

UPMC Pinnacle



LIVING KIDNEY Donation Program

Transplant Services

KIDNEY TRANSPLANT OFFERS HOPE

For people with kidney failure, a kidney transplant offers hope.

Since starting our program in 2000, the UPMC Pinnacle Transplant Department has performed more than 1,100 kidney and kidney/pancreas transplants. More than half of our transplants are made possible through living donation.

Because of our academic and research expertise, our program can offer the latest breakthroughs in transplant science and donation options. This results in excellent outcomes, exceeding the national averages.

The UPMC Pinnacle Transplant program is committed to providing the finest medical services. Our experienced transplant team – surgeons, nephrologists, transplant coordinators, nursing staff, social workers, financial coordinators and other professionals – provides our patients with the emotional and practical support necessary to get through the transplant process.



Certified by the United Network for Organ Sharing (UNOS), Medicare and the Health Care Financing Administration, UPMC Pinnacle's transplant program includes pre-transplant and post-transplant services in conjunction with the referring nephrologists. Our wide range of care and support services, including imaging and lab services and Magnet recognition for nursing excellence, allows us to provide comprehensive care to transplant patients.

UPMC Pinnacle is a nationally recognized leader in providing high-quality, patient-centered health care services in central Pennsylvania and surrounding communities. Its more than 2,900 physicians and allied health professionals and approximately 11,000 employees serve a 10-county area at outpatient facilities and eight acute care hospitals with 1,360 licensed beds: Carlisle, Community Osteopathic, Hanover, Harrisburg, Lancaster, Lititz, Memorial, and West Shore. For more information, visit www.upmcpinnacle.com.



UPMC Pinnacle complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.

WELCOME

Welcome to the Living Kidney Donation Program at UPMC Pinnacle. This booklet is designed to be a resource for you. It will answer many questions that you may have about kidney donation. It will also address questions that you may have about the living donor evaluation process, expectations, and care after kidney donation. We hope you find this booklet useful and informative throughout your donation experience.



The donation journey will not be easy. It is normal to experience some stress and anxiety during this time. You will be concerned and have many questions about your own health and future, as well as the impact that this process will have on your family. We are here to answer your questions and support you and your family throughout this process.

The Transplantation and Living Donation Team at UPMC Pinnacle is committed to providing you with the finest in medical services. We are concerned about providing you with the emotional and practical support that is necessary to get through the donation process successfully. You and your family become part of our transplant team by taking an active part in your health care. As a member of our team, you are responsible for learning as much as you can about the donation process and what is involved.

We are truly grateful for the giving spirit that every potential organ donor possesses.

Donating a kidney is a courageous, generous act. You are giving a gift of life to someone in need. You are a hero!

WHY CONSIDER LIVING DONATION?

- People who receive a living donor kidney transplant live longer and enjoy a better quality of life than those who stay on dialysis.
- A kidney from a living donor starts working faster and lasts longer than a kidney transplant from a deceased donor.
- People on the deceased donor list wait approximately 5 to 6 years for transplant in our region.
- Living donors free up another space on the transplant list for those people who do not have a living donor.

THE TRANSPLANT TEAM

Transplant Surgeons/Physicians

Harold C. Yang, MD, PhD
Surgical Director/Attending Surgeon

Danielle Ladie, MD, MPH
Attending Surgeon

Shane Ottmann, MD
Per Diem, Attending Surgeon

Mary Waybill, MD
Research/ Transplant Nephrology

Nurse Practitioner

Rhonda Saylor, MSN, CRNP
Stephanie Midile, MSN, CRNP, CCTC

Transplant Director

Kim Barnett, MSN, MBA-HC, RN,
CCTC

Nurse Manager

Rebecca Brown, MSN, RN, CCTC

Pre-Transplant Coordinators

Becky Mulreany, BSN, RN
Evelyn Simmons, BSN, RN, CNN
Brittany Bowman, BSN, RN

Living Donor Coordinators

Nancy DeSanto, BSN, RN, CCTC
Tiffany Conroy, BSN, RN

Post-Transplant Coordinators

Judy Arnold, RN, CCTC
Deb Holibaugh, BSN, RN, CCTC
Eleanor Rinck, RN, CCTC

Research Coordinator

Paula Kratzer, BSN, RN, CCTC

Transplant Social Workers

Dawn Temple, MSW, LSW, CADC,
ICADC
Alice Baird, MSW, LSW

Transplant Financial Counselors

Deb Macchioni
Melinda Soles

Transplant Pharmacist

Transplant Nutritionist

Independent Living Donor Advocate

Amy Zook, MSW

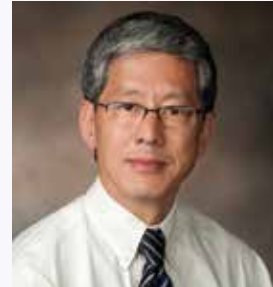
SURGEONS

Harold Yang, MD, PhD

Dr. Yang received his medical degree at the University of Chicago. His surgical residency was completed at the University of Chicago. His fellowship was completed at Massachusetts General. His specialties include kidney and pancreas transplantation.

Dr. Yang was Assistant Professor of Surgery at the Milton S. Hershey Medical Center from 1987-1995. From 1995 - 1999, Dr. Yang was Chief of the Department of Transplantation at the Hershey Medical Center.

Dr. Yang entered private practice and joined the UPMC Pinnacle surgical staff in October 1999. He currently sits on several hospital committees. Under his leadership, transplantation in Central Pennsylvania has experienced both growth and great success.



“They gave me the greatest gift they can ever give someone.”

“We are all so thankful for mom’s health, and that she can be part of the lives of our children.”

– Janet Fisher and Betsy Coldiron



SURGEONS

Danielle Ladie, MD, MPH

Dr. Ladie earned her bachelor of science degree from Penn State University and received her medical training at St. George's University, where she received the Arnold P. Gold Humanism in Medicine Award. She is fellowship trained in transplant surgery from the University of Virginia and completed her residency at UPMC Pinnacle, where she served as chief resident.



Shane Ottmann, MD

Dr. Ottmann attended medical school at the University of Missouri-Columbia in Missouri. He completed his general surgery internship and residency at the Walter Reed Army Medical Center in Washington DC. Dr. Ottmann performed his transplant surgery fellowship at the University of Pennsylvania in Philadelphia from 2008-2010. He has served as an attending transplant and general surgeon at the Walter Reed Medical Center and Johns Hopkins. Dr. Ottmann has been deployed on front line surgical teams to Afghanistan and Iraq on three separate occasions. Dr. Ottmann provides surgical coverage and assistance to our program on an as needed basis. Dr. Ottmann joined the UPMC Pinnacle medical staff in Oct 2011.

*“While you can’t help the whole world,
you can make a difference one life at
a time.”*

– Janeth Buser

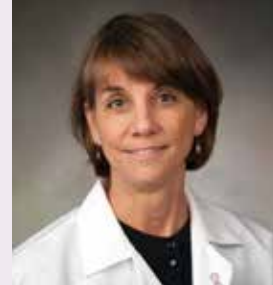


NEPHROLOGISTS

Mary Waybill, MD

Dr. Waybill received her medical degree at Temple University School of Medicine in Philadelphia. She completed her residency at the Medical College of Virginia. Dr. Waybill also completed her fellowship in nephrology at the Medical College of Virginia. Dr. Waybill was Assistant Professor of Medicine at the Milton S. Hershey Medical Center from 1990-1993 and 1995-2000. Dr. Waybill entered a private nephrology practice from 2000-2002.

In 2003, Dr. Waybill joined Central Pennsylvania Transplant Associates and has been overseeing the transplant research protocols and participating in the care of complex medical issues after transplant. Dr. Waybill has been on staff at UPMC Pinnacle since 2000 and is certified by the American Board of Internal Medicine in Nephrology.



NURSE PRACTITIONERS

Nurse practitioners work closely with physicians, nurses, and staff to extend the care of the physicians. Nurse practitioners also assist with evaluations of living donors and inpatient and outpatient care to post-transplant patients.

“I wish more people knew that you can enjoy a normal life after being a kidney donor”

“Her donation brought me back to life.”

– Jose and Isauri Molina



PHARMACIST

The transplant pharmacist is a pharmacist with specific expertise in transplant pharmacology. The role of the transplant pharmacist is to help you and your family understand the importance of any medications you may currently be taking and to address concerns or questions you may have about your medications.

TRANSPLANT COORDINATORS

The living donor transplant coordinators will be your main source of contact with the transplant team. The coordinator is a Registered Nurse with specialized education who will be an integral part of your transplant process both before and after transplant.

Before transplant, your coordinator will guide you through the education and work-up process. Your coordinator will be your contact person for any questions or concerns after the donation as well.

****Please note** - All communications between the potential donor and the transplant center will remain confidential. No information will be shared with the potential recipient without the donor's permission.



TRANSPLANT SOCIAL WORKERS

The transplant social workers will assist you in preparing yourself socially for kidney donation. They will assess your social, financial and support systems to ensure that your donation can be a gratifying experience.

In addition to potential individual health concerns, it is possible for negative psychological consequences to result from living donation. Depression and anxiety after donation are not uncommon and often are attributed to the healing process of surgery, renewed family demands and an attention shift from the donor onto the recipient.

As with any transplant, there is also the risk that the recipient will have problems such as infection, rejection of the organ, or even death. For a living donor, the news of such problems may be devastating.

Living donors must be made aware of the physical and psychological risks involved before they consent to donate an organ. You should discuss your feelings, questions and concerns with a transplant social worker.

TRANSPLANT FINANCIAL COORDINATORS

The transplant financial coordinators will review your recipient's insurance coverage to make sure it is adequate for transplant. Coverage for the costs of donor tests and the donor surgery/hospital stay will be paid by the recipient's health insurance and/or the transplant center's Kidney Acquisition Fund (KAQ). You are responsible for travel expenses and expenses related to time off of work, unless your employer is able to provide paid time leave or allow you to use short-term disability. Financial resources are available as needed.

NUTRITIONIST

The transplant nutritionist will make sure you are in good nutritional health and discuss any concerns you may have.

INDEPENDENT LIVING DONOR ADVOCATE

The independent living donor advocate (ILDA) is a social worker that is not a part of the transplant team. The ILDA is trained to be an independent and specialized advocate for the living donors. Since the ILDA is not a member of the transplant team, they have no vested interest in the recipient process and therefore can be an unbiased advocate and supporter of the living donors. The ILDA's role is to make sure the living donors understand the donation process, have had their questions answered, and get the specialized support and consideration they deserve. As a potential living donor, any questions or concerns you have about care you receive from the transplant team may be directed to the independent living donor advocate.

WHAT DO MY KIDNEYS DO?



Your kidneys are bean-shaped organs, each about the size of your fist. They are located near the middle of your back, just below the rib cage. The kidneys are sophisticated reprocessing machines. Every day, your kidneys process about 200 quarts of blood to sift out about 2 quarts of waste products and extra water. The waste and extra water become urine, which flows to your bladder through tubes called ureters. Your bladder stores urine until you go to the bathroom.

The wastes in your blood come from the normal breakdown of active tissues and from the food you eat. Your body uses food for energy and self-repair. After your body has taken what it needs from the food, waste is sent to the blood. If your kidneys did not remove these wastes, the wastes would build up in the blood and damage your body.

The actual filtering occurs in tiny units inside your kidneys called nephrons. Every kidney has about a million nephrons. In the nephron, a glomerulus—which is a tiny blood vessel, or capillary—intertwines with a tiny urine-collecting tube called a tubule. A complicated chemical exchange takes place, as waste materials and water leave your blood and enter your urinary system.

At first, the tubules receive a combination of waste materials and chemicals that your body can still use. Your kidneys measure out chemicals like sodium, phosphorus, and potassium and release them back to the blood to return to the body. In this way, your kidneys regulate the body's level of these substances. The right balance is necessary for life, but excess levels can be harmful.

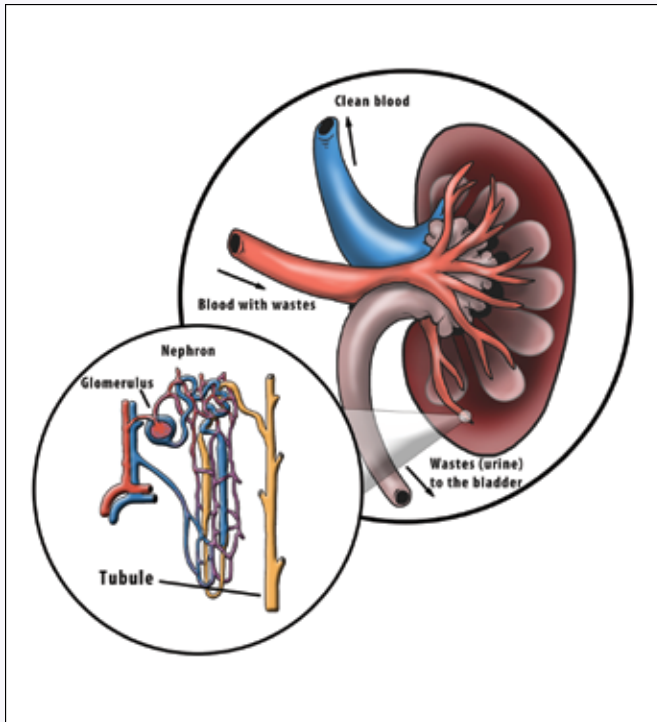


FIGURE 2. In the nephron (left), tiny blood vessels intertwine with urine-collecting tubes. Each kidney contains about 1 million nephrons.

In addition to removing wastes, your kidneys release three important hormones:

- Erythropoietin (eh-RITH-ro-POY-eh-tin), or EPO, which stimulates the bone marrow to make red blood cells
- Renin (REE-nin), which regulates blood pressure
- Calcitriol (kal-suh-TRY-ul), the active form of vitamin D, which helps maintain calcium for bones and for normal chemical balance in the body

KIDNEY FUNCTION AFTER DONATION

Immediately after donation the donor's kidney function is reduced until the remaining kidney picks up and can make up for the missing kidney. This takes approximately 2-4 weeks. After the initial phase of recovery, the donor's kidney function returns to 60-80% of function prior to donation. This is more than adequate to support the donor's needs. The amount of function that is picked up by the remaining kidney depends on the donor's age, weight and function prior to donation.

"As a father I could relate to his struggle. I saw him working full-time and just not having the energy to do certain things."

"When you think about being an organ donor, you think about how you might be blessing someone else. But really, I was blessed too. It has given me more compassion in my work and in my life."

– Eric Burton and Ryan George



LIVING DONORS AND TRANSPLANTATION

People who have kidney failure have a few treatment options to choose from. These are:

- Continue to follow with their nephrologist (kidney specialist) for medical treatment
- Remain on dialysis treatments
- Remain on the waitlist for a deceased donor

Another option for these patients is to have a living kidney donor transplant. This is when someone chooses to donate one of their kidneys. This person may be a blood relative or unrelated to the recipient. This is a very safe procedure for the donors. They can live a long and healthy life with one kidney. Donors are screened and tested very thoroughly before donation to minimize the risks for future health problems after the kidney has been removed. Our practice with our potential kidney donors is that we **DO NOT** put them at any risk either now or in the future.

There are several advantages to receiving a kidney from a living donor.

1. There is no need to wait for a deceased donor kidney to become available (most living transplants take place 3 months after the evaluation process begins).
2. The kidney usually begins to work immediately, even in the operating room. There is a very low occurrence of ATN (acute tubular necrosis) in living transplants. A deceased donor kidney may not work right away for several reasons. This is known as ATN.
3. There are fewer episodes of rejection. As a result, living donor kidneys tend to last longer. Living donor kidneys tend to last an average of 20+ years, while deceased donor kidneys last an average of 11-13 years.
4. Living donor transplants can be scheduled. This allows both the donor and the recipient to plan for absences from work, childcare, and other social concerns.

ELIGIBLE DONORS

Living donors can be siblings (brothers or sisters), parents, sons or daughters, other relatives (half brothers or sisters, grandparents, cousins, etc.), or unrelated donors (spouses, friends, coworkers, and sometimes even complete strangers or non-directed donors). Non-directed donors are people willing to donate to a person in need, without knowing or having any emotional attachment to the recipient.

Donors must be between the ages of 18 and 65. They must not have a history of high blood pressure, cancer, diabetes or chronic kidney stones. They must also be a compatible blood type (see next page). Your transplant coordinator will help make arrangements to have your blood type tested. Patient pairs that are not blood type compatible may be eligible for paired exchange transplant (see page 13-14).

BLOOD TYPE COMPATIBILITIES:

Blood Type	Can RECEIVE a kidney from donors with blood type
A	A, O
B	B, O
AB	A, B, AB, O
O	O
Blood Type	Can DONATE a kidney to patients with blood type
A	A, AB
B	B, AB
AB	AB
O	A, B, AB, O

Rh factors (+, -) Do NOT need to match

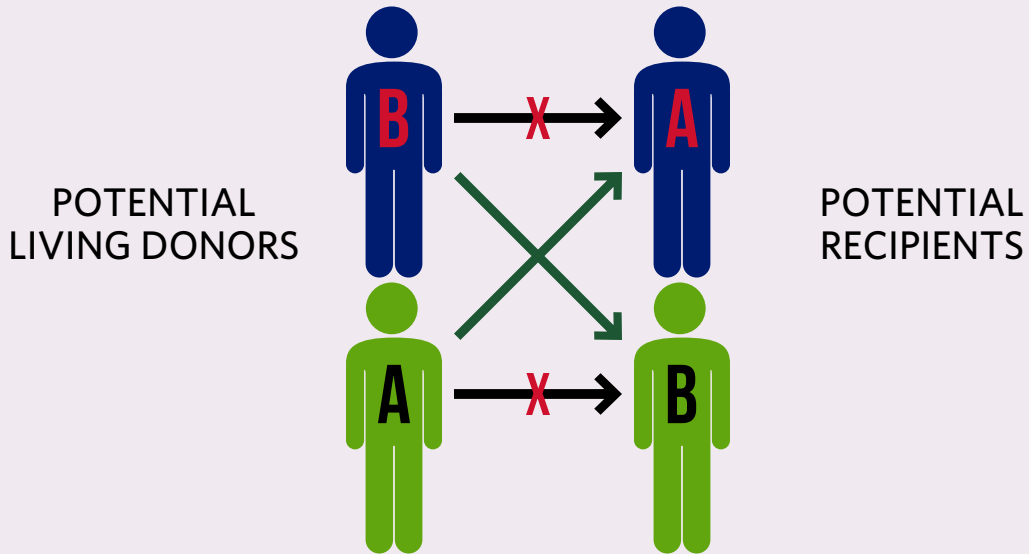
PAIRED EXCHANGE TRANSPLANT

Paired exchange transplant is a great option for living donor and recipient pairs who are blood type or crossmatch incompatible. Paired exchange transplant may also be a very good option for pairs who have a significant difference in weight, size, or age. Paired exchange allows donor and recipient pairs to exchange (or swap) donors with another pair and allows the recipients to still benefit from the advantages of living donor transplant. Paired exchange transplant can take place between pairs within a single transplant center or between pairs at different transplant centers. Paired exchange transplants can be as simple as a two way swap or as extensive as multiple pairs that create a chain.

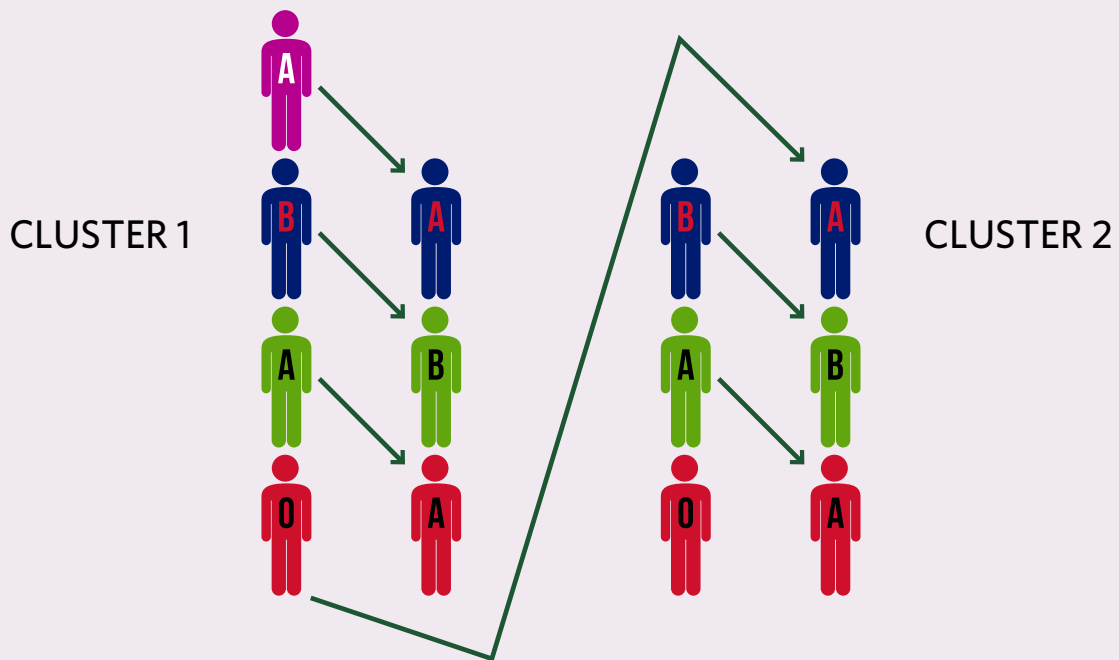
Some paired exchange chains can be lengthy and are completed in clusters. The living donor surgery at the end of one cluster is delayed until the next cluster is ready to go to surgery. These donors are known as bridge donors, as they bridge one cluster to the next cluster of transplants. The delay in surgery for the bridge donor can be as short as 1 day or as long as several weeks. Bridge donors are vital to ensure that the next cluster of transplants take place.

Chains are sometimes started with a non-directed donor. Non-directed donors are also known as Good Samaritan or Anonymous donors. A non-directed donor is someone who does not have an intended recipient, but decided to donate a kidney to help those in need.

TWO WAY PAIRED EXCHANGE (SWAP)



PAIRED EXCHANGE TRANSPLANT CHAIN (WITH CLUSTERS)



In this example, the O donor in cluster 1 is the bridge donor needed to start cluster 2 and continue the chain. If no potential recipient can be found for the last donor in a chain, that donor will donate to a patient waiting on the deceased donor list and the chain will end.

WHO PAYS FOR THE DONOR WORK-UP, TESTING, AND SURGERY?

Medicare covers the work-up, tests, and surgery related to living donation through the transplant centers kidney acquisition fund (KAQ). If the potential recipient has commercial insurance the living donor expenses will be billed and paid by that insurance.

****Please note:** *If you receive any bills related to living donation, please forward them to the transplant office, so we can take care of them for you. Please do not assume we received the bill! Chances are if you received the bill we DID NOT!*

Please, DO NOT pay for anything without speaking with someone from the transplant team. Medicare has strict requirements for living donor billing that the transplant center must follow. The transplant center can not reimburse donors for bills that they pay for out of pocket. Medicare mandates that after 6 months post-donation the costs for medical care and follow-up related to donation may be the donor's responsibility.

Please be aware that there are assistance programs available to help cover out of pocket expenses for living donors. If you have any financial concerns about living donation, please discuss this with your transplant coordinator or your transplant social workers.



DONOR EVALUATION & TESTING

Below are some of the tests that may be performed prior to donation:

White Blood Cell Crossmatch

- **Preliminary Crossmatch** – is an initial crossmatch done to determine if the recipient has antibodies against the kidney being considered for transplant.
- **Final Crossmatch** – is performed within 10 days of actual transplant. This is to make sure the recipient has not developed antibodies against the kidney being considered for transplant. If the recipient has developed antibodies (an incompatible crossmatch) the surgery will be canceled.

Blood Samples – will give us information about your body chemistry and past infections, Hepatitis and HIV status.

Protein to Creatinine Ratio – This is a urine test that will show if you have too much protein in your urine, which may indicate a tendency toward becoming diabetic.

Glofil Test – is a test to evaluate your kidney's ability to clear creatinine (waste product) and assess kidney function.

Glucose Tolerance Test (GTT) – Glucose is the sugar that the body uses for energy. Patients with untreated diabetes have high blood glucose levels. Glucose tolerance tests are one of the tools used to diagnose diabetes.

History and Physical exam – performed by a transplant surgeon or transplant nephrologist.

Social worker evaluation – A transplant social worker will interview and educate all potential donors about what to expect after donation.

Independent Living Donor Advocate (ILDA) – The ILDA will interview and discuss with all potential donors issues and concerns related to donation, ensure donation is voluntary, and be an advocate for donor rights and safety.

Psychologist – may be required depending on social work evaluation, medical history, or type of donor. All non-directed donors are required to meet with the transplant psychologist.

Female donors – need gynecological exam with pap smears. Will also need a mammogram if over age 40.

Male donors – will need prostate exam if 50 years old or greater.

Chest X-ray – will look for abnormalities of your heart and lungs.

EKG – is obtained to make sure your heart rhythm is normal.

Cardiac Stress Test – If you are over 50 years old or have a family history of heart disease, you will be required to have a Cardiac Stress Test.

CT Angiogram – is the last test you will have, providing all other studies are normal. This specialized CT Scan will identify the anatomy of the arteries and veins that supply blood to your kidneys. It will also identify any abnormalities in these blood vessels.

Maternal Fetal Medicine Consult – All women of child bearing age are recommended to be seen by our maternal fetal medicine physician to discuss the impact that pregnancy may have after living donation. In most donors this risk is minimal.

Colonoscopy – A screening colonoscopy is required for all donors age 50 or greater.

****Additional tests may be needed based on the results from the tests listed above.**

TESTING PHASES

The tests that are required for the Living Donor evaluation will be completed in phases. Some of the testing can be done at a local physician office or lab, others will need to be completed at UPMC Pinnacle. Your coordinator will explain this to you in detail.

Initial Testing:

- Initial donor phone screening
- Medical review
- ABO Rh (Blood type)
- Additional lab tests
- Urine testing
- Tissue crossmatch (blood test to determine compatibility with donor)

Final Testing:

- History and physical exam
- Social Worker evaluation
- Chest x-ray
- EKG
- Glofil test to determine kidney function
- Lab testing
- ILDA

STANDARD DONOR SELECTION CRITERIA

A standard set of selection criteria will be used to determine if it is safe or appropriate for a person to be a living kidney donor. The following conditions must be met for a patient to be considered as a living donor at this center.

- a. Body Mass Index (BMI) less than or equal to 35
- b. Normal blood pressure (less than 135/85).
- c. Normal results of tests such as chest x-ray, EKG, and routine age appropriate testing
- d. Acceptable crossmatch results
- e. Normal cardiac stress test if over 50 years of age
- f. Normal lab values
- g. Normal/acceptable CT angiogram (kidney anatomy)
- h. Adequate psychosocial and financial support

“What a difference it would make in this world if everyone considered living kidney donation. If you have the right information and a good team, like the one at UPMC Pinnacle, living kidney donation is very rewarding.”

– Michael Gaetani and Kimberly Rivera



The following conditions may prevent someone from being a candidate for living donation at this center:

- a. Less than age 18 or over age 65
- b. Blood pressure greater than 135 systolic or greater than 85 diastolic
- c. Abnormal glucose levels: fasting value greater than 100 or 2-hour tolerance greater than 140
- d. History of gestational diabetes, cancer, or autoimmune disorder such as lupus
- e. Abnormal results from any requested testing (identified in list on page 13)
- f. Infections or infectious diseases identified on work-up such as Hepatitis, tuberculosis etc.
- g. Psychological diagnosis or illness
- f. Social or financial concerns identified by transplant team that would put a donor at risk
- h. Substance abuse

BMI CHART

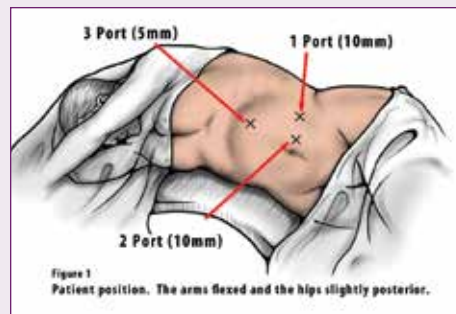
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5'2"	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53	55	57	59	60
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5'7"	19	20	22	23	25	27	28	30	31	33	34	36	38	39	41	42	44	45	47	49	50	52
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5'9"	18	19	21	22	24	25	27	28	30	31	32	34	35	37	38	40	41	43	44	46	47	49
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6'10"	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	35

DONOR SURGICAL OPTIONS

Keeping your safety in mind, our transplant surgeons will decide which approach is appropriate for you based on your past surgical history, body size and kidney anatomy.

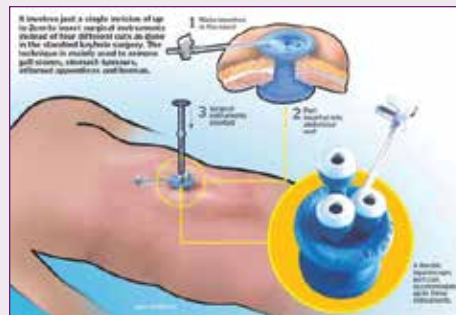
1. LAPAROSCOPIC DONOR NEPHRECTOMY –

This approach uses small scopes and instruments (through 3-4 very small incisions on the abdomen) to free the kidney which is then removed through a small incision which is a few inches below the donor's belly button. A kidney removal done by this approach results in very little pain or discomfort for the donor, a very short hospital stay (1-2 days), and very rapid return to normal activity. Most donors are ready to return to work and normal activity within 2 - 4 weeks of surgery.



2. SINGLE INCISION LAPAROSCOPIC DONOR –

This surgical approach allows all the small scopes and instruments to be inserted through one incision in the abdomen. Through this single incision all work is completed to free the kidney which is then removed through the same small incision which is a few inches from the donor's belly button. A kidney removal done by this approach results in very little pain or discomfort for the donor, a very short hospital stay (1-2 days), and very rapid return to normal activity. Most donors are ready to return to work and normal activity within 2-4 weeks of surgery.



POSSIBLE SURGICAL COMPLICATIONS

There are risks associated with every surgical procedure. The transplant team is obligated to inform you of the following potential risks associated with kidney donation:

- Infection of the wound
- Possible need for blood transfusion
- Pneumonia
- Hernia at incision site
- Hypertension
- Change in body image
- Allergic reaction to anesthesia
- Pain
- Hemorrhage (bleeding)
- Kidney Failure
- Proteinuria (protein loss in urine)
- Death

Other Risks of Surgery: Your ability to obtain health and life insurance coverage after you have donated your kidney is not restricted by MOST insurance companies. However, there have been some instances in which living donors had difficulty changing insurance carriers after the donation, due to higher premiums or a pre-existing waiting period. If you have questions about your insurance, the social worker is available to speak with you.

WHAT HAPPENS AFTER SURGERY?

Immediately after surgery, you will be in the recovery room for approximately 2-3 hours. When you are stable and awake after surgery, your pain is under control and your vital signs are normal, you will be transferred to a room on the 4th floor. You will remain on the 4th floor until you are discharged to home approximately two days later.

Routine post-operative care will include:

- Vital signs – blood pressure, pulse, respirations, temperature
- Foley catheter is connected to a urinary drainage bag to measure urine output
- Incentive spirometry is required for you to inhale deeply to expand your lungs
- Walk as soon as you are alert, at least four times the first day after surgery
- Pain medications as needed

Expected length of stay following surgery is two days. When you are discharged it is important that you do the following:

- Keep your pain/discomfort under control
- Do not lie in bed all day, it is important to get up and move around
- Go for a light, casual, non-stressful walk each day (do not increase your heart rate)
- Eat a healthy diet, including high fiber foods to prevent constipation
- Drink plenty of water

When you are home, please report any of the following to the transplant coordinator:

- Increased urinary frequency
- Increased urgency to urinate
- Burning or painful urination
- Blood in urine
- Temperature of 100 degrees or greater
- Swelling, redness or tenderness along the incision site

After your surgery you will have a few activity restrictions to follow:

- You will be off work 2-4 weeks. Depending on the type of work you do, you may need to be off of work for up to 6 weeks to completely recover
- You must not lift anything over 20 lbs. for 6 weeks
- You are not allowed to drive for 14 days following surgery

Future Health and Safety:

- Visit your family physician each year for an annual check-up (check blood pressure and labs)
- Maintain a healthy weight
- Drink adequate amount of water each day
- Inform other physicians providing your care that you have only 1 kidney (some medications such as antibiotics may need to be dose adjusted for your safety)
- Avoid the use of non-steroidal anti-inflammatory medications (NSAIDS). Some examples of NSAIDS are: Advil, Aleve, Ibuprofen, Indocin, Motrin, Celebrex and Naprosyn. These kinds of medications can be harmful to your remaining kidney. Use alternative pain relievers, such as Tylenol, instead.

You will not have any dietary restrictions and will not need to be on any medications related to the donation. After your incision(s) have healed, you should experience no difference in your energy level, ability on the job, life expectancy, susceptibility to illness or sexual functioning.

For our donors' safety and continued good health, you are expected to follow up with the transplant team at the following time points after donor surgery: one month, six months, one year, and two years. This is a requirement from UNOS (United Network for Organ Sharing) and CMS (Center for Medicare Service) so the long-term outcomes for all living donors can be reported for tracking and safety monitoring. The cost of routine follow up (> six months without documented complications) may be the living donor's responsibility depending on the recipient's insurance at the time of transplant or at the time of required follow-up.

ORGAN DONATION WEBSITES

National Living Donor Assistance Center (NLDAC)

www.livingdonorassistance.org

May provide assistance to living donors for travel and meals

For more information contact: NLDAC @ 703-414-1600 or by email at NLDAC@livingdonorassistance.org

American Organ Transplant Association (AOTA)

www.aotaonline.org or by phone at 713-344-2402

American Kidney Fund

May provide assistance to living donors for travel and expenses related to donation.

800-638-8299

National Transplant Assistance Fund www.transplantfund.org

National Foundation for Transplants www.transplants.org

Donate Life America

www.donatelife.net

Transplant Experience

www.transplantexperience.com

Transplant Living

www.transplantliving.org

OrganDonor.gov – Access to US Government Information regarding Transplantation

www.organdonor.gov

The Organ Procurement and Transplant Network

www.optn.org

United Network of Organ Sharing – National governing body over transplantation

www.unos.org

National Kidney Foundation Living Donor Message Board

www.livingdonorsonline.org

UPMC PINNACLE IMAGING LOCATIONS

For the most up-to-date list of locations, services, and hours, visit UPMCPinnacle.com

Hospital & Medical Center Locations

Greenbriar Medical Center

520 Greenbriar Road,
York, PA 17404
Phone: 717-815-2698

Lancaster Breast Imaging

1600 Sixth Avenue, Suite 106,
York, PA 17403
Phone: 717-815-2600

Mammography Center

300 Highland Avenue,
Hanover, PA 17331
Phone: 717-316-3500

UPMC Pinnacle Carlisle

361 Alexander Spring Road,
Carlisle, PA 17015
Phone: 717-249-1212

UPMC Pinnacle Community Osteopathic

4300 Londonderry Road,
Harrisburg, PA 17109
Phone: 717-230-3700

UPMC Pinnacle Hanover

300 Highland Avenue,
Hanover, PA 17331
Phone: 717-316-2200

UPMC Pinnacle Harrisburg

111 South Front Street, Fifth Floor,
Harrisburg, PA 17101
Phone: 717-230-3700

UPMC Pinnacle Lititz

1500 Highlands Drive,
Lititz, PA 17543
Phone: 717-625-5000

UPMC Pinnacle Lancaster

250 College Avenue,
Lancaster, PA 17603
Phone: 717-625-5555

UPMC Pinnacle Memorial

325 South Belmont Street,
York, PA 17403
Phone: 717-815-2382

Community Locations

Carlisle Imaging Services

2 Jennifer Court,
Carlisle, PA 17015
Phone: 717-960-3696

Imaging Center of Lancaster

924 Red Rose Court,
Lancaster, PA 17601
Phone: 717-293-0709

Imaging Center of Willow Street

226 Willow Valley Lakes Drive,
Suite A,
Willow Street, PA 17548
Phone: 717-735-3939

Imaging Services at Hillside

250 Fame Avenue, Suite 104,
Hanover, PA 17331
Phone: 717-316-7981

Imaging Services at New Oxford

5615 York Road, New Oxford, PA
17350
Phone: 717-624-0058

Imaging Services at South Hanover

1404 Baltimore Street, Suite 2,
Hanover, PA 17331
Phone: 717-316-6717

Imaging Services at Thistle Hill

2030 Thistle Hill Drive, Suite 101,
Spring Grove, PA 17362
Phone: 717-225-7211

Lancaster Breast Imaging

2170 Noll Drive,
Lancaster, PA 17603
Phone: 717-393-5187

PinnacleHealth Imaging

Lebanon Valley Advanced Care
Center
1251 East Main Street,
Annville, PA 17003
Phone: 717-230-3700

850 Walnut Bottom Road,
Carlisle, PA 17013
Phone: 717-230-3700

One Trinity Drive East, Suite 130,
Dillsburg, PA 17019
Phone: 717-230-3700

110 Lowther Street
Lemoyne, PA 17043
Phone: 717-230-3700

Community Campus, Medical
Sciences Pavilion
4300 Londonderry Road, Third Floor,
Harrisburg, PA 17109
Phone: 717-230-3700

Polyclinic Campus, Landis Building
2501 North Third Street, Second Floor,
Harrisburg, PA 17110
Phone: 717-230-3700

West Shore Campus, Fredricksen
Outpatient Center
2015 Technology Parkway, First Floor,
Mechanicsburg, PA 17050
Phone: 717-230-3700

21 Waterford Road,
Mechanicsburg, PA 17050
Phone: 717-230-3700

1025 West Harrisburg Pike,
Middletown, PA 17057
Phone: 717-230-3700

1000 Evelyn Drive,
Millersburg, PA 17061
Phone: 717-30-3700

Medical Professional Center
300 Bretz Court,
Newport, PA 17074
Phone: 717-230-3700

PinnacleHealth Tristán Radiology Specialists

240 Grandview Avenue,
Camp Hill, PA 17011
Phone: 717-230-3700

2808 Old Post Road,
Harrisburg, PA 17110
Phone: 717-230-3700

4518 Union Deposit Road,
Harrisburg, PA 17111
Phone: 717-230-3700

32 Northeast Drive,
Hershey, PA 17033
Phone: 717-230-3700

UPMC PINNACLE LAB LOCATIONS

For the most up-to-date list of locations, services, and hours, visit UPMCPinnacle.com

Hospital & Medical Center Locations

Greenbriar Medical Center

520 Greenbriar Road,
York, PA 17404
Phone: 717-815-2698

UPMC Pinnacle Carlisle

361 Alexander Spring Road,
Carlisle, PA 17015
Phone: 717-249-1212

UPMC Pinnacle Community Osteopathic

4300 Londonderry Road, First Floor,
Harrisburg, PA 17109
Phone: 717-657-7214
Fax: 717-657-7192

UPMC Pinnacle Hanover

300 Highland Avenue,
Hanover, PA 17331
Phone: 717-316-2150

UPMC Pinnacle Harrisburg

111 South Front Street, First Floor,
Harrisburg, PA 17101
Phone: 717-782-5564
Fax: 717-782-5536

UPMC Pinnacle Lancaster

250 College Avenue,
Lancaster, PA 17603
Phone: 717-291-2811

UPMC Pinnacle Lititz

1500 Highlands Drive,
Lititz, PA 17543
Phone: 717-625-5000

UPMC Pinnacle Memorial

325 South Belmont Street,
York, PA 17403
Phone: 717-849-5790

Community Locations

Eichelberger Lab

195 Stock Street, Suite 119,
Hanover, PA 17331
Phone: 717-316-2054

Hillside Lab

250 Fame Avenue, Suite 104,
Hanover, PA 17331
Phone: 717-316-7981

Littlestown Lab

300 West King Street,
Hanover, PA 17340
Phone: 717-359-8291

New Oxford Lab

5615 York Road,
New Oxford, PA 17350
Phone: 717-624-0058

PinnacleHealth Outpatient Laboratory

Lebanon Valley Advanced Care
Center
1251 East Main Street, Suite 3,
Annville, PA 17003
Phone: 717-988-0420

850 Walnut Bottom Road,
Suite 104, Carlisle, PA 17013
Phone: 717-462-4450
Fax: 717-462-4451

One Trinity Drive East,
Suite 130, Dillsburg, PA 17019
Phone: 717-502-0405
Fax: 717-502-0306

2310 Patton Road, Suite B,
Harrisburg, PA 17112
Phone: 717-724-6537
Fax: 717-724-6540

Landis Building
2501 North Third Street,
First Floor, Harrisburg, PA 17110
Phone: 717-782-4634
Fax: 717-782-4610

2808 Old Post Road,
Harrisburg, PA 17110
Phone: 717-920-4570
Fax: 717-920-4571

8105 Adams Drive, Suite A,
Hummelstown, PA 17036
Phone: 717-482-8845

Fax: 717-482-8852

3 Walnut Street, Suite 100,
Lemoyne, PA 17043
Phone: 717-909-0933
Fax: 717-909-0930

Fredricksen Outpatient Center
2015 Technology Parkway, First Floor,
Mechanicsburg, PA 17050
Phone: 717-791-2409
Fax: 717-791-2404

21 Waterford Drive,
Mechanicsburg, PA 17050
Phone: 717-591-3634
Fax: 717-591-3635

1025 West Harrisburg Pike,
Middletown, PA 17057
Phone: 717-702-1137
Fax: 717-702-1139

1000 Evelyn Drive,
Millersburg, PA 17061
Phone: 717-692-1035
Fax: 717-692-1036

Medical Professional Center

300 Bretz Court, Newport, PA 17074
Phone: 717-988-9030
Fax: 717-703-0028

Progress Professional Center Laboratory Services

97 Progress Boulevard,
Shippensburg, PA 17257
Phone: 717-530-1845

South Hanover Lab

1404 Baltimore Street, Suite 2,
Hanover, PA 17331
Phone: 717-316-7981

Thistle Hill Lab

2030 Thistle Hill Drive, Suite 1001,
Spring Grove, PA 17362
Phone: 717-225-7211

Walnut Bottom Laboratory Services

850 Walnut Bottom Road, Suite 104,
Carlisle, PA 17015
Phone: 717-462-4450

Walnut Bottom Professional Center Lab

419 Village Drive, Suite 7,
Carlisle, PA 17015
Phone: 717-960-3560

HARRISBURG REGIONAL LODGING

BAILEY HOUSE

The Bailey House is a comfortable home-like setting for families of seriously-ill patients of UPMC Pinnacle Harrisburg. The House is a lodging facility one block from the hospital sponsored by the Pinnacle Health Auxiliary.

The 24-hour a day facility provides housing, refreshments and other home-like conveniences. Space is limited. Call 717-232-2721 for more information.

AREA HOTELS

If you or your family need to stay overnight in Harrisburg, the following area hotels and motels offer preferred room rates for UPMC Pinnacle patients and their families. When calling for reservations, be sure to mention that you will be receiving care at UPMC Pinnacle in order to receive the discount.



Quality Inn

525 Front Street, Harrisburg, PA 17104
717-233-1611

Crowne Plaza

23 South Second Street, Harrisburg, PA 17101
717-234-5021 ~ basshotels.com

Days Inn, Harrisburg North

3919 North Front Street, Harrisburg, PA 17110
717-233-3100 ~ daysinnharrisburg.com

Best Western Premiere

800 East Park Drive, Harrisburg, PA 17111
717-561-2800 ~ fourpoints.com

Hampton Inn, Harrisburg West

4950 Ritter Road, Mechanicsburg, PA 17050
717-691-1300 ~ harrisburghampton.com

Hampton Inn, Harrisburg East

4230 Union Deposit Road, Harrisburg, PA 17111
717-545-9595 ~ hampton-inn.com

Hilton Harrisburg & Towers

One North Second Street, Harrisburg, PA 17111
717-233-6000 ~ hilton.com

Radisson Penn Harris

1150 Camp Hill Bypass, Camp Hill, PA 17011
717-763-7117 ~ radisson.com

GLOSSARY

Acute tubular necrosis (ATN) – Reversible kidney swelling resulting in delayed kidney function

Antibody – A substance made by the immune system to develop resistance against foreign proteins (antigens) or infections

Antigen – Proteins found on the surface of blood cells. Six antigens play an important role in transplantation

Compatibility – Test performed by putting a donor's blood and a potential recipient's blood together to look for any signs of reaction, which could cause an acute (immediate and severe) rejection after transplant.

Deceased donor – An individual who has recently died of causes that do not affect the function of the organ to be transplanted. Their family has graciously offered their organs/tissues for transplant.

Graft – Word used to refer to a transplanted organ.

HLA (human leukocyte antigens) screen (also known as tissue typing) – genetic antigens which are on blood cell surfaces. These are identified before transplant through a blood test to identify tissue matches with available organs.

Immunosuppression – Decreased function of the immune system

- Decreases the body's ability to fight off infections
- Needed after transplant to prevent rejection

Living Kidney Donor – Someone who is related or unrelated who has a kidney removed for transplant.

Non-Compliance – Failure to follow any or all instructions given to you by your health care providers.

Rejection – Attempt by the immune system to attack and destroy a transplanted organ. If not treated, it will result in loss of the transplanted organ.

I am so thankful for my donor. Someone quite literally changed my life forever because of their decision to be a donor. The difference is like night and day, and I'm grateful to have so much energy and time to be with my family.

– Richard Weidenhammer



UPMC Pinnacle

TRANSPLANT SERVICES

UPMC Pinnacle Harrisburg
Brady Building, 8th floor
205 S. Front St.
Harrisburg, PA 17104

877-778-6110
717-231-8700
UPMCPinnacle.com/Transplant