



Introduction to Transplant Evaluation Candidate Education

Assessing if transplant is right for you.



Kidney Transplant Program
Medical Arts Pavilion 2



FOR THE LOVE OF HEALTH™

We serve our neighbors as respectful, expert, caring partners in their health. We do this by creating innovative, effective, affordable systems of care that our neighbors value.



What to expect ?

- Available medical records are being reviewed by clinical members of the transplant team.
- Today's live, virtual education session with information about kidney transplantation, associated risks & the evaluation process.
- Individual Telehealth sessions will be scheduled with a transplant social worker, financial counselor, registered dietitian & possibly transplant pharmacist.
- In office appointment with transplant nephrologist, transplant surgeon, transplant coordinator & transplant lab work.



Why are you here?

Objectives

- ✓ To see if kidney transplant is right for you by learning about the process, requirements & risks.
- ✓ To meet your transplant coordinator.

You will meet other members of the Multidisciplinary Team through Telehealth visits & our physicians at your in office visit.

Note: This visit does not mean you are automatically placed on the waiting list.

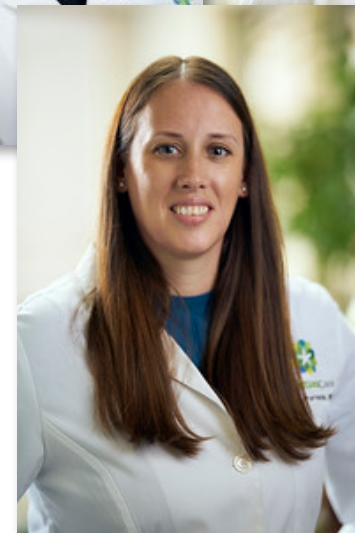


Question

Does an evaluation
guarantee you a place on
the waiting list?

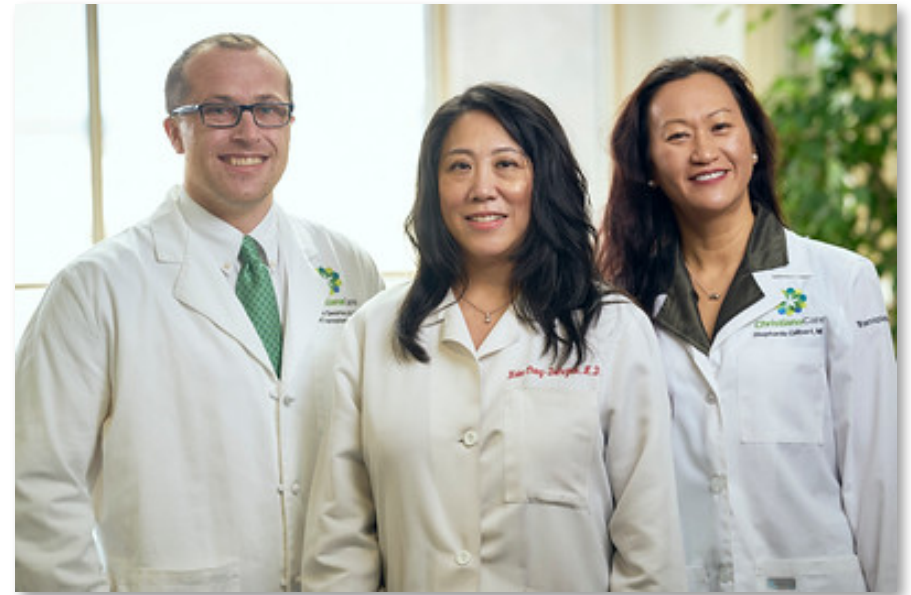
Transplant RN Coordinators

- Guides you through the testing
- Shares information about testing
- Collaborates with other health care providers regarding your testing
- Main resource for support and answers
- Communicates the team's decisions
- Point person while you wait for transplant



Transplant Nephrologists

- Will be seen at in office visit
- Trained as a medical kidney doctor or nephrologist
- Addresses blood pressure, electrolytes and other non-surgical issues related to transplant
- Helps to coordinate medical issues that may impact a kidney transplant
- Manages long-term immunosuppression in post transplant patients to optimize longevity of your kidney transplant



Transplant Surgeons

- Will be seen at in-office appointment.
- Performs kidney transplant surgery.
- Determines if patients are suitable for surgery.
- Manages anti-rejection medications after transplant.



Transplant Social Worker

- Individual Telehealth consult with you & your support person
- Directs you to resources for health/family issues
- Provides resources for recovery/rehabilitation
- Assists with insurance or medication problems
- Leads support group for patients
- Makes referrals to psychiatry or other counselors as needed



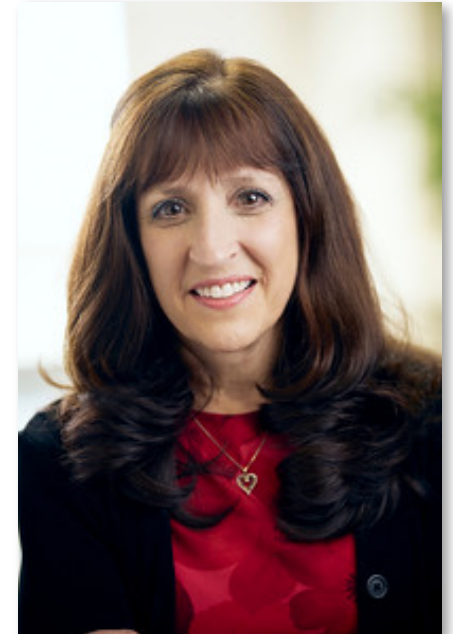
Financial Coordinator

- Individual Telehealth consult
- Reviews insurance
- Contact point for insurance changes
- Checks type of benefits for transplant and related medications
- Explains Medicare, Medicaid, DE Chronic Renal
- Do not forget to call us with any changes!



Transplant Dietitian

- Individual Telehealth Consult
- Assesses current nutritional status and compliance
- Provides individualized counseling based on patients' needs:
 - ✓ Weight loss/gain to meet BMI standards
 - ✓ Increasing protein to improve albumin
 - ✓ Pre-dialysis diet education
 - ✓ Modified diet to improve lab values (potassium/phosphorus, etc.)
 - ✓ Carbohydrate controlled diet
- Assists with diet changes post transplant



Transplant Pharmacist

- Individual Telehealth Consult
- Records and evaluates your allergies
- Reviews your medications (prescription and non-prescription)
- Explains the differences between current and post-transplant medications and the pharmacist's role in your care after transplant
- Answers your medication questions



Spiritual or Pastoral Services

- Available during any phase of care
- During evaluation over the phone
- While waiting on the list
- During hospital admissions
- Post transplant



To contact pastoral services, call 302-733-1280 or ask one of the transplant staff for assistance.

Your Current Nephrologist



- While waiting on the list, you will still be cared for by your current nephrologist.
 - ✓ Dialysis
 - ✓ Hospital admissions
- Immediately after transplant, your care will be managed by the transplant team.
- After a year or so, your care will be shared by both the transplant team, your current nephrologist and primary care physician.

Transplant Cardiologist

- Seen prior to listing to assess candidacy for transplant
- Seen annually while waiting on the list to assess continued candidacy for transplant
- Seen in addition to your own cardiologist (if applicable)



You...

- Are the most important member of our team.
- Must be involved in your care.
- Should contact your coordinator with changes in phone numbers, addresses, & dialysis centers.
- Should contact your coordinator with changes in your health.
- Should ask that test results be faxed to 302-623-3825.





Treatment Options

Kidney transplant – preferred for those medically eligible

- ✓ Living donor (<1 year)
- ✓ Deceased donor (5-10 year wait; 60% waitlist mortality in 5 years)

Dialysis – a bridge to transplant for those medically eligible

- ✓ Hemodialysis
- ✓ Peritoneal Dialysis

Patient survival is better if you are transplanted than staying on dialysis.*

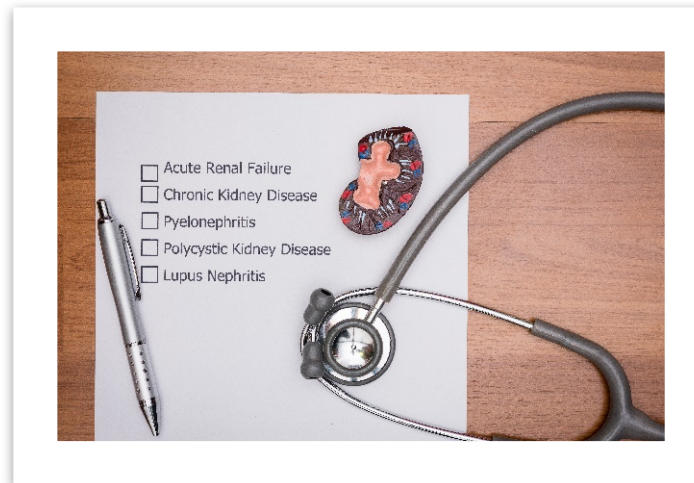
*Depends on age and other health conditions; and if medically cleared to be transplanted.

To be eligible for transplant...

On dialysis (hemodialysis or peritoneal)

OR

Not yet on dialysis, but kidney function* or below 20%



* Measured by the estimated glomerular filtration rate (eGFR)



Transplant is NOT an option if...

- Severe heart disease without possibility of intervention.
- Other organ failure requiring transplant – can be referred to another program.
- Patients with irreversible essential organ failure.
- Current malignancy (cancer).
- HIV infection, AIDS, or active infection.
- Multiple medical problems making surgery unsafe.



Transplant may not be right for you if...

- Age > 75
- Significant blood vessel disease.
- Patients who are unable to care for themselves and are without a support person to help them.
- BMI > 38
- Patients without means to financially afford post transplant medications.



Transplant may not be right for you if...



- Patients with active illegal drug use
- Patients with psychosocial contraindications
- Patients with cancers that have been treated
- Patients with recurrent infections
- Tobacco abuse (smoking or chewing)
- Untreated sleep apnea / CPAP non-compliance

Vaccination



Why do I have to do testing?

- To ensure your safety!
- To protect you from possible post transplant medications side effects
- To make sure your blood vessels are healthy for transplant surgery



What tests do I need to be listed?

Cardiac testing

- ✓ To decrease risk of adverse events during or after transplant
- ✓ Ensure your safety

Blood work

- ✓ To decrease risk of adverse events during or after transplant (Includes viral testing)
- ✓ Ensure your safety

Radiology

- ✓ Chest X-ray
- ✓ CT Scan of the abdomen and/or ultrasound





What tests do I need to be listed?

Your primary care physician may help you coordinate possible other health maintenance testing (to be current)

- ✓ Mammogram for women over 40.
- ✓ Gyn / PAP exam for women of all ages.
- ✓ Colonoscopy for everyone over 50.
- ✓ Dental clearance to rule out infection and cancers.

Health maintenance needs to be completed within 3 months of transplant evaluation.



Testing must be complete!!

You will NOT be approved for transplant or added to the national waitlist until...

Testing is completed and results are received/reviewed by transplant team!

Wait time is key factor in getting a deceased donor transplant!

- ✓ Average waiting time is **5 – 10 years** in our region.
- ✓ Blood type plays a major role in how long you wait for a deceased kidney.

A 5+ years

O 6+ years

B 7+ years



If approved for transplant...

You will be notified and registered for the national waitlist.

- UNOS: United Network for Organ Sharing

Federal agency that manages the process and information on all potential listed recipients throughout the U.S.

- OPO: Organ Procurement Organization

- ✓ “Gift of Life” is our local organ procurement organization

- ✓ Manages organ offers both “locally” (250 NM from transplant center) & nationally

- ✓ Notifies transplant centers in this region when a deceased donor organ becomes available

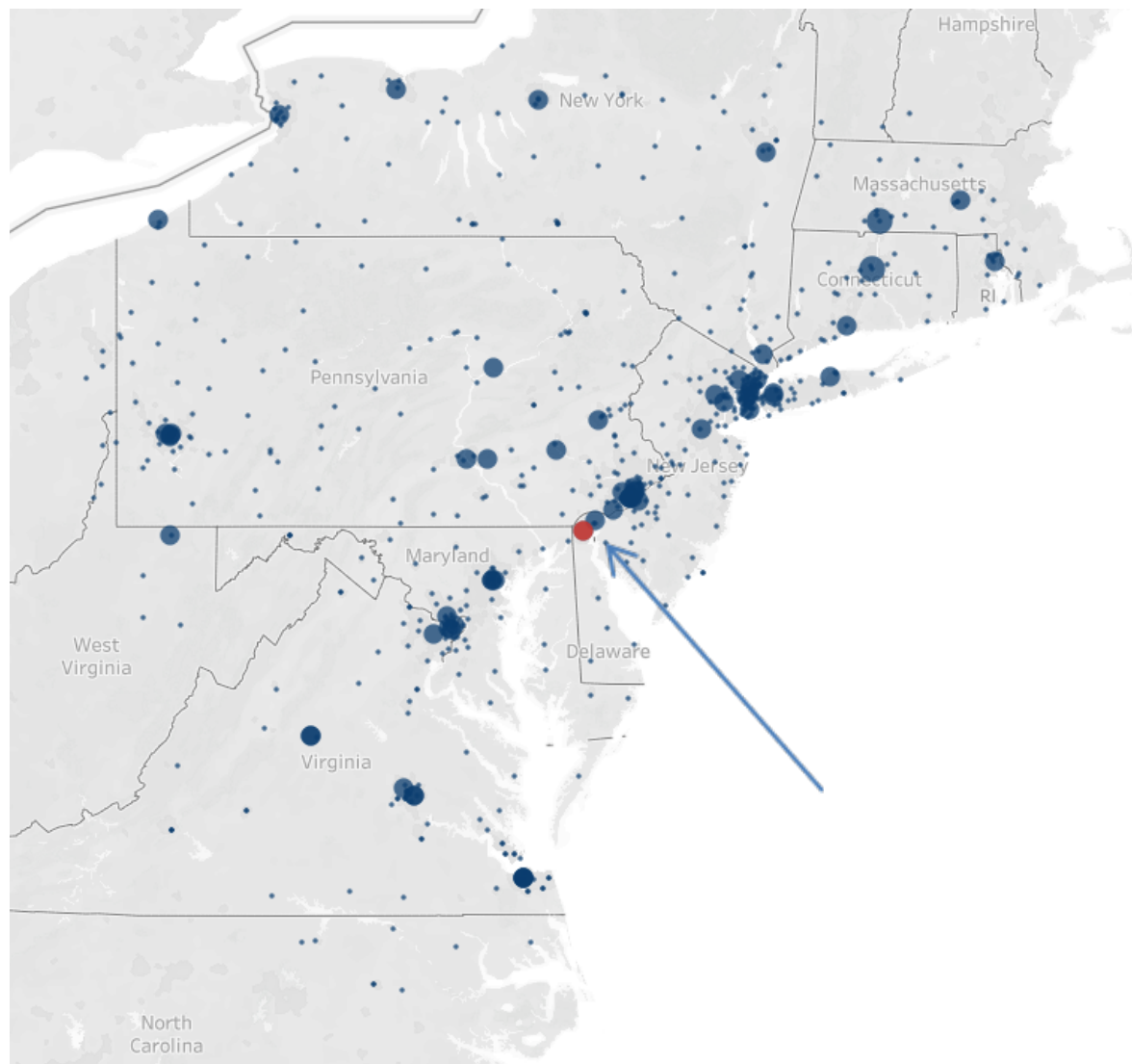
What is multi-listing?

Advantages

- ✓ Increases your chances to match w a deceased organ donor
- ✓ Could decrease your wait time for a deceased donor

Disadvantages

- ✓ You must travel to the outside center for transplantation & all post-operative care
- ✓ There is increased risk of Delayed Graft Function, as the distance of the donor to our center increases



There is little benefit in multi-listing at centers that are close by, as you would likely receive the same kidney offers.



Why is there a wait list?

Approximately 750,000 people in the United States have end stage renal disease.

- >100,000 people are on the kidney transplant waiting list. ...

increasing every day.

- >17,000 kidney transplants are performed each year.

- ✓ 33% are from living donors – *preferred*

- ✓ 67% are deceased donors

Source: kidney.org (2016)



Listing Status

Listed Status 1 (active) (This is your goal!)

- Testing is complete
- Ready for transplant AND to be offered a deceased donor kidney.

Listed Status 7 (inactive)

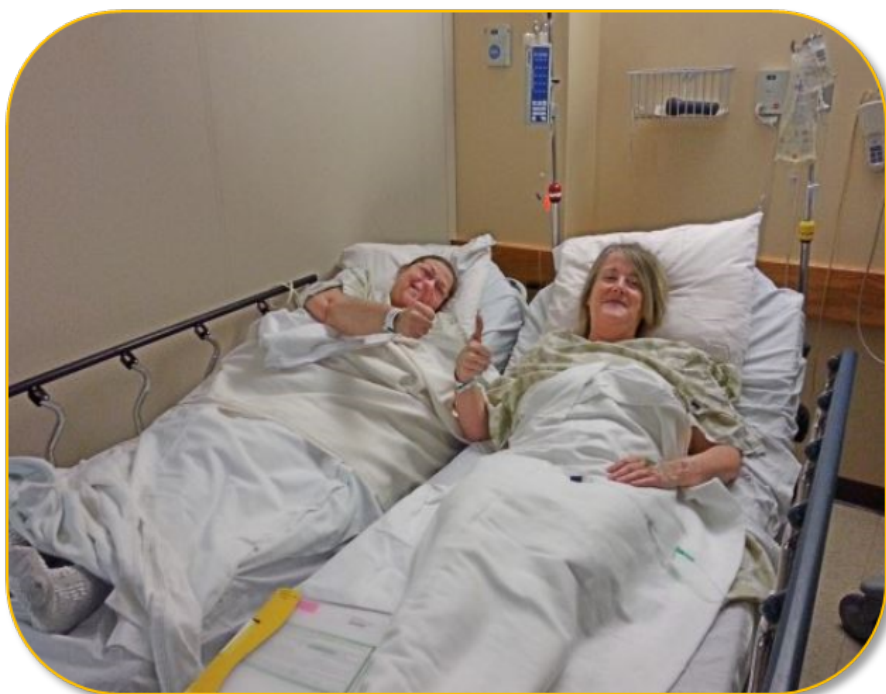
- Gaining time, but will not be called for a deceased donor organ offer

Reasons why you may be listed status 7

- ✓ Change in functional status
- ✓ Waiting 1-year post heart stent
- ✓ Something that **TEMPORARILY** makes you NOT a candidate for transplant

Types of Donors: A True Gift

Living Donors



Deceased Donors



Source: Getty Images & <http://bangordailynews.com/2014/03/13/living/kidney-donor-from-veazie-recipient-from-caribou-form-special-bond/>

Living donor transplants

Types of donors

- ✓ Living related
- ✓ Living unrelated



Criteria for living donors

- ✓ Must be between 18 and 65 year old
- ✓ Must be healthy
- ✓ Must be willing and want to give
- ✓ Must have compatible blood types





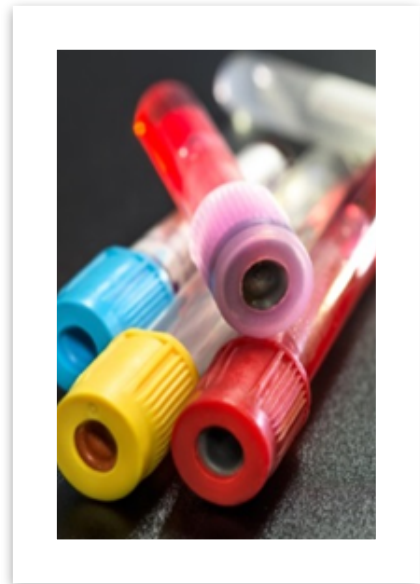
Advantages for living donation

- You do not have to wait years at risk on a list.
- Shorter time between kidney removal and transplantation
- Kidney spends minimal time “on ice” waiting to be transplanted
- Planned surgery
- Better outcomes



Living donor evaluation

- Living donor has a different coordinator
- Ensures healthy enough to donate
- Blood and tissue typing performed to check for compatibility
- Donor testing ordered



Living donor transplants

- Can be challenging, but very fulfilling.
- The timing of the donation is determined by the donor.
- The transplant team cannot share information about the donor with you, such as why they were turned down as a donor or if they decided not to go forward with donation.



Do you have a living donor?

Anyone who wants to be or could be a living donor should start by talking with their primary care physician to ensure age- appropriate testing is up-to-date.

- ✓ Annual physical with primary care or family physician.
- ✓ Mammogram for women over 40
- ✓ Gyn exam for women
- ✓ Colonoscopy for anyone over 50
- ✓ Vaccinations



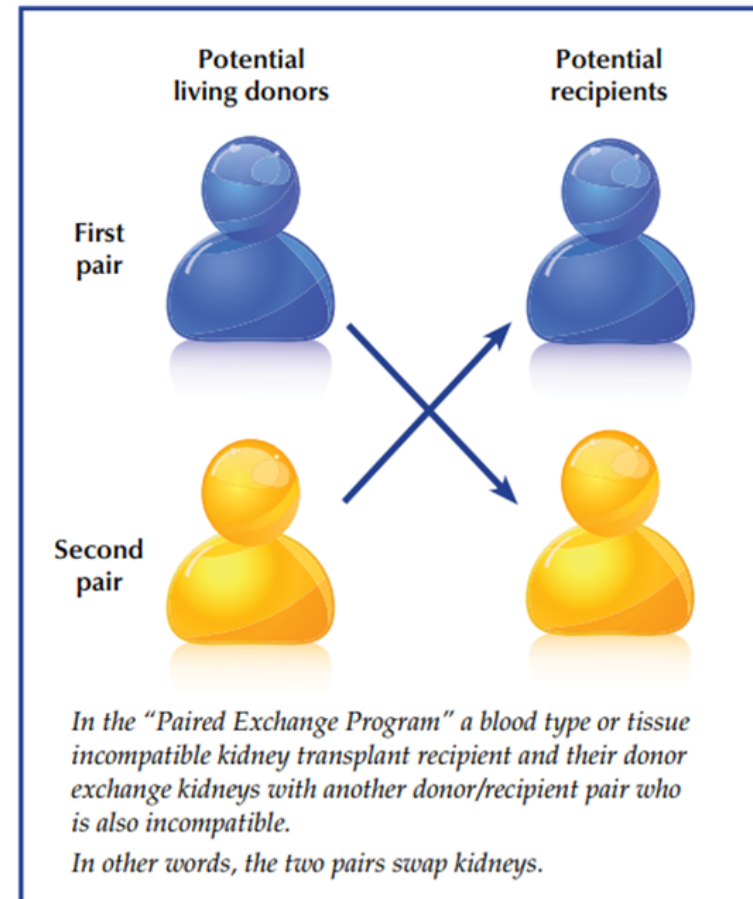


Do you have a living donor?

Recipient Blood Type	Donor Blood Type
O	O
A	A, O
B	B, O
AB	AB, O, A, B

Paired kidney donation programs

- An alternate way of receiving a kidney from a living donor, when you and your donor are not a match.
- You and your donor are entered into a paired donation program... *if you both agree.*
- We participate with NKR and UNOS paired donation programs.
 - ✓ National Kidney Registry
 - ✓ United Network of Organ Sharing





Deceased donor transplants

Organ are given a value based on the following information:

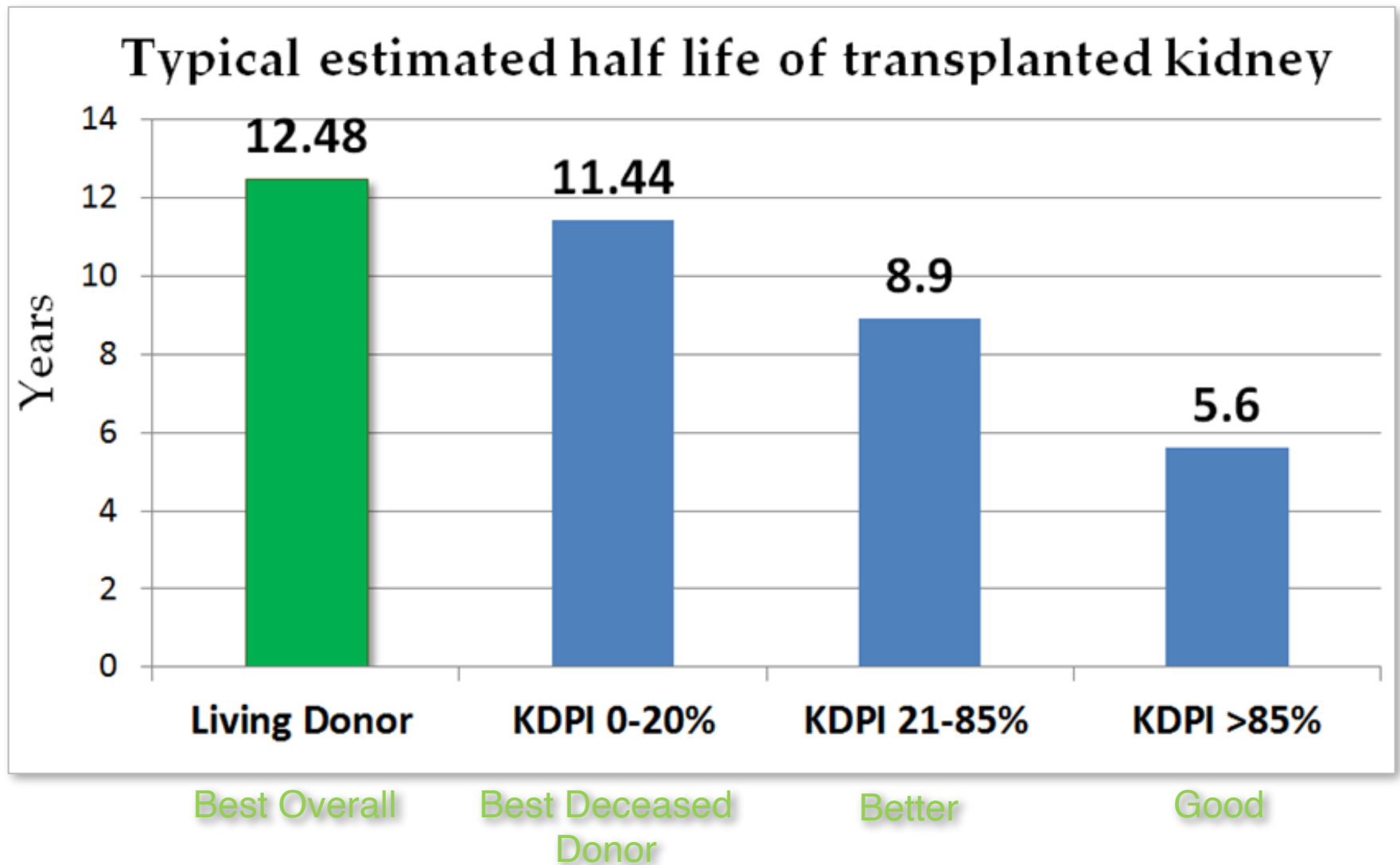
- Donor Age
- Race/ethnicity
- Hypertension
- Diabetes
- Serum Creatinine
- Cause of death-Stroke
- Height
- Weight

- Donation after cardiac death (DCD)
- Donors with risk criteria
- Hepatitis C Status

Only candidates who consent & are medically appropriate can receive these kidneys

Quality of donated kidney

Kidney Donor Profile Index (KDPI)



KDPI categories...“Car story”



KDPI 0 – 20%

Allocated to patients those with longest expected post transplant survival



KDPI 21 – 35%

Allocation to pediatrics, then according to wait time



KDPI 36 – 85%

Allocation according to wait time



KDPI > 85%


Allocation to those who will accept kidney offers from middle aged donors with known prior health issues

KDPI > 85 Kidney



- “Not quite ideal” kidneys
- Separate waitlist for recipients who sign a consent to consider offers
- Kidney survival rate is typically lower than with younger, healthier donors but . . .

If you are over 40, your survival rate is better than what it would be on dialysis!



Donation after cardiac death (DCD)

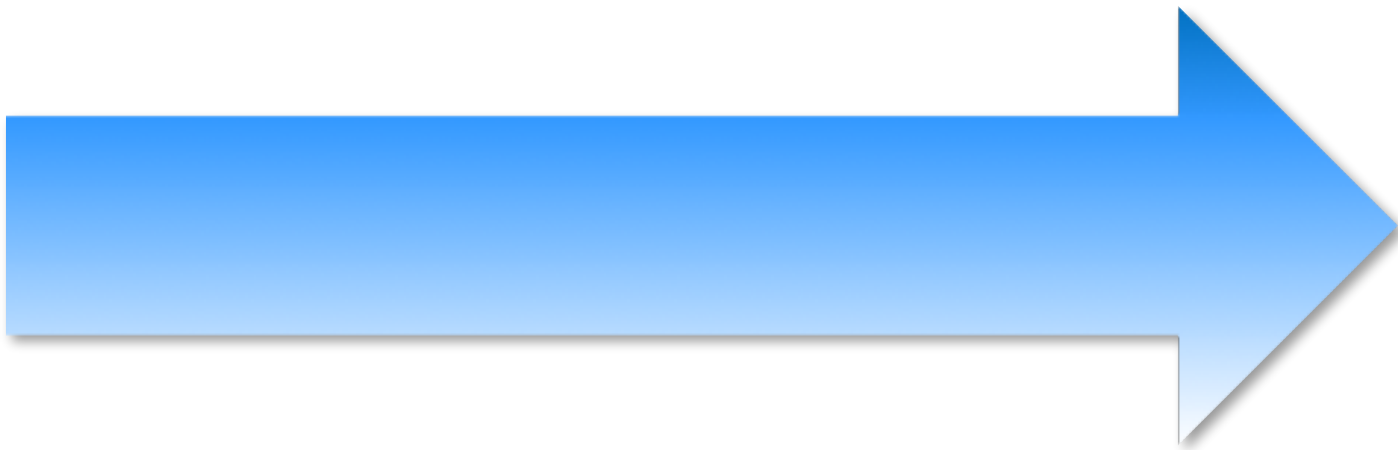
- Donor fails to meet the criteria for brain death.
- In order to be declared deceased, the donor's heart must stop beating.
- Donor is removed from life support before kidneys are removed.
- 40% chance of delayed graft function, but kidneys will recover.

*You may need dialysis for a short time after your transplant



Directed donation option

- If someone dies in a hospital under certain conditions, and their family is aware that you are on a kidney transplant list...
then they can ask that you be given the kidney.
- Donor must be blood and tissue type compatible.
- Kidney can come from anywhere in the United States.





Donors with Risk Criteria

- EVERY donor is tested for HIV and hepatitis BEFORE you are called with the organ offer.
 - ✓ If a donor has Hepatitis B, candidates can be safely transplanted based on their Hepatitis B vaccination status & antibody levels. This will be determined by our transplant team.
 - ✓ Hepatitis C positive donors can be offered to candidates who are medically appropriate & a special consent is needed to be eligible for this type of donor.
 - ✓ HIV positive donors will NEVER be considered for our candidates.
 - ✓ Treatment for transmitted infections after transplant will be offered to recipients when medically indicated.



Donors with Risk Criteria

- A donor's risk criteria is based on donor testing & history. We **MUST** inform intended recipients if the donor has any risk criteria.
- All donors are tested for HIV, HCV, & HBV within 96 hours prior to procurement.
- An assessment of donor's behavior during the 30 days before organ procurement determines if there is a risk criterion for HIV, HCV, and HBV infection, such as:
 - Sexual behaviors
 - Intravenous Drug use
 - Child breastfed/born to infected mother
 - Imprisonment
 - Unknown medical or social history



Donors with Risk Criteria

- All candidates will be tested for HIV, HCV, & HBV during evaluation.
- Candidates HBV vaccination status (or reason that vaccination is NOT completed) must be assessed & reported.
- Transplant recipients will be tested on admission prior to transplant & then 28 to 56 days post transplant



Donors w Hep C to Hep C+ Recipients

Advantage: HCV+ recipients typically get transplanted sooner with HCV+ kidneys.

- More acceptable types of donor kidneys = More possible offers/transplants
- Given this shorter waiting time we prefer to treat HCV+ recipients with a Direct Acting Antiviral (DAA) after they have received an HCV+ kidney.
- CCHS has been successfully transplanting HCV+ kidneys to HCV+ patients for years



Can we safely transplant HCV+ organs into HCV- recipients?

The Answer is YES!

Emerging research suggests HCV+ organs can be safely transplanted into HCV- recipients.

Potential Advantages

- Increasing donor pool with organs enriched from younger donors
- Increasing transplant access for some patients on waiting list that are disadvantaged by current allocation
- Making something positive out of a terrible situation for drug overdose donors' families
- Cost-effective care



Recipient Inclusion Criteria

- Seronegative for HIV, hepatitis B surface antigen, hepatitis B core antibody, and quanti-feron gold
- Have no acceptable living kidney donor
- Pre-transplant infectious disease or hepatology* consultation
**preferred for patients with a history of abnormal liver function*
- Informed-consent
- No active illicit substance abuse (including alcohol and marijuana)
- Less than 70 years old
- Contraception counseling



How are organs offered?

- 24/7/365 process managed by OPO and UNOS.
- The OPO (“Gift of Life”) notifies UNOS.
- UNOS generates a new list for each kidney offered.
- Our surgeons first review the donor information.
- Patients are then notified by the transplant coordinator.



When a kidney becomes available

- We have **1 hour** to reach you by phone!
- Keep your contact information updated with us.
- **Answer the phone!**
 - ✓ Ensures us that you are available.
 - ✓ We ask questions about your health.
 - ✓ We discuss the offer with you.
 - ✓ You decide, if you want the kidney or not.





When a kidney becomes available

- You may receive **many offers** before you are transplanted.
- There are **many recipients** offered each organ:
 - ✓ Primary means you are first on the list.
 - ✓ Back up means you are not the first person in line.
- You will be at a different place in line for each kidney offer.
- Crossmatch to see if you are compatible with the donor.

No such thing as “Top of the List”

Order of the list changes with each organ offer based on:

- Donor's blood type
- Crossmatch results
- Recipient's time on the list
- Recipient's state of health at the time
- KDPI of the donor



UNOS makes the ultimate decision for who gets the organ!

Crossmatch tests

Crossmatch tests if a recipient and donor are compatible.

- Negative crossmatch is desired.
- A positive crossmatch means you cannot accept a kidney from this donor.
- Antibodies* can develop, so repeat crossmatch testing is sometimes required during evaluation of living donors and prior to all transplants.



* Antibodies are fighter cells against a specific protein in the donor

Panel reactive antibodies (PRA)

- Recipient's serum is tested against a panel of cells from many people.
- Increases due to blood transfusions, prior transplants, abortions or pregnancy.
- A higher PRA makes finding a donor more difficult and impacts kidney survival.



Monthly blood samples

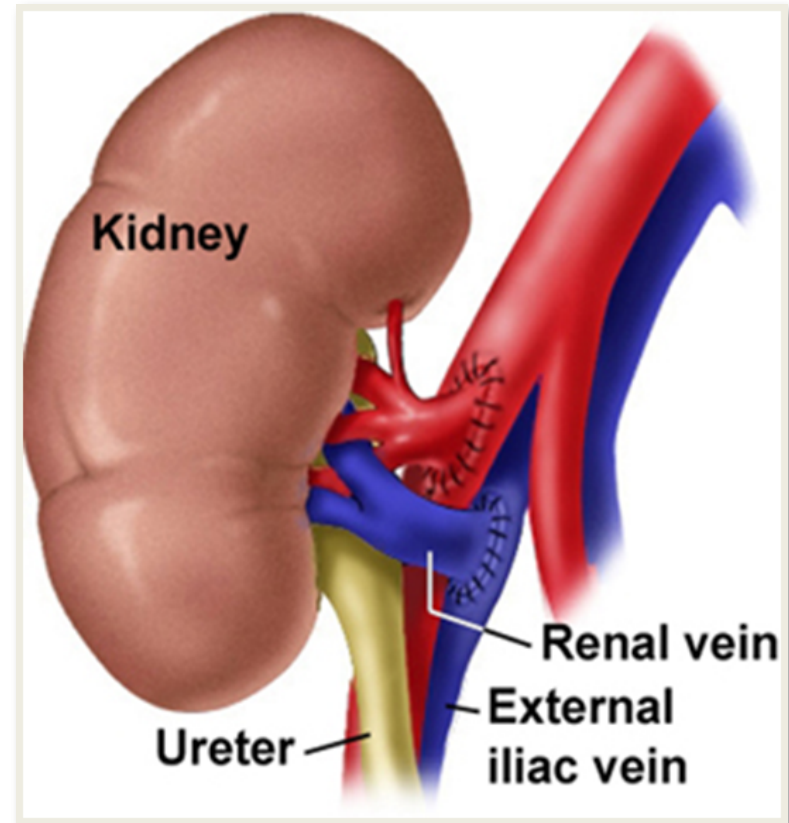
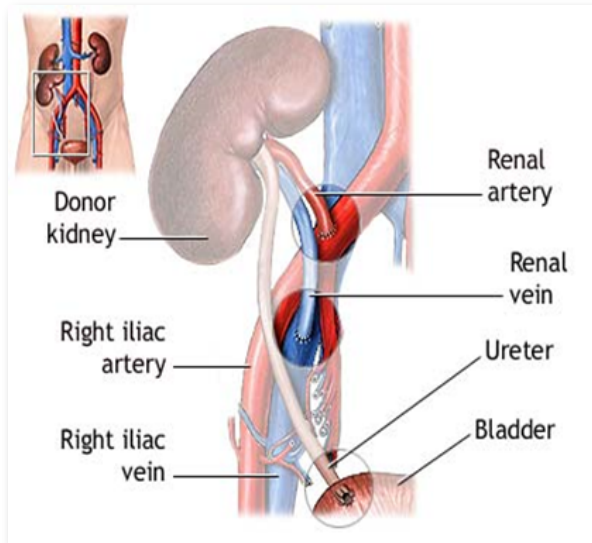
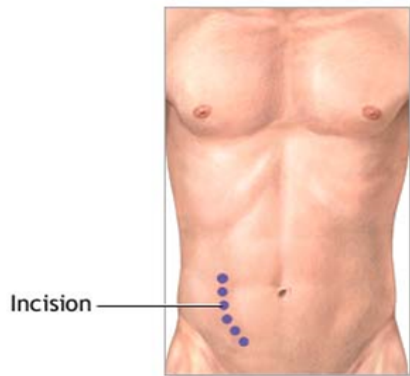
Once listed, a tube of your blood will be sent each month to the tissue typing lab to:

- Check for the presence of new antibodies (PRA)
- Be used for testing against any potential donors when available



Jefferson Hospital is our tissue typing lab.

Kidney transplant operation





Potential surgical issues/risks

- Bleeding
- Infection
- Fluid collections in wound
- Non-functioning kidney
- Clotting issues
- Urinary leak or blockage



Most complications can be corrected and happen infrequently.



What happens after transplant?

- Hospital length of stay
 - ✓ 3 – 5 days with living donor kidney
 - ✓ 4 – 6 days with deceased donor kidney
- Anti-rejection medications are started immediately
 - ✓ 2 – 3 medications for the life of the kidney.
 - ✓ Keeps your body from attacking the new kidney.
 - ✓ Side effects typically include nausea, vomiting & diarrhea.
 - ✓ Increased chance of infections and cancers.
 - ✓ Missed doses will increase the chance of rejection
- Testing for HIV, HBV, HCV within 28 to 56 days post transplant
- Regularly scheduled follow-up exams and lab work

Post-transplant follow-up

- Transplant clinic follow-up in Medical Arts Pavilion 2
 - ✓ Short-term
 - ✓ Long- term office visits
- Thanking the donor family
- Continued care from transplant team for the life of the kidney
- It is extremely important to stay in contact with your transplant team...even if you move.



Post-transplant travel



- The Transplant Team needs to be informed of your travel plans before you book your trip. Always purchase travel insurance!
- You cannot travel more than two hours from home for the 1st six months after you receive your transplant.
- You cannot travel outside the United States for 12 months.
- If you live outside the United States, our Transplant Team will determine when it is safe for you to return home.

Medications after transplant

- Can be up to 10 different medications and 20-30 pills a day!
 - ✓ Prograf® (tacrolimus)
 - ✓ CellCept® (mycophenolate mofetil)
 - ✓ Nulojix® (belatacept) - monthly IV infusion
- Some are preventative to avoid infections (Bacterial, viral, fungal)
- Continue medications for blood pressure, cholesterol, diabetes.
- Anemia: may still need EPO shots





Potential medical problems

- Cancer
 - ✓ Skin: 50% @ 5yrs, 80% @10yrs
 - ✓ Kidney: your old ones
 - ✓ Post transplant lymphoproliferative disorder 1% risk caused by the EBV/Mono virus
- Delayed Graft Function aka “sleepy kidney”
 - ✓ You may need some dialysis for a short time
- Rejection does not always mean you lose your kidney
 - ✓ Biopsy at 3-months and 1-year
 - ✓ **Can be silent! Frequent lab test are needed**







What's in your patient packet







- CCHS Kidney Transplant Program Brochure
- UNOS What Every Patient Needs to Know
- UNOS Facts & Figures
- UNOS Kidney Allocation Policy
- UNOS Multiple Listing and Waiting Time Transfer
- CCHS Learn More about Living Kidney Donation Brochure
- How to Find a Living Kidney Donor
- Frequently Asked Questions Packet



christianacare.org/kidneytransplant

SOCIAL MEDIA

 ChristianaCare... Fri 7/10/2020 12:50 pm ...	 ChristianaCare... Mon 7/27/2020 9:58 am ...	 ChristianaCare... Wed 7/1/2020 10:09 am ...
We provide expert kidney transplant care, one patient at a time. Please learn about our...	Here's a helpful tip from our pharmacist, Nadia. Currently, the U.S. Postal Service is...	Meet Eileen Edge, MSW, LSW, our transplant social worker. Eileen provides social-work...
		
Total Engagements 257	Total Engagements 70	Total Engagements 70
Reactions 107	Reactions 28	Reactions 31
Comments 34	Comments 5	Comments 15
Shares 8	Shares 2	Shares 2
Post Link Clicks 8	Post Link Clicks -	Post Link Clicks 3
Other Post Clicks 100	Other Post Clicks 35	Other Post Clicks 19

 christianacare... Thu 9/24/2020 2:47 pm ...	 christianacare... Sun 9/6/2020 4:56 am PDT	 christianacare... Fri 9/11/2020 5:27 am PDT
COVID-19 has fundamentally changed the process of donating blood. Before COVID...	Stop and read this! Our amazing pharmacist, Nadia, is always on the lookout for you...	Today, we remember.
		
Total Engagements 16	Total Engagements 12	Total Engagements 8
Likes 15	Likes 8	Likes 6
Comments 1	Comments 3	Comments 1
Saves 0	Saves 1	Saves 1



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Stay Connected!



January eNews
Kidney Transplant Program



- Receive important messages from your transplant team
- Get updates on patient events
- Please provide your email to our staff today or scan this QR code!



General Questions?

Your specific questions can be addressed with your transplant coordinator or any staff member during your Telehealth consult.

If they are not, please let us know.