YOUR KIDNEY TRANSPLANT COORDINATOR IS:

(Kidney Transplant Coordinator)

My Pre-transplant Educational Session took place on

(Date)

UPMC Pinnacle Transplant Services

Location: UPMC Pinnacle Harrisburg

Telephone: 717-231-8700
877-778-6110 Toll-Free
717-231-8753 Fax Number

Address: UPMC Pinnacle Harrisburg
Transplant Services
205 South Front Street
Brady Building, 8th floor
Harrisburg, PA 17104

Website: UPMCPinnacle.com/Transplant

Office Hours: 7:30 a.m. to 4 p.m. / Monday through Friday

Holidays, evenings, and weekends:

For urgent issues, call 717-231-8700 or toll-free 877-778-6110. The Medical Bureau of Harrisburg (an answering service) will answer your call. Ask to speak to the Transplant Coordinator on call.

IF YOU ARE HAVING A MEDICAL EMERGENCY, PLEASE CALL 911 FIRST!

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.
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Welcome to the Transplant Program at UPMC Pinnacle. Our team is here to help make your transplant experience a rewarding one. We will provide you with specific information about our transplant program, and answer any questions that you may have regarding transplantation.

Deciding to receive a transplant is a lifelong commitment. If you decide that transplant is the best form of treatment for you, we will provide you with the best service and medical care possible.

The transplant process will not be easy. It is normal to experience some stress and anxiety during this difficult period. 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.

The Transplant program at UPMC Pinnacle is committed to provide you with the emotional and practical support that is necessary to get through the transplant process successfully. Because of our academic and research expertise, our program can offer the latest breakthroughs in transplant science. Those resources, along with your firm commitment to faithfully take care of yourself and your transplanted organ, will offer you an excellent chance of returning to a normal lifestyle after transplant.

This teaching manual is designed to be a resource for you. It will answer many questions that you may have about kidney and/or pancreas transplantation. It will also address questions that you may have about the transplant work-up process, wait time, expectations, and care after transplant. We hope you find this manual useful and informative throughout your transplant experience.

If you have any questions during any point in the process, do not hesitate to contact your transplant coordinator.

Thank you for choosing UPMC Pinnacle. We sincerely hope that your experience here is a rewarding one.
## THE TRANSPLANT TEAM

### Transplant Providers
- Harold C. Yang, MD, PhD  
  *Surgical Director/Attending Surgeon*
- Danielle Ladie, MD, MPH  
  *Attending Surgeon*
- Manpreet Singh, MD  
  *Medical Director*
- William Hoffman, MD  
  *Director, Living Donor Program*
- Mary Waybill, MD  
  *Research/Transplant Nephrology*
- Rhonda Saylor, MSN, CRNP  
  *Nurse Practitioner*
- Stephanie Midile, MSN, CRNP, CCTC  
  *Nurse Practitioner*

### Transplant Director
- Kim Barnett, MSN, MBA-HC, RN, CCTC

### Nurse Manager
- Rebecca Brown, MSN, RN, CCTC

### Pre-Transplant Coordinators
- Kelsey Karpinski BSN, RN  
- Becky Mulreany, BSN, RN  
- Sharon Perrine, BSN, RN  
- Brittany Powell, BSN, RN

### Living Donor Transplant Coordinator
- 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  
- Tori Fry, BSN, RN

### Research Coordinator
- Paula Kratzer, BSN, RN, CCTC

### Transplant Social Workers
- Dawn Temple, MSW, LSW, CADC, ICADC  
- Alice Baird, MSW, LSW

### Transplant Financial Coordinator
- Melinda Soles  
- Deb Macchioni

### Transplant Pharmacist
SURGEONS

Harold Yang, MD, PhD
Dr. Yang received his medical degree at the University of Chicago, where he also completed his surgical residency. His fellowship was completed at Massachusetts General Hospital. His specialties include kidney and pancreas transplantation.

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

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. Dr. Ladie joined the Transplant team in 2014.
NEPHROLOGIST

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 the Assistant Professor of Medicine at the Penn State Milton S. Hershey Medical Center from 1990-1993, and 1995-2000. Dr. Waybill entered a private nephrology practice from 2000-2002. Dr. Waybill oversees the transplant research protocols and participates in the care of our transplant patients and living kidney donors. Dr. Waybill has been on staff at UPMC Pinnacle since 2000, and is certified by the American Board of Internal Medicine in nephrology.

Manpreet Singh, MD
Dr. Singh completed his nephrology fellowship at Boston University and a Transplant Nephrology fellowship at University of California, San Francisco. A graduate of Government Medical College in Patiala, India, he completed his residency at SUNY Stony Brook Medical Center in New York.

Prior to joining UPMC Pinnacle, Dr. Singh served as the Assistant Professor of Medicine, Renal Division at UMass Memorial Medical Center. He has special interest in acute and chronic antibody mediated rejection, BK virus nephropathy, and simultaneous kidney/pancreas transplantation.

Dr. Singh is fluent in English, Punjabi, and Hindi.

William Hoffman, MD
Dr. Hoffman completed his Nephrology Fellowship at the University of Pittsburgh, where he was the chief fellow. Additionally he completed a fellowship in transplant nephrology and a research fellowship in transplant immunology through the University of Pittsburgh.

A graduate of the University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, Dr. Hoffman completed his residency at University of Rochester, Strong Memorial Hospital.

Prior to joining UPMC Pinnacle, he was the Clinical Instructor, Department of Medicine, Division of Nephrology, at UPMC. An author of several publications, he is the recipient of the American Society of Nephrology Ben J. Lipps Research Fellowship Award.
NURSE PRACTITIONERS

Nurse practitioners work closely with physicians, nurses, and staff to extend the care of the physicians. Nurse Practitioners participate in the care of transplant candidates, recipients of kidney transplants, and living kidney donors.

PHARMACIST

The transplant pharmacist is a pharmacist with specific expertise in transplant pharmacology. The pharmacist actively participates in your medication management and provides medication education both before and after transplant.

Management of the complex medications taken after transplant is a vital and important component of your care. Both before and after transplant, the pharmacist will review your medications for potential drug interactions, help prevent and monitor for adverse reactions, work with the physicians to adjust medication doses, and help individualize your medication plan.

The role of the transplant pharmacist is to help you and your family understand the importance of your medications and to address concerns or questions you may have about your medications.

TRANSPLANT COORDINATORS

The 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 pre-transplant coordinator will guide you through the education and work-up process. Your pre-transplant coordinator will be your contact person for any questions or concerns while you are waiting for your transplant.

After transplant, the post-transplant coordinator will educate you about how to care for yourself. The post-transplant coordinator will also monitor your lab work and care after transplant, as well as answer any questions that may arise.

LIVING DONOR COORDINATOR

The living donor coordinator guides living donors through all phases of the donation process. The living donor coordinator is your resource for all questions and concerns about living donation.
RESEARCH TRANSPLANT COORDINATOR

The research transplant coordinator is a transplant nurse who coordinates and oversees patients who participate in research protocols.

TRANSPLANT SOCIAL WORKERS

The transplant social workers will assist you in preparing yourself socially for a transplant. They will assess your social, financial, and support systems to ensure that your transplant can be a successful experience. They will also be available after transplant to assist you with obtaining the needed medications as well as addressing other social concerns you may have.

TRANSPLANT FINANCIAL COORDINATORS

The transplant financial coordinators will review your insurance coverage for transplant and medications after transplant. They may also be able to make recommendations for additional coverage to minimize your out-of-pocket expense after transplant.
KIDNEYS: HOW DO THEY WORK?

Location:
Your kidneys are located deep in your abdominal cavity. They are located at waist level and toward your back. They are well protected from external injury by muscles, body fat, and your lower ribs. Each kidney is about the size of your fist.

Function:
Your kidneys have several important jobs:

- **Filter your blood**—Your kidneys remove toxins and waste products, which are produced by normal body activities such as breathing, eating, exercise, etc.
- **Produce hormones**—These hormones help regulate your blood pressure and red blood cell production.
- **Fluid management**—Your kidneys help control (get rid of or keep) fluid in your body, as well as maintain salt and acid levels.

Kidneys with normal function are able to perform all of these activities without difficulty. Kidneys that are damaged or diseased are unable to perform some or all of these jobs. This can lead to build up of excess fluid, waste products, high blood pressure, and a low blood count. When this occurs, dialysis and medications are needed to clear these waste products and prevent death.

Once dialysis is initiated, many patients tend to feel better than before dialysis. Some patients feel dialysis limits their ability to work and socialize. They feel tired and may potentially have other complications such as sexual dysfunction, poor appetite, bone disease, and heart disease.

A kidney transplant eliminates the need for dialysis, provides a better quality of life, and for most people a longer, healthier life. A working kidney transplant is able to remove waste products from the body 24 hours per day, while dialysis can only do 10% of the work of a functioning kidney.
FORM OF TREATMENT

Transplantation is a form of treatment for kidney failure however, it is not a cure. There are benefits and risks to both dialysis and transplant. You must look at all of these benefits and risks and decide whether or not transplant is good for you.

It is okay to decide that you do not want to receive a transplant.

The alternative treatment to transplant is dialysis therapy.

Once you have received a transplant, you are committed to take care of it for the rest of your life. This includes things like taking a lot of medications every day for the rest of your life, frequent blood draws, frequent clinic appointments, and increased risk for infections. These requirements and risks are discussed later in this booklet in detail.
EVALUATION PROCESS

To determine if transplant is a safe form of treatment for you, several steps must be completed. It is possible that the testing process will show that the risks of transplantation are higher than any benefit you would receive, and you may not be a candidate for transplant at this center.

- **Step 1: Transplant Education Class** - This is a two-hour appointment where you will learn the basics of kidney and pancreas transplant. You will learn about the evaluation process, the surgical procedure, and the care required after transplant.

- **Step 2: Evaluation at the Transplant Clinic** - This three-to-four-hour appointment includes a medical history review, a physical exam, psycho-social evaluation, insurance review, and blood draw for specialized laboratory testing including HLA type, viral screening, and blood type.

- **Step 3: Completion of required tests/procedures** - This step normally takes between two and three months to complete. You will be scheduled for several diagnostic tests that are necessary to determine if transplant is a safe form of treatment for you. These test requirements will be determined by the Transplant team after you have had your evaluation appointment. These tests will be scheduled at a UPMC Pinnacle facility. The results of these tests provide information necessary to minimize risk to your health at the time of transplant and to determine if the transplant procedure is the best option for you. These tests can also identify potential health concerns BEFORE they occur. This allows your transplant team to safely care for you before, during, and after your transplant.

- **Step 4: Review of Test Results** - Your test results will be reviewed by the transplant coordinator and physician. If any tests are abnormal, you may need to have additional tests or consultation with a specialist.

- **Step 5: Presentation at Transplant Selection Committee** - Your information will be presented at the Transplant Selection Committee. This Committee is made up of all members of the pre-transplant team. If approved, you will then be placed on the National Transplant List. If denied, your transplant coordinator will provide you with an explanation via phone and in a letter. This letter will be sent to you, your nephrologist, and your dialysis unit.

- **Step 6: Listed for Transplant** - Once approved for listing, you will be required to review and sign a consent for transplant listing. You will be asked to come to the transplant office to do this. You will also receive a letter notifying you of the date you were placed on the transplant list.
TESTING

The following is a list of routine tests used to determine eligibility for transplant listing. *Your exact list of tests may vary depending on your medical history and physical findings.* These tests will be determined by the transplant team.

**History and Physical:** This provides information about current physical condition and past illnesses.

**Chest x-Ray:** This is a picture of your lungs and lower respiratory tract, which will identify any abnormalities.

**EKG (electrocardiogram):** This is an electrical picture of your heart rhythm.

**Blood Draw:** Will be required at least two times to determine blood type and complete screening for viruses and special transplant tests.

**Abdominal Ultrasound:** This ultrasound (sound wave) picture of your abdominal organs will identify any abnormalities that may need further testing.

**Cardiac Stress Test:** This test will show us how your heart functions under stress (similar to how it will need to work during and immediately after your transplant surgery). There are several types of stress tests. The one that is best suited for you based on your health and history will be ordered.

**Echocardiogram:** This is a non-invasive ultrasound procedure used to look at the heart’s function and structures.

**Cardiac Catheterization:** This test looks for cardiac disease that may not be detected by other tests like stress tests or echocardiograms.

**Colonoscopy:** is required if over age 50 for cancer screening.

**Hemoccult Testing:** a test to detect hidden blood in bowel movements.

**Age and gender-appropriate screenings:** this includes gyn exams and mammograms for women and prostate exams for men.

**KUB:** a x-ray of your abdomen that screens for any abnormalities.

**Transplant Cardiology Consult:** some patients will be required to meet with a UPMC Pinnacle cardiologist who has expertise in the care of transplant patients.
STANDARD SELECTION CRITERIA

A standard set of selection criteria will be used to determine patient’s candidacy for transplant listing. The following conditions must be met for a patient to be listed for transplant at this center.

• Body Mass Index (BMI) less than or equal to 40
• Clearance from a transplant cardiologist (heart doctor), if requested
• Ejection Fraction (heart function) greater than 35%
• Adequate blood flow to support the transplanted organ
• Normal results of tests such as EKG, chest x-ray, and routine screenings
• Appropriate psychosocial support system
• Adequate financial coverage
• Documentation of compliance with current prescribed treatments

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

• Uncorrectable heart or vascular disease
• Liver cirrhosis
• HIV (AIDS) that is unresponsive to therapy
• Disseminated malignancy (cancer)
• Chronic infections that are not responsive to treatment
• Inadequate social support system
• Active substance abuse
• Uncontrolled psychosis
• Non-compliance with prescribed medical treatments
• Current incarceration
• Resident of long-term care facility
• On-going tobacco use in candidates who have known COPD, atherosclerotic disease, or tobacco-related malignancy in the past
• Pulmonary hypertension
WORK PAGE FOR TESTING

This page is provided for you to use as a worksheet. It will help you to keep track of each test and when it is completed.

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WAITING

The average wait time for a deceased donor transplant is four to six years. Please keep in mind that this is an average. Some people do not wait as long, some wait longer. We are unable to determine how long you will need to wait for a transplant. The wait time for deceased donor transplant is so long because of the number of people that are on the wait list for a transplant. Currently there are more than 100,000 people in the United States waiting for a kidney transplant.

This waiting time can be very frustrating. You can find support and encouragement during this time at several places. Speak to your dialysis support group, become or stay involved in a church, and speak to your transplant coordinator and social worker.

The following things are very important for you to do during this time:

I. **Stay Healthy:** The healthier you are before transplant surgery, the better and quicker you will recover and return to a more normal lifestyle. The following are some quick tips to consider:

   • See your primary care doctor on a regular basis
   • Exercise if your doctor says that it is okay
   • Follow your renal diet to prevent additional health complications
   • Keep your routine health screens up to date (i.e.: GYN exams, prostate exams, mammograms, and dental exams)
   • Complete any additional testing that we may request during this time
   • **Most patients are required to have a yearly cardiac (heart) stress test and all candidates must return to our clinic yearly while waiting for transplant. If these requirements are not completed, your transplant may be delayed or postponed.**

II. **Keep Us Informed:** Please call when any of the following things occur:

   • Changes of name, address, or phone numbers
   • Change of insurance carrier
   • Change of doctor or dialysis unit
   • Change of type of dialysis
   • Any hospital admissions or Emergency Department visits
   • Any infections that are treated with antibiotics
   • Any surgical procedures

III. **Be Available:** It is extremely important that we are able to contact you when a kidney becomes available. We have a very limited amount of time to be able to contact you (one hour). Please make sure we have phone numbers where you can be reached.
IV. **Send Blood:** While you are on the transplant waiting list, you must send us a sample of your blood the first week of each month (one tube). This blood is used to do your antibody screen (PRA) as well as start crossmatch testing with potential donors. Without current blood, your transplant may be postponed or delayed.

V. **Blood Transfusions:** If you should require a blood transfusion, please remind the person giving you the transfusion that you should only receive leukopen blood, because you are awaiting transplant. This filter is used to help prevent you from developing antibodies to the proteins in the donor blood. A high antibody level could make it VERY difficult to find a compatible kidney and usually means a longer wait time for transplant. You must also notify your transplant coordinator as soon as possible, as you will need to have additional blood draws to monitor your antibody levels.

**TYPES OF TRANSPLANTS**

**Living Donor Transplant:**
This type of transplant occurs when a living person volunteers to donate one of their kidneys to another person in need.

There are several advantages to receiving a kidney from a living donor. **Kidneys from living donors last longer and work better than kidneys from deceased donors.** Kidneys from living donors are better quality and begin to work right away. Also, with a living kidney donor your surgery can be scheduled and planned for ahead of time.

There are several types of living donor transplants:

1. **Living related** – kidney is donated from someone who is genetically related to the recipient.
2. **Living unrelated** – kidney is donated from someone who is known to the recipient (friend, co-worker, spouse, etc.) but there is no genetic relationship.
3. **Non-directed or Good Samaritan** – kidney is donated from someone who feels emotionally/socially drawn to help another in need and is a stranger to the recipient.
4. **Paired Exchange** – A paired exchange transplant occurs when incompatible living donor and recipient pairs exchange (or swap) donor kidneys with another incompatible pair. This allows both patients to receive a living donor transplant and the benefits that go along with a living donor transplant.

**Deceased Donor Transplant:**
This is a transplant that occurs from someone who has been determined brain dead (no brain activity) or from someone who has experienced an irreversible brain injury and the family has decided to withdraw life support (donation after cardiac death).

There are several challenges in deceased donor transplant, including a longer wait to find a match and delayed organ function.
DECEASED DONOR ORGAN DISTRIBUTION

Unfortunately, the demand for kidneys is far greater than the supply of deceased donor organs. The United Network for Organ Sharing (UNOS) is a non-profit, charitable organization that manages the nation’s transplant system—known as the Organ Procurement and Transplantation Network (OPTN)—under contract with the federal government. As the OPTN, UNOS helps create and define organ sharing policies that make the best use of donated organs.

The kidney allocation system underwent some major changes in December 2014. This matching system helps more people have longer function with their transplanted kidney and may help shorten the waiting time for some groups of people who are hard to match with most kidneys.

Every kidney that is offered for transplant receives a Kidney Donor Profile Index (KDPI) score. This score is calculated based on facts about the donor that affect how long the kidney is likely to function. These factors include:

- Age
- Height
- Weight
- Ethnicity
- Whether the donor died due to loss of heart function or loss of brain function
- Serum Creatinine value (a measure of kidney function)
- Stroke as cause of death
- History of High Blood Pressure
- History of Diabetes
- Exposure to the Hepatitis C virus

The KDPI score ranges from 0 to 100 and is associated with how long the kidney is likely to function when compared to other kidneys. The lower the score, the longer the kidney is expected to last. A KDPI score of 20% means the kidney is likely to function longer than 80% of other available kidneys.
Each kidney candidate (someone on the kidney waiting list) has an individual Estimated Post Transplant Survival Score (EPTS). The EPTS is calculated based on facts about the candidate that affect how long they are likely to need a kidney.

These factors include:
• Age
• Length of time on dialysis
• Having received a previous transplant of any organ
• Current diagnosis of diabetes

The lower the EPTS score, the longer the recipient is likely to need the transplanted organ. These two numbers (the KDPI and the EPTS) are important in the allocation system. The 20% of kidneys that are expected to last the longest (those with a KDPI of 20% or less) will first be offered to patients likely to need a transplant the longest (those with an EPTS score of 20% or less).

Kidneys with high KDPI scores are expected to function for a shorter amount of time than others and may be best used to help candidates who are less able to stay on dialysis for a long time. The 15% of donated kidneys likely to function the shortest time (those with a KDPI of 85% or greater) will be offered to a wider area of the country than other kidneys. The goal is to encourage use of these kidneys by finding a suitable patient as quickly as possible.

Candidates qualify for waiting time based on the start date of chronic dialysis.

Candidates who are very difficult to match because they have developed immune system antibodies also get additional points on the list, as it is much more difficult to find a matching kidney for them.

The allocation system is very complex; it was designed with input from transplant professionals and people who have personal experience with donation and transplantation to make sure we are efficiently using a very precious resource—a kidney, the gift of life.

Candidates who are not on dialysis begin accruing wait time when they are put on the list and their glomerular filtration rate (GFR) is 20 ml/min or less. The GFR is a measure of kidney function.
LIVING DONOR TRANSPLANTATION

Often patients are concerned about asking someone else to donate a kidney to them for transplant. It is important to understand that living donation is a very safe procedure for the donors. Living donors can live a long and healthy life with one kidney. Donors are screened and tested very thoroughly before donation to ensure that removing a kidney will not affect their health in any adverse way. Our policy 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 four to six 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 delayed transplant function in living transplants.

3. There are fewer episodes of rejection. As a result, living donated kidneys tend to last longer and work better than deceased donor transplants.

4. Living donor transplants can be scheduled. This allows both you and the donor to plan for absences from work, childcare, and other social concerns.
LIVING KIDNEY DONATION

Living kidney donors must be between the ages of 18 and 65. They may not have a history of high blood pressure, cancer, diabetes, or autoimmune diseases such as Lupus. A donor must be a compatible blood type to donate directly to you (see below). If potential donors do not know their blood type, the living donor coordinator can arrange for this to be tested. If potential donors are not blood type compatible, participation in a paired exchange program is a great option.

Potential donors must call the transplant office to initiate the donor evaluation process. We are unable to call potential donors. They must initiate this process on their own. The donor coordinator is available to answer questions that anyone may have about the donation process.

Confidentiality of Patient Information

Due to patient privacy and to ensure that accurate information is obtained from both the potential recipient and potential donors, all information is treated as private. This means that no information about the donor will be shared with the potential recipient and no information about the recipient will be shared with the donor.

BLOOD TYPE COMPATIBILITIES:

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

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DONOR SURGICAL OPTIONS

Laparoscopic: Laparoscopic donor nephrectomy (kidney removal) uses small scopes and instruments (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 2-3 weeks of surgery.

Single Incision Laparoscopic (SILS): This is laparoscopic kidney removal using a special port that only requires a single 2½-inch incision on the lower abdomen. This technique leaves a very small scar. The surgeon will discuss this option with potential donors if they are candidates for this technique. The recovery period is the same as the laparoscopic procedure.
RISKS AND BENEFITS OF TRANSPLANTATION

Transplant is a form of treatment for kidney disease. Transplant is not a cure for your disease. Like any other treatment, there are risks and benefits which must be reviewed to determine if transplant is a treatment option that is right for you. Like other forms of treatment the potential benefits of transplant are not a guarantee.

Benefits include, but are not limited to the following:

- Patients may avoid the need for dialysis.
- Patients may have an improved quality of life.
- Patients may live longer than those who remain on dialysis.
- Patients may have improved blood counts and energy level.
- Patients may avoid use of insulin (in diabetic patients undergoing pancreas transplant).

Potential Risks may include, but are not limited to the following:

1. **Medical Risks:**
   - Patients may get a post-surgical wound infection.
   - Patients may be at risk for pneumonia or other infections.
   - Patients may develop a blood clot in the legs.
   - Patients may have transplanted organ rejection, failure, or the need for re-transplant.
   - Patients will have to take immunosuppressant medications for as long as they have a functioning transplant – which may be the rest of their life.
   - Patients may have complications that require re-operation.
   - Patients may be at a higher risk for certain cancers after transplant.
   - Patients may have irregular heart rhythms or cardiac complications.
   - Patients may have multi-organ failure or even death.

2. **Psychosocial Risks:**
   - Patients may experience some depression after transplant.
   - Patients may be at risk for post traumatic stress disorder (PTSD).
   - Patients may have generalized anxiety.
   - Patients may have difficulty dealing with the need to depend on others for assistance.
   - Patients may experience feelings of guilt.
RECEIVING THE CALL, 
AND GETTING A TRANSPLANT

Be prepared! You never know when you will get a call that an organ is available for you. Organ offers often happen in the middle of the night. Be sure you have worked out details like:

• Transportation: Who will drive you to the hospital?
• Child care: Who will watch or care for your children?
• Pet care: Who will care for your pets?

When the transplant coordinator calls you with an available organ offer, they will do several things:

• Brief medical/physical review: This is done to ensure that it is safe to proceed with transplant at that time.
• Instructions: The coordinator will give you specific instructions about coming to the hospital.

** You will need to bring a list of your current medications, your ID, and your insurance cards with you to the hospital**

You will be notified if you are the first patient for the available organ or a back-up patient. To avoid wasting available organs, there are always several patients in line for each organ. This is done to ensure that every available organ is transplanted.
ARRIVING AT THE HOSPITAL FOR TRANSPLANT

When you arrive at UPMC Pinnacle Harrisburg, you will need to report to the Patient Registration office (hospital main entrance). After you are in your hospital room, there will be a lot of activity. You will have blood drawn, a complete physical, EKG, chest x-rays, and an IV placed in your arm. Some of the blood that is drawn is used to perform a final crossmatch. This is a test to ensure that you and the available organ are compatible. This test takes between four to six hours until results are available.

It may be many hours from the time you arrive at the hospital until a determination is made if you will get the transplant. This time can be long and nerve-wracking for patients. The transplant coordinator will communicate information to you as it becomes available. A final determination to transplant an organ can not be made until the donor surgery takes place and our transplant team has the information they need. In addition, the final crossmatch must be completed. This process can take a very long time (many times more than 12 hours).

Patients are often called into the hospital for potential transplant several times until they actually are able to get a transplant.

When the organ is accepted by our team for transplant, you will be prepared to go to the operating room.
TO THE OPERATING ROOM

- Your transplant operation will take between two and four hours.
- Your transplanted kidney (and/or pancreas) will be placed in your abdomen (lower front side). This will allow us easy access to your newly transplanted kidney (and/or pancreas) for ultrasound or biopsy if necessary.
- Your incision will be between six to eight inches long.
- Your transplanted kidney (and/or pancreas) is hooked up to the main artery and vein that supplies blood flow to your leg. It is also connected to your bladder.
- In most cases, your natural (native) kidneys do not need to be removed. If a native nephrectomy (kidney removal) is required, your transplant coordinator and surgeon will discuss this with you.
- It is unusual for patients to require blood transfusion during or after transplant. In rare occurrences blood transfusions are required for a patient’s benefit and safety after transplant.
IMMEDIATELY AFTER SURGERY

You will wake up in the surgical intensive care unit (ICU), where you will stay overnight. During this time, your heart rate, blood pressure, and urinary output will be monitored closely.

You will have a special IV, called a central line, inserted near your collar bone (placed while you are asleep in the operating room). This catheter allows us to monitor your fluid levels, as well as give you fluids and medications as needed.

You will have a catheter in your bladder. This will allow us monitor your urine output closely. You will be asked to get out of bed the day after your surgery and start walking. This is done to prevent post-op complications such as blood clots and pneumonia.

Everyone’s hospital stay varies based on an individual’s needs. Most patients are in the hospital four days after transplant. During this time, the transplant coordinators will educate you about how to care for yourself and your newly transplanted organ.
Routine Expectations After Transplant

There are several expectations that patients must be prepared to meet to ensure success after transplant. Understanding these expectations prior to deciding to undergo transplant is very important.

1. **Return to Clinic** – patients are expected to return to clinic for care and management after transplant on a routine basis and as requested for urgent issues. Routine post-op visits include visits at 1, 2, and 4 weeks after transplant, 3, 6, and 9 months after transplant. In addition, visits at one year, 18 months, and then on an annual (yearly) basis are expected. We can not provide transplant patients safe care without seeing them in clinic on a regular basis.

2. **Get Blood Drawn** – patients are expected to get blood work drawn on a frequent basis after transplant. The routine schedule for blood draws is as follows:
   a. 0-6 months after transplant – blood draws two times a week
   b. 6-12 months after transplant – blood draws one time a week
   c. 12-18 months after transplant – blood draws once every other week
   d. After 18 months – blood draws once a month
   e. After 24 months - every three months

3. **Take Medications** – Patients are required to take medications at least two times a day and may be required to take medications up to four times a day after transplant.

4. **Take Vital Signs** – Patients are required to take their weight once a day and their blood pressure and temperature twice a day after transplant and write that information down.
LIFE AFTER TRANSPLANT

This explains why the expectations outlined in the prior section are in place for patients after transplant.

*Take Your Medications:* You will need to take medications every day for the rest of your life. These medicines are extremely important. They prevent your body from rejecting (destroying) your transplant organ. Skipping doses of medications or not taking them as prescribed puts patients at higher risk for rejections. Patients often do not feel bad if a dose or two of medication is skipped, but damage may occur to the transplanted organ. When a patient starts to feel bad it is often too late to save the transplant from rejection, and the patient must return to dialysis.

*Get Blood Drawn:* After transplant, you will need to have blood drawn frequently. This is a way for us to keep a very close watch on the function of your transplanted organ. Blood draws allow us to address small changes before they become a big problem and affect your transplanted organ. Blood draws also allow us to adjust medications to make sure dosages are safe and effective for you.

*Return to Clinic:* You will need to return to our post transplant clinic for follow up and care on a regular basis. It is not safe for us to provide you care and medications without seeing you in clinic on a routine basis.

*Take Your Vital Signs:* Take your blood pressure, temperature, and weight daily and write this information down. This is basic but important information we will need to know to take care of you after transplant. If you call the office with questions or concerns we will need this information to safely take care of you.

Not doing any or all of the above requirements is considered noncompliance. Patients who are noncompliant after transplant (not following instructions they are given) and lose/reject their transplanted organs, may not be considered for another transplant.

Receiving a transplant is a very precious gift. It is your responsibility to take very good care of your transplanted organ. We are here to help you do that in every way we can.
MEDICATIONS

Immunosuppression Medications: These are medications that you will need to take for the rest of your life. These medications will suppress your immune system. Your immune system is responsible for fighting off infections and destroying invading foreign substances. Your immune system will look at your transplanted organ as something foreign that does not belong. As a result, it will try to attack and destroy your newly transplanted organ. This is known as rejection. To prevent this from happening, you will need to take medications to decrease the function of your immune system (immunosuppression) for the rest of your life. After your transplant, you must take these medications FOREVER.

IF YOU EVER STOP TAKING THESE MEDICATIONS, YOU WILL LOSE YOUR TRANSPLANT, AND BECOME VERY SICK OR EVEN DIE!

Side Effects: These medications have potential side effects. Side effects that transplant patients experience can vary greatly. These can be anything from a few side effects for a short period of time, to many side effects for the life of your transplant.

The following is a list of some of the immunosuppressive medications that you will need to take after transplant, as well as their potential side effects.

1. Steroids (prednisone, Deltasone, Solu-Medrol IV)
   - Stomach ulcers, indigestion
   - Salt and water retention, as well as increased fatty deposits, especially in face area--round, full, “moon” face
   - Increased appetite, weight gain
   - Sun sensitivity
   - Cataracts/glaucoma
   - Difficulty sleeping
   - Mood swings
   - Delayed wound healing
   - Increased circulating blood sugar, diabetes
2. *Cellcept* (mycophenolate mofetil, MMF)
   - Decreased white blood cell count
   - Diarrhea and vomiting
   - Will cause birth defects in unborn child (Pregnancies must be planned after transplant. Your transplant coordinator needs to be informed so we can change your medicines.)

3. *Prograf* (Tacrolimus, FK 506)
   - Hand tremors
   - Numbness, tingling in hands and feet
   - High blood pressure
   - Nausea and diarrhea
   - Nightmares
   - Headaches
   - Slightly higher risk of drug-induced diabetes

4. *Simulect or Thymoglobulin*: These are IV medications which are given while you are in the hospital to prevent or rejection. They are powerful immunosuppressant medications.

Other medications you will be taking after transplant:

5. Anti-infectives—Because your immune system is affected by the anti-rejection medications, you will need to take antibiotics, anti-viral, and anti-fungal medications for several months after transplant. This will help prevent infections.
OTHER MEDICATIONS

You will be given other medications to counteract the side effects of the immunosuppressive agents as well as for problems independent of the transplanted organ. They include:

- Anti-ulcer drugs, to decrease stomach acid production
- High blood pressure medication
- Diuretic (Water pills)
- Pain-relief medications
- Vitamin supplements, such as multivitamins with folic acid
- Stool softener
- Baby aspirin

EQUIPMENT YOU WILL NEED AFTER TRANSPLANT:

1. Large 4-doses-a-day pill box
2. Scale
3. Blood pressure cuff
4. Thermometer
5. Telephone answering machine or active voicemail box
POSSIBLE COMPLICATIONS

1. **Rejection**: This is your body’s attempt to get rid of something it believes does not belong there (i.e. your transplanted organ). There are several kinds of rejection:
   - **Hyperacute** – This severe form of rejection happens within minutes or hours after transplant surgery. The new kidney and/or pancreas must then be taken out. This form of rejection is very rare.
   - **Acute** – This is the most common type of rejection. While it can happen anytime, it more frequently occurs during the first six months after transplant. This type of rejection can be treated with medication. It is usually reversible.
   - **Chronic** – This type of rejection can happen at any time, including years after the transplant. A common cause of (chronic) late rejection is not taking your medication, skipping days, or taking the wrong dosage.

   The medicines that you take will help lessen the number or severity of the rejection episodes, but may not completely prevent them. Most rejections that happen shortly after surgery can be treated medically.

2. **Infections**: After transplant you will need to take immunosuppression medications to prevent rejection for the rest of your life. Because of this, you will always be at some risk for infections. This risk is highest the first few months after transplant. Most infections can be treated at home with medications. Occasionally, patients will need to be admitted to the hospital for a few days for IV medicines to help treat infections. You will need to use good hand washing and common sense about infections after transplant.

3. **Delayed Graft Function**: The functioning of your kidney transplant may be delayed, causing a need for dialysis or longer hospital stay until the kidney “wakes up.” Delayed graft function may last from several days to several weeks.

4. **Diabetes**: Some of the immunosuppression medications you take may cause diabetes. Diabetes is an increased level of glucose (sugar) in your blood. Your blood glucose levels will be monitored for the first year to help detect any problems early. If you should develop diabetes, you will be taught how to deal with this problem. In some cases, it can be controlled by diet, weight loss, and exercise. Some people need oral medications or insulin to help control their diabetes.
5. **Technical Problems:** As with any major surgery, technical problems can occur during or after the transplant surgery. There may be bleeding, collection of lymph fluid (called lymphocele), obstruction of the ureter, or kinking or tightening of the blood vessels. These are rare, but if they occur, may require medical or surgical treatment and a longer hospital stay.

6. **Recurrence of Kidney Disease:** There is a possibility, with some disease processes, that the disease can reoccur in the transplant organ. Some of these diseases are MPGN (membranoproliferative glomerulonephritis), FSGS (focal segmental glomerulosclerosis), IGA nephropathy, diabetes mellitus, and others. We can discuss any concerns about this with you.

**OTHER THINGS YOU NEED TO KNOW**

- NO driving for two weeks after transplant.
- NO vigorous activity or lifting anything greater than 20 pounds for four to six weeks after transplant.
- NO birds or turtles due to the risk of infections from these animals. You are not allowed to have contact with them after transplant.
- No smoking or use of any tobacco products.
- Gardening/Soil—When gardening or working with soil, you will need to wear gloves.
- Swimming—You may swim after transplant when your incision is completely healed. You may swim in the ocean or in a pool (no lakes, ponds, creeks, due to risk of infections).
- Fluids—You will be encouraged to drink a lot of water and fluids after transplant. Your newly transplanted kidney will need this in order to work properly. We recommend our patients drink at least eight (8 oz) glasses of fluid a day after transplant.
- Diet—Your diet will not be as limited as before transplant. You will be able to eat many foods that you are currently not allowed to have while you are on dialysis. For example: bananas, potatoes, orange juice, and cheese.
- Return to normal activity—One of the major goals after transplant is to get you back to a normal lifestyle and activities as soon as possible. This will be a gradual progression, but you will be able to return to work, exercise, and perform many other activities shortly after receiving your transplant.
We recognize that deciding to get a transplant is an important decision for you. The transplant team at UPMC Pinnacle is here to help you through this difficult process. Being comfortable with your transplant team and the care that is provided to you is very important. We want to thank you for inquiring about transplant at our center. Please keep this manual for future reference as you go through the transplant process. If you have any questions throughout this process please contact your transplant coordinator so we can answer them for you.
IMAGING SERVICES

For the most up-to-date information and locations, visit UPMCpinnacle.com/Imaging

Carlisle Imaging Services
2 Jennifer Court
Carlisle, PA 17015
Phone: 717-960-3696
Fax: 717-245-2164

Imaging Center at UPMC Pinnacle Lititz
1500 Highlands Drive
Lititz, PA 17543
Phone: 717-625-5555

Imaging Center at UPMC Pinnacle Lancaster
250 College Avenue
Lancaster, PA 17603
Phone: 717-625-5555

Imaging Center of Lancaster
924 Red Rose Court
Lancaster, PA 17601
Phone: 717-293-0709
Fax: 717-293-0819

Imaging Services at New Oxford
New Oxford Medical Center
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
Thistle Hill Professional Center
2030 Thistle Hill Drive, Suite 101
Spring Grove, PA 17362
Phone: 717-225-7211

Lancaster Breast Imaging
Breast Health Center
2170 Noll Drive, Suite 200
Lancaster, PA 17603
Phone: 717-393-5187
Fax: 717-299-2374

UPMC Imaging Services
UPMC Outpatient Center
1160 Manheim Pike
Suite 200
Lancaster, PA 17601
Phone: 717-625-5555

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

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

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

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

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: 717-230-3700

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

The 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 Hanover at Hillside Imaging and Lab Services
Hillside Medical Center
250 Fame Avenue, Suite 104
Hanover, PA 17331
Phone: 717-316-7981

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

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

Women’s Imaging
4300 Londonderry Road
Second Floor, Harrisburg, PA 17109
Phone: 717-230-3700

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OUTPATIENT LABORATORY

For the most up-to-date information and locations, visit UPMC-Pinnacle.com/Imaging

HOSPITAL LOCATIONS

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: 717-782-5694

UPMC Pinnacle Lancaster
250 College Avenue
Lancaster, PA 17603
Phone: 717-291-8412

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

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

Littlestown Lab
Littlestown Professional Center
300 West King Street
Hanover, PA 17340
Phone: 717-359-8291

New Oxford Lab
New Oxford Medical Center
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

Polyclinic Campus, 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

Fredrickson 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: 717-944-1436

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 Lab
97 Progress Boulevard
Shippensburg, PA 17257
Phone: 717-530-1845
Fax: 717-530-1502

South Hanover Lab
1404 Baltimore Street
Hanover, PA 17331
Phone: 717-316-6717

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

UPMC Pinnacle Hanover at Hillside Imaging and Lab Services
250 Fame Avenue, Suite 104
Hanover, PA 17331
Phone: 717-316-7981

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 Campus. 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 Hotel Harrisburg
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 kidney 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.

**Immunosuppression** – Decreased function of the immune system
  - Decreases the body’s ability to fight off infections
  - Needed after transplant to prevent rejection

**Living 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.
# ONLINE RESOURCES

**To learn about kidney disease and treatment options:**

<table>
<thead>
<tr>
<th>Website</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>American Assn. of Kidney Patients</strong>&lt;br&gt;www.aakp.org</td>
<td>Provides advocacy, education, and interaction for kidney patients</td>
</tr>
<tr>
<td><strong>Explore Transplant</strong>&lt;br&gt;www.ExploreTransplant.org</td>
<td>Supports patients and kidney care providers with educational programs and training seminars</td>
</tr>
<tr>
<td><strong>Kidney School</strong>&lt;br&gt;<a href="http://Kidneyschool.org">http://Kidneyschool.org</a></td>
<td>Features educational models for patients and providers about kidney disease and its treatments</td>
</tr>
<tr>
<td><strong>Living Donors Online</strong>&lt;br&gt;www.livingdonorsonline.org</td>
<td>Provides information for patients, medical professionals, and the public</td>
</tr>
<tr>
<td><strong>National Kidney Foundation</strong>&lt;br&gt;www.kidney.org</td>
<td>Provides information for patients, medical professionals, and the public</td>
</tr>
<tr>
<td><strong>PKD Foundation</strong>&lt;br&gt;www.pkdcure.org</td>
<td>Offers comprehensive information about polycystic kidney disease</td>
</tr>
<tr>
<td><strong>Renal Support Network</strong>&lt;br&gt;www.rsnhope.org</td>
<td>Provides non-medical services to those affected by chronic kidney disease, including education about transplantation</td>
</tr>
<tr>
<td><strong>Renewal</strong>&lt;br&gt;www.life-renewal.org</td>
<td>Provides education, referrals, and logistical support to Jewish patients seeking and receiving living donor transplantation or living donors</td>
</tr>
<tr>
<td><strong>Transplant Recipients International Organization (TRIO)</strong>&lt;br&gt;www.trioweb.org</td>
<td>Provides education about transplantation in general, as well as financial issues around transplantation</td>
</tr>
<tr>
<td><strong>Transplant Living</strong>&lt;br&gt;www.transplantliving.org</td>
<td>Offers information about living donation and supporting patients throughout the process</td>
</tr>
<tr>
<td><strong>United Network for Organ Sharing</strong>&lt;br&gt;www.unos.org</td>
<td>Provides information and data about transplants, the waiting list, and transplant centers</td>
</tr>
<tr>
<td><strong>U.S. Dept. of Health &amp; Human Services</strong>&lt;br&gt;www.organdonor.gov</td>
<td>Provides comprehensive information about organ donation and transplantation</td>
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For financial assistance with transplant:

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<thead>
<tr>
<th>Organization</th>
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<tbody>
<tr>
<td>American Kidney Fund</td>
<td>Provides resources to compare dialysis facilities and learn about Medicare coverage for end-stage renal disease (ESRD)</td>
</tr>
<tr>
<td><a href="http://www.kidneyfund.org">www.kidneyfund.org</a></td>
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<tr>
<td>American Transplant Foundation</td>
<td>Provides education about alternative kidney transplant options:</td>
</tr>
<tr>
<td><a href="http://www.americantransplantfoundation.org">www.americantransplantfoundation.org</a></td>
<td></td>
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<tr>
<td>Centers for Medicare &amp; Medicaid Services (CMS)</td>
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<tr>
<td><a href="http://www.cms.gov/center/esrd.asp">www.cms.gov/center/esrd.asp</a></td>
<td></td>
</tr>
<tr>
<td>National Foundation for Transplants</td>
<td>Provides financial assistance with travel costs and expenses associated with living organ donation</td>
</tr>
<tr>
<td><a href="http://www.transplants.org">www.transplants.org</a></td>
<td></td>
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<tr>
<td>National Living Donor Assistance Center</td>
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<tr>
<td><a href="http://www.livingdonorassistance.org">www.livingdonorassistance.org</a></td>
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