donor
- Continues to be the living donors coordinator after donation
- Responsible for living donor follow up



# The Social Worker

- Completes a psychosocial assessment to evaluate mental health, emotional well-being of the potential living donor
- Discuss the reasons why the donor wants to donate, and that is free from coercion and inducement
- Assess financial implications and time off work
- Assess to make sure that a care partner is present to help the living donor with discharge
- Is present in the discharge planning process



# The Psychologist

- Completes a psychosocial assessment to evaluate mental health, emotional well-being of the potential living donor
- To assure that the donor can give informed consent
- To discuss the reasons why the donor would like to donate
- To determine that the donor has the coping strategies in place to uphold the stress of donation





# The Transplant Surgeon

- Interviews the potential donor to assess motivation to donate
- Reviews the risks of the operation both short term and long term
- Provides information regarding potential post donation outcomes
- Discusses the donor nephrectomy surgery
- Reviews donor test results and CTA studies



# The Donor Nephrologist

- Interviews the potential donor to assess motivation to donate
- Completes a history and physical on the potential donor
- Discusses the long term risk associated with kidney donation
- Reviews all test results



# The Independent Living Donor Advocate

- Protects the interests and well-being of the donor
- ILDA is completely separate from the care of the recipient
- Interviews the potential donor to assess motivation to donate
- Ensures that the donor understands the organ donation process and the short and long term risks of living donation
- Ensures that donor understands that they can say no at anytime and for whatever reason
- Ensures that the living donor know that there are other options for the recipient
- Ensures that the decision to donate is free from coercion and free from inducement
- Represents and advise the living donor throughout the process



# The Entire Donor Team Responsibility

- Our top priority is you as a donor!
- Our responsibility as an entire team is to make sure it is safe for you to donate not only medically, but psychologically and emotionally.
- There is no medical benefit for a living donor to donate.
- We want to make sure it is the right decision for you!
- We want to make sure that your decision to donate is your independent decision and you are free of inducement or coercion.
- It is unlawful to receive any form of payment in exchange for being a donor and may be punishable up to five years in prison or a \$50,000 fine.



# Preoperative Phase

- Preoperative labs, including a final crossmatch, and serology testing
- Preoperative history and physical with the transplant team
- Sign of surgical and blood consents
- Pre anesthesia consult if indicated by history



# Daily Bathing Decreases Infection

- All people have harmful germs or harmful bacteria on their body
- These germs and bacteria can cause infections after surgery
- You will be asked to take a shower at the time of admission for surgery
- You will be asked to bath daily following your surgery.
- Taking a shower prior to surgery and a bath daily following surgery CAN prevent infection



# The donor surgery

- Laparoscopic Nephrectomy (left kidney removed)
  - Two small incisions in the left lower quadrant and one midline incision or bikini incision, which the kidney is removed through
  - Laparoscopic donors have been shown to require less analgesia, shorter length of stay in hospital, and faster return to normal activity; the average hospital stay is 2 days
- Open Nephrectomy (rarely used - for right kidney removal)
  - Flank incision using the retroperitoneal approach
  - Technique is safe with low mortality, acceptable risk of peri-operative complications, preservation of graft function
  - Larger incision may result in significant discomfort and prolonged recovery



# Post-operative course

- Admit to SOTU
- Will have IV fluids, pain management, Foley catheter overnight
- Day 0, walk 3 x day, decrease IV fluids, start oral pain medications, discontinue Foley catheter and advance diet as tolerated
- Typically discharged 2 days after surgery with pain medications and bowel regimen
- Follow-up with surgeon 2 weeks post-donation
- Lifting restriction of less than 10 pounds for 6 weeks
- No driving while on pain medications





# Perioperative risks

- Small bowel obstruction
- Shoulder pain
- Bleeding
- Pneumonia
- Urinary tract infection
- Wound infection
- Hernia
- Blood clots/pulmonary embolism
- Death: low risk 3.1 per 10,000 donors in national studies
- Allergic reactions to meds



# Life After Donation

- You will be seen by the transplant team two weeks after donation.
- Make sure that you maintain good long term medical follow up with your PCP
- We ask that you avoid NSAIDS (example Ibuprofen/Aleve products)
- Women of childbearing age may get pregnant after donation, we ask that you wait one year after donation and follow closely with OBGYN as you are at a little bit higher risk of having high blood pressure in pregnancy



# Life After Donation

- Kidney function usually stabilizes 70-75% of your previous function a few months after donation
- We ask that you maintain a healthy weight and a healthy life style (for example avoidance of smoking, etc.)
- Don't hesitate to call at anytime with questions regarding life after donation. We are always available for your resource.



# Living Donor Follow Up

- Important for yearly follow up with your PCP for your benefit
- UNOS requires all transplant programs submit data on all living donors at 6 months, 1 year and 2 years
- A living donor follow up form is sent to all our living donors at 6 months, 1 year and 2 years and reminder to schedule their appointment
- All donors sign and agree prior to donation to follow up with their primary care physician at 6 months, 1 year and 2 years post-donation
- A functional status questionnaire is filled out by the living donor
- Follow-up data by primary care physician include urine analysis for protein, blood creatinine, current weight, and blood pressure



# Financial Implications

- The living donor testing, the surgery and the two week post donation follow up is covered under the recipient insurance
- The 6-month, 1-year and 2-year follow-up is the living donor's responsibility
- Donor travel and lodging expenses are not covered. There are programs that you may be eligible for(NLDAC) to offset the cost. Discuss with your coordinator if you are interested.
- All living donors need to have health insurance for your safety and protection



# The Kidney Transplant Surgery

Risk and Outcomes



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# Recipient Surgery

- The kidney transplant surgery is about 2 to 3 hours.
- The kidney is attached in the front of body, near the bladder.
- The recipient will stay on Clarkson's 5<sup>th</sup> floor which is our designated SOTU floor.
- Our average hospital stay after transplant is three to five days.
- The recipient will be up and moving the day of surgery.



# Transplant Outcomes

For updated Scientific Registry for Transplant Recipients (SRTR) data visit us online at: [www.srtr.org](http://www.srtr.org)





# Living Donor Kidney Options

**Donor is a match**

- Blood type and tissue type match
- Can be related or unrelated donor

**Proceed to donor evaluation**

**Donor is not a match**

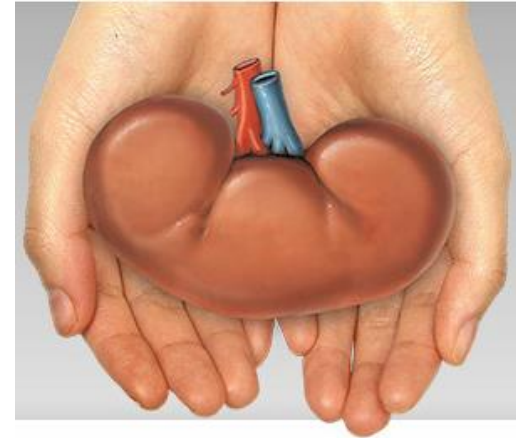
- Blood type and/or tissue type not matching

**Internal exchange  
KPD  
Find another donor**

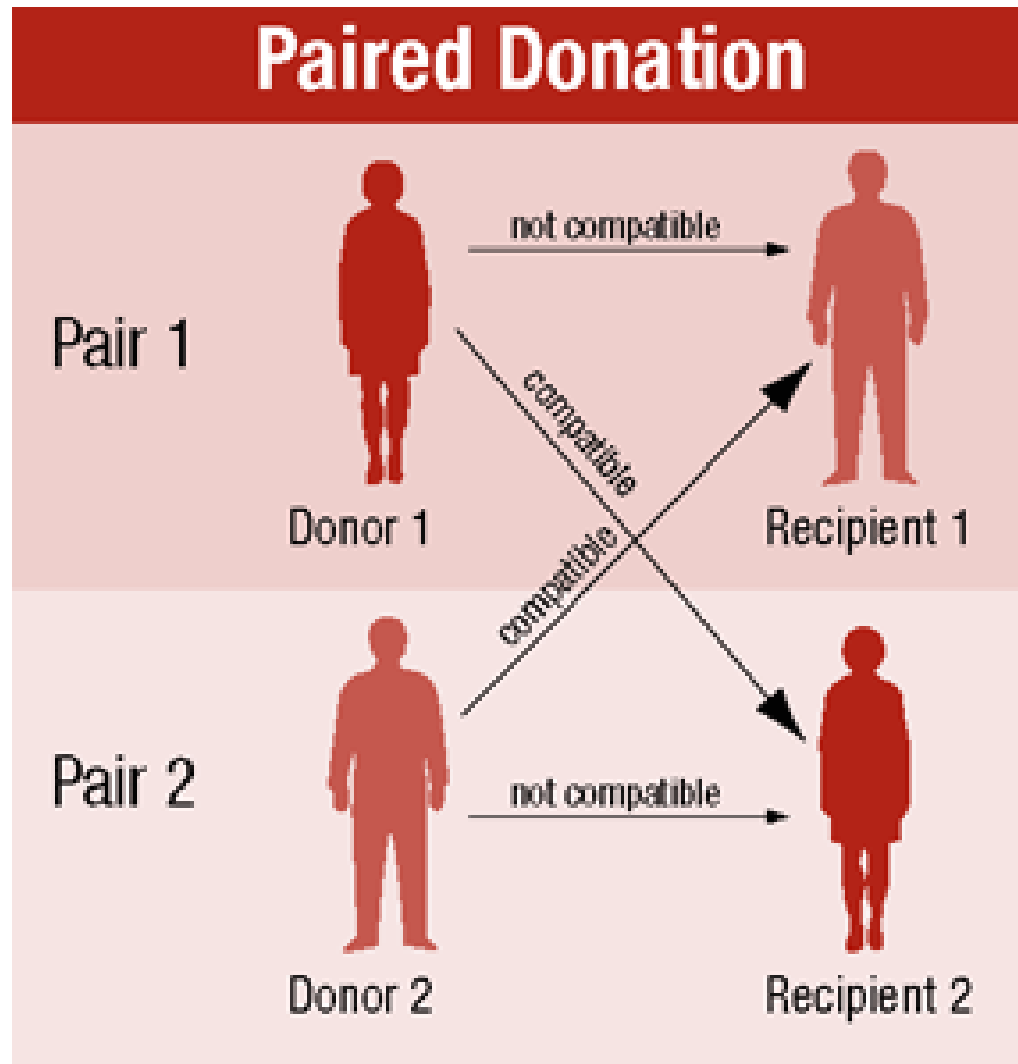


# Living Donor Options at Nebraska Medicine

- Direct donation
- Non-directed donation
- Internal exchange
- ABO incompatible
- Kidney Paired Donation



# Kidney Exchange Program



# Blood Type Incompatibility

- All potential donors will be considered regardless of blood type
- Recipient may receive treatments before and after transplant to decrease the risk of rejection
- No change in treatment or surgery for the donor



# Quiz

Please circle one.

True / False

Donor may opt out at any time.

True / False

Most common complication of the donor surgery is a hernia.

True / False

Lifting restriction of less than 10 lbs., for 6 weeks after surgery.

True / False

It is okay to take Ibuprofen frequently after donating a kidney.

True / False

The donor needs a primary care physician.



# Questions?





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