



Your Kidney Donation Decision

Patient Information

Beaumont

Beaumont Transplant Clinic Directory

Transplant Services Beaumont Hospital, Royal Oak

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Contents

The Beaumont Transplant

Program 1

More than 40 years of excellence ... 1

Multidisciplinary transplant team.... 1

Objectives 2

General information.....3

Where are the kidneys?..... 3

What do kidneys do? 3

Kidney failure.....4

What is kidney failure? 4

Treating kidney failure.....4

Dialysis 4

Types of dialysis 4

Hemodialysis..... 4

Peritoneal dialysis 5

Kidney transplant5

Living donor kidney transplants..... 6

Option for incompatible donors..... 7

Paired exchange..... 7

Chain transplants 8

Deceased-donor kidney transplants
..... 8

Living kidney donor selection

criteria.....8

Beaumont’s selection criteria for live
donor candidacy..... 9

Confidentiality 10

Informed consent for evaluation .. and donation..... 11

What will my life be like with a single
kidney?..... 12

Potential risks associated with living
donation evaluation..... 13

Potential risks associated with living
donation surgery and long term 13

Potential medical or surgical risks
..... 13

Potential psychosocial risks 14

Potential financial impacts..... 14

Living kidney donation initial

evaluation 15

Blood typing 16

Tissue typing..... 16

Crossmatch 17

Choosing the donor 17

Living kidney donor evaluation . 18

Evaluation day..... 18

Transplant assistant..... 18

Transplant nurse coordinator 18

Transplant social worker..... 19

Transplant financial coordinator/
representative..... 20

Transplant surgeon 22

Transplant nephrologist 22

Independent living donor advocate
..... 22

Transplant dietitian..... 23

Transplant pharmacist..... 23

Team decision.....24

What test will I have to do during the
evaluation phase?24

Laboratory.....24

24-hour urine collection.....24

Glucose tolerance test 25

Chest x-ray 25

Electrocardiogram (EKG or ECG).. 25

Colonoscopy 25

Cardiac stress test..... 25

CT angiogram scan 25

Pap smear and pelvic exam 26

Mammogram..... 26

PSA (prostate specific antigen) 26

Miscellaneous testing 26

What happens when all the tests are completed satisfactorily?..... 26

Before surgery 27

Kidney donation surgery 27

Laparoscopic donor surgery 28

Conversion of laparoscopic to open surgery 29

Day of surgery 29

Will I need a blood transfusion during surgery?..... 30

After surgery 30

Complications 31

What guidelines should I follow after surgery? 33

How long will my recovery take?... 33

When can I drive?..... 33

When can I go back to work? 34

How can you protect your remaining kidney 34

Monitoring..... 34

Controlling blood pressure..... 35

Eating sensibly 35

Avoiding injury 35

Pregnancy 36

Feel free to ask questions..... 36

Closing thoughts..... 36

Definitions of terms 37

Transplant administrative staff .41

Notes and questions.....42-43

Beaumont multi-organ transplant center44

Living kidney donor signature sheet 44

Materials..... 44

THE BEAUMONT TRANSPLANT PROGRAM

The Beaumont Transplant Program is committed to providing comprehensive medical care to patients with chronic kidney disease and guiding patients in choosing the best possible individualized treatment options for their end-stage renal (kidney) disease.

More than 40 years of excellence

The first kidney transplant was performed at Beaumont Hospital, Royal Oak in 1972. Since that time, the Kidney Transplant Program has performed more than 2,400 adult kidney transplants. This extensive experience allows the transplant team to specifically tailor immunosuppression to the individual needs of our patients, as well as perform technically challenging kidney transplant procedures.

The Beaumont Transplant Kidney and Living Donor Kidney Programs are Medicare approved.

Beaumont Transplant Program outcomes are available for national comparison through the Scientific Registry of Transplant Recipients (SRTR). The SRTR provides ongoing evaluation of the status of solid organ transplantation in the United States. SRTR responsibilities include reporting outcome information to transplant programs, organ procurement organizations, policy makers, transplant professionals, transplant recipients, organ donors and donor families, and the general public. The SRTR reports include transplant center specific comparisons of patient and kidney transplant survival. All patients will be provided a handout containing the Beaumont Transplant Program's most recent available SRTR data. All transplant center specific reports are also available for patient review at srtr.org.

Multidisciplinary transplant team

The specialized multidisciplinary team includes:

- transplant surgeons
- transplant nephrologists (a physician who specializes in kidney disease)
- transplant nurse coordinators
- transplant social workers

- independent living donor advocates
- transplant dietitians
- a transplant pharmacist
- transplant financial coordinator and representative
- other team members including a histocompatibility specialist, anesthesiologist and infectious disease physician

We work very closely with our patients and their families, referring physicians and other hospital staff members to provide support, guidance and state-of-the-art medical care in preparation for the journey through the transplant process.

Beaumont has a multi-physician and multi-surgeon Transplant Team available 365 days a year, 24-hours a day, to provide transplant program coverage and to respond when an organ (deceased donor or kidney paired donation donor) is made available for transplant.

Objectives

This booklet will help you understand the following information:

- kidney (renal) failure
- forms of treatment for kidney failure
- the interview process prior to donation
- diagnostic studies required during the evaluation phase
- time it takes to complete the evaluation phase
- admission to the hospital and the hospital stay
- expectations before and after surgery
- life after donating a kidney

Please keep in mind that this booklet is for general information only. Your individual treatment and experience may vary.

GENERAL INFORMATION

Where are the kidneys?

The kidneys are bean-shaped organs in the back of your abdomen. They lie on either side of the spine. An adult kidney weighs 4 to 6 ounces each and are about the size of a fist. Normally a person has two kidneys. Occasionally people are born with only one kidney and still live normal lives.

What do kidneys do?

Kidneys filter and remove waste products from the blood, help control blood pressure, control fluid and electrolyte balance, and make hormones such as erythropoietin, which stimulates red blood cell growth.



KIDNEY FAILURE

What is kidney failure?

About 20 million American adults have chronic kidney disease, or CKD, and millions of others are at increased risk. End stage renal disease (ESRD), or kidney failure, occurs when the overall function of the kidneys declines to less than 20 percent of normal. There are two types of kidney failure: Acute and chronic.

- Acute kidney failure occurs when the kidneys lose function very rapidly. This may occur within a few hours or days. Kidney function may return to normal or progress to CKD or ESRD.
- Chronic kidney failure occurs when the kidney tissue is slowly and permanently destroyed. Often, no symptoms occur until less than 25 percent of kidney function remains. When the kidney function declines to less than 20 percent of normal, planning for dialysis or a kidney transplant becomes necessary.

TREATING KIDNEY FAILURE

Dialysis

When the kidneys do not function, fluids and waste products accumulate in the body. One method used to remove the build-up of fluid and waste products from the body is dialysis. However, dialysis cannot perform many of the other normal kidney functions. At best, dialysis only provides the equivalent of 8 to 9 percent of kidney function.

Types of Dialysis:

Hemodialysis

Hemodialysis uses a machine to remove the fluids and waste products from the blood stream. Patients may have a temporary catheter placed for hemodialysis access. Most hemodialysis patients have a connection called a fistula or graft. This connection is made between an artery and a vein in the patient's arm. The fistula or graft provides a large blood vessel (or tube) through which blood can easily be removed and replaced.

Blood flows from the patient's artery through a special filter called a

dialyzer. While the blood is in the dialyzer, waste products and excess water are removed and washed away. Blood is then returned to the patient through a vein. Hemodialysis is usually needed three times each week for two to four hours per treatment. Most patients go to outpatient dialysis centers for their treatments, but hemodialysis can also be done at home.

Peritoneal dialysis

Peritoneal dialysis (also called continuous ambulatory peritoneal dialysis, or CAPD) also removes waste products from the body. A catheter (a soft plastic tube) is surgically placed into the abdomen just below the navel. A solution called peritoneal dialysate flows through the catheter into the abdominal cavity. Waste products and excess water move from the body fluids into the dialysate. The dialysate is then drained out of the body. Peritoneal dialysis is repeated four times per day, every day of the week. Patients are taught how to perform peritoneal dialysis for themselves. This method of dialysis allows the patient to be more mobile and independent. Some patients are candidates for the cyclor, which is an automated way to perform peritoneal dialysis.

KIDNEY TRANSPLANT

Kidney transplants are a widely accepted treatment for end-stage kidney failure. Transplantation is not a cure, but is a preferred alternative to dialysis. About 17,000 kidney transplants are successfully performed each year in the United States. However, about 100,000 people are waiting for a kidney transplant.

Transplant hospitals determine candidacy for transplantation based on existing hospital specific guidelines or practices and clinical judgment.

Kidneys can be donated by a living donor (living related or living non-related) or a deceased donor (individuals who have agreed to donate their organs at the time of their death).

Success rates vary depending on each kidney recipient's situation.

The recipients must take medications for as long as the transplanted kidney remains functioning and be diligent in follow-up office appointments.

A well-functioning transplant can last 20 years or more, however, many kidney transplants do not last the rest of the recipient's life. Reasons for losing the transplanted kidney include: rejection, surgical problems, side effects of medications, recurrence of the original disease which caused kidney failure or nonadherence to medical recommendations.

Living donor kidney transplants

Living donor kidney transplants have been performed since 1954. Currently, living donor surgeries comprise approximately 35 percent of kidney transplants in the United States.

There are two types of living donor transplants:

- living related
- living non-related (includes altruistic and kidney paired donors)

A living related kidney may be donated by a blood relative such as a mother, father, sister, brother, son, daughter, cousin, aunt or uncle. Patients who have the option of a living related kidney transplant have certain advantages:

- Generally, a living related kidney provides a closer genetic match than a deceased donor kidney. This increases the chance that the recipient's body will accept the kidney.
- Typically, a closer matched kidney will function for a longer time.
- The recipient may be able to be treated with lower doses of immunosuppression medicine.
- The recipient will not have a long wait on the deceased donor kidney list, where the average wait is five years. Receiving a kidney transplant sooner often means that the recipient is in better health, making recovery easier.
- Early donation may eliminate the need for dialysis. The longer an individual stays on dialysis, the more negative its impact on survival and health.

- The surgery may be scheduled at a time convenient for both the donor and recipient.
- Living donors complete a thorough medical evaluation providing a high quality kidney for the recipient.
- The live donor kidney is transplanted into the recipient shortly after removal, which helps to preserve kidney function and reduce the risk of complications.

Success rates for the transplanted kidney (graft) at one year, for persons receiving a living related kidney transplant, may reach 95 percent. The average living-related kidney lasts 18-25 years.

A living non-related kidney transplant (sometimes called “living unrelated kidney transplant”) includes anyone who is living but not blood related, such as the spouse or a friend. A person who wishes to donate to a person with whom they have no connection is called an “altruistic” donor.

The advantages to a living non-related kidney transplant are the same as the living-related kidney transplant. Statistically, a living non-related transplant recipient has a higher success rate than a deceased-donor kidney recipient.

One year success rates for the transplanted kidney for someone receiving a living non-related kidney transplant may reach 95 percent. The average living non-related kidney lasts 15 to 20 years.

Option for incompatible donors

Some people who wish to become a living donor are not compatible with the intended recipient. For instance, a donor may have blood type A, while the recipient blood type B. Depending on your incompatibility, other approaches to transplant are available.

Paired exchange

With paired-organ donation, a donor exchanges his or her kidney with a living donor from another incompatible donor/recipient pair to create two compatible pairs. The donor will not directly donate his or her kidney to the intended recipient, but exchanging with another

incompatible pair will allow for two compatible transplants.

Chain transplants

Donor chains work similarly to paired kidney donations in that they involve healthy and willing, but incompatible, donors. The chain is initiated by what is called a non-directed donor. A non-directed donor is someone who offers to donate a kidney without a designated recipient, but with the wish to donate to someone in need of a transplant.

Deceased-donor kidney transplants

Usually deceased donors are individuals who have been declared brain dead. The individual's family is offered the option of organ and tissue donation and provide consent for the donation.

When a person is on the United Network for Organ Sharing (UNOS) waiting list for a kidney, they are waiting for a deceased donor kidney. Unlike living-related and living non-related kidney transplants, the deceased donor kidney transplant surgery cannot be scheduled ahead of time.

It is likely that your intended transplant recipient is on or is in the process of completing their evaluation to be placed on the deceased donor waiting list. They will remain on the deceased donor waiting list while you are in the process of completing your donor evaluation. As a result, a deceased donor kidney offer may become available before your evaluation is complete.

Success rates for the transplanted kidney at one year, for persons receiving a deceased-donor kidney transplant, are about 93 percent. The average deceased-donor kidney is expected to last 10 to 12 years.

LIVING KIDNEY DONOR SELECTION CRITERIA

All transplant centers are required to have selection criteria for living donors. Some of these criteria are mandated by UNOS and others are transplant center specific.

The reason for the criteria is to ensure safety for the potential donor

and to provide an unbiased selection.

Beaumont's selection criteria for live donor candidacy

Living kidney donor candidates are generally between the ages of 18 and 60. Being both under 18 years of age and mentally incapable of making an informed decision are an exclusion criteria for kidney donation. Individuals older than 60 can be considered on a case by case basis if they are highly motivated and do not exhibit prohibitive co-morbidities (medical conditions).

The candidate must possess decision-making capacity to understand kidney donation including its risks. The candidate must also understand the risks, benefits, and alternative treatments available to the recipient.

Each candidate presenting for evaluation to be a living donor to a transplant candidate must be reasonably healthy and without evidence of kidney disease. They will undergo detailed evaluation by a transplant nephrologist, donor surgeon, transplant coordinator and social worker. This process is conducted to obtain a comprehensive medical and psychological assessment of the potential living donor. There are standard tests that are required to be performed in order to ensure that it is safe to be a living kidney donor. If those tests raise any questions, additional testing to clarify acceptability may be required. In the event that medical, anatomic, psychological or other factors which preclude donation are identified, the potential donor will be advised that they are not a candidate to donate their kidney.

The following criteria exclude consideration as a kidney donor:

- uncontrollable hypertension or history of hypertension with evidence of end organ damage
- HIV
- diabetes
- active malignancy, or incompletely treated malignancy
- evidence of acute symptomatic infection (until resolved)
- diagnosable psychiatric conditions requiring treatment before donation including any evidence of suicidality

Determination for live kidney donor candidate eligibility has been developed within the framework of the hospital's mission for the care of persons without regard to race, national origin, religion, gender, and sexual orientation.

If you do not meet Beaumont Transplant's selection criteria for kidney donation, you have the option to seek another evaluation at another transplant center that may use different selection criteria.

CONFIDENTIALITY

Beaumont Transplant Center will take all reasonable precautions to ensure confidentiality for both the living donor and the recipient. If, during the process of your work-up, you are found to have a previously undetected health problem, you will be counseled regarding it. If a health problem is detected that would prevent you from being a donor, your recipient would only be told that it would be medically unsafe for you to proceed. In other words, no details of your health issue would be shared with the recipient.

Health information obtained during your donor evaluation will be subject to the same regulations as all patient records. There are certain conditions (such as communicable diseases) that the transplant program must report to local, state or federal public health authorities.

If an infectious disease or malignancy pertinent to recipient care is discovered during the donor's first two years of post-operative follow-up care, by regulation these findings:

- will be disclosed to the donor
- may need to be reported to local, state or federal public health authorities
- will be disclosed to their recipient's transplant hospital
- will be reported through the Organ Procurement and Transplantation Network (OPTN) Improving Patient Safety Portal

The donor's identity may also be disclosed on the recipient's insurance Estimate of Benefits form.

Similarly, confidential medical information about the recipient is not shared with the potential donor. Any transplant candidate may have risk factors for increased adverse outcomes (including complications and/or loss of kidney transplant) or mortality (death) that:

- exceed local or national averages
- do not necessarily prohibit transplantation
- are not disclosed to the living donor

Beaumont can disclose to the living donor certain information about the transplant candidate only with the permission of the candidate. This includes the reasons for the transplant candidate's increased likelihood of adverse outcomes, and personal health information gained during the transplant candidate's evaluation which is confidential and protected under privacy law.

INFORMED CONSENT FOR EVALUATION AND DONATION

Donation of a kidney is one of the most important decisions of your life. It is a decision which requires a great deal of information and thought. There are many advantages to living donation (as outlined previously in the section describing living donation). However, you must consider how kidney donation may affect your life: medically, emotionally and financially. The informed consent process will help you to understand the risks and benefits of donating a kidney.

Donors must be volunteers who do not expect any material gain from donation. If you ever feel that you are being coerced (pressured) to donate, it is important to share this information during the donor work-up. Those donors with any evidence of coercion to donate their kidney will be excluded from donation.

It is a federal crime for the potential donor to knowingly acquire, obtain or otherwise transfer any human organ for valuable consideration (i.e., for anything of value such as cash, property, vacations). If there is high suspicion of illegal financial exchange between the donor and the recipient for valuable consideration, the

individual will not be considered as a kidney donor.

You have the right to stop the donation process at any time. If you choose not to become a donor, your recipient still has the options of dialysis, an alternate living donor, a deceased donor transplant or stopping treatment (palliative care or hospice).

What will my life be like with a single kidney?

Donating a kidney should not increase your risk for kidney failure or shorten your life expectancy. This risk should be no greater than people who are born with only one kidney, and people born with only one kidney tend to have normal life expectancies. Nevertheless, because you would be left with only one kidney, an injury to that kidney or developing a disease process such as a kidney stone would be a risk to the function of your only remaining kidney.

The remaining kidney actually grows approximately 30 to 50 percent larger and works harder than before. After one to two years, it will do approximately the work of one and one-half kidneys.

Post-donation kidney function and how chronic kidney disease (CKD) and end-stage renal disease (ESRD) might potentially impact the donor in the future:

- On average, donors will have a 25 to 35 percent permanent loss of kidney function after donation.
- Although baseline risk for ESRD does not exceed that of members of the general population with the same demographic profile, risk for ESRD for living kidney donors may exceed that of healthy non-donors with medical characteristics similar to living kidney donors.
- Donor risks must be interpreted in light of the known disease course of both CKD and ESRD. When CKD or ESRD occur, CKD generally develops in mid-life (40 to 50 years old) and ESRD generally develops after age 60. The medical evaluation of a young potential donor cannot predict lifetime risk of CKD or ESRD.
- Donors may be at a higher risk of CKD if they sustain damage to the remaining kidney. The development of CKD and subsequent progression to ESRD may be more rapid with only one kidney.

- Dialysis is required when reaching ESRD.
- Current practice is to prioritize prior living kidney donors who become kidney transplant candidates.

Though living donation has many advantages for the kidney transplant recipient, donation of your kidney will not improve your health and has a potential for harming it. This potential is small, but these issues must be considered when making your choice to donate.

Outlined below are some of the potential risks associated with the donor evaluation process and donation.

Potential risks associated with living donation evaluation:

- allergic reaction to contrast
- discovery of reportable infections
- discovery of serious medical conditions
- discovery of adverse genetic findings unknown to the donor, and discovery of certain abnormalities that will require more testing at the donor's expense or create the need for unexpected decisions on the part of the transplant team

Potential risks associated with living donation surgery and long term:

Potential medical or surgical risks

Even though most living donor surgeries are done laparoscopically, there are risks associated with anesthesia and any surgery. Obesity, hypertension, age or other donor-specific medical conditions may increase risk for surgical complications.

The following surgical, medical, psychosocial and financial risks are associated with living kidney donation. These risks may be transient or permanent and include, but are not limited to, the following:

- Death: Living kidney-donor surgery is estimated to have a 0.03 percent mortality (death) rate (i.e., 3 in 10,000). To put this in context, this is the approximate risk of dying in a motor vehicle accident on the streets of Metro Detroit every year or the risk of a construction worker dying on the job annually. According to the United States Census Bureau, the 2014 infant mortality rate in the

U.S. is 0.58 percent (i.e., 58 in 10,000), indicating that it is almost 20 times riskier to be born in the United States than to donate a kidney.

- Scars, pain, fatigue, hernia, wound infection, blood clots, pneumonia, nerve injury and other consequences typical of any surgical procedure.
- Decreased kidney function.
- Abdominal or bowel symptoms such as bloating, nausea and/or developing bowel obstruction.
- Acute kidney failure and the need for dialysis or kidney transplant for the donor.
- There may be long-term complications that are currently unforeseen.

Potential psychosocial risks

- problems with body image
- post-surgery depression or anxiety
- feelings of emotional distress or bereavement if the transplant recipient experiences recurrent disease or in the event of the transplant recipient's death
- changes to the living donor's lifestyle

Potential financial impacts

- personal expenses of travel, housing, child care costs and lost wages related to donation might not be reimbursed (resources may be available to defray some donation-related costs)
- need for life-long follow-up at the donor's expense
- loss of employment or income
- negative impact on the ability to obtain future employment
- negative impact on the ability to obtain, maintain or afford health, disability and life insurance
- future health problems experienced by living donors following donation may not be covered by the recipient's insurance

All of these issues will be discussed with you in detail on your initial evaluation day and throughout the evaluation process. You will be asked to sign a consent that you understand the evaluation

and donation process and that all of your questions have been answered. If at any time during the process of your evaluation you are uncomfortable considering donation, you have the right to opt out of donating and your reason for this will be kept confidential.

When you agree to become a living kidney donor, you must also commit to UNOS required post donation follow-up testing at six months, one year and two years post donation. This means that you will return to the Beaumont Transplant Center at those intervals for blood work and a urine sample, and a brief exam to assess your blood pressure, weight and general health. In addition to this follow-up, it is recommended that you have an annual physical exam with your primary care physician, so that anything that may affect your remaining kidney is treated in a timely manner.

LIVING KIDNEY DONATION INITIAL EVALUATION

The confidential donor evaluation phase begins when you contact the Beaumont Transplant program office. You will be mailed a copy of this donor education booklet, an initial consent for blood work, an outpatient general consent to treatment form, Beaumont's notice of privacy practices and a donor questionnaire which asks questions about your medical history. It is essential that you answer all of the information completely and accurately on this questionnaire, sign the forms and return them in the envelope provided.

The kidney living donor nurse coordinator will call you to review the medical history that you have submitted. If there are no immediate concerns that would exclude you from being considered as a kidney donor (as listed in the selection criteria), an appointment will be made for lab work to determine if your blood type matches your potential recipient. There are no diet or fluid restrictions prior to this test.

If you do not live in the area where Beaumont Hospital, Royal Oak is located, the transplant nurse coordinator will help arrange to have the blood drawn near your home. Your blood will need to be delivered by next-day mail service to our laboratory for testing. Our office will

provide all the necessary blood tubes, instructions and pre-paid mailing envelopes.

Blood typing

There are four different blood types. O is the most common blood type. The next most common is blood type A, then B, and the rarest is blood type AB. The blood type of the donor must be compatible with the recipient. Blood type O is considered the universal donor. People with blood type O can give to any other blood type. Blood type AB is the universal recipient because they can receive an organ from any blood type.

For kidney transplant, it does not matter if you are Rh positive or negative (i.e. A+ or A-)

If a recipient's blood type is:	The donor must be:
O	O or non-A1 (a subtype of A)
A	A, A1, non-A1 (subtypes of A) or O
B	B, O, non-A1, non-A1B
AB	A, AB, A1, non-A1, non A1B, B or O

Tissue typing

Tissue typing, also known as human leukocyte antigen (HLA) typing, is a blood test that uses DNA-based technology to identify genetic similarities (antigens) between the donor and the recipient. Tissue typing reveals how many antigens you and the person receiving your kidney (recipient) have in common.

There are six antigens that have been shown to be the most important in organ transplantation. Of these six antigens, we inherit a set of three from each parent. Because of the way we inherit genes from our parents, it is possible for one sibling to match all six antigens (also referred to as HLA identical or a perfect match) with another sibling. It is also possible that among siblings, there might be either a three-antigen match (haplotype) or a zero-antigen match (complete mismatch). Parents and their natural children will always match three antigens (haplotype).

The ideal match would be an identical twin. Since few individuals have identical twins, the next best match is a living-related, six-antigen match. However, it is not necessary to have a six antigen match in order to have excellent kidney transplant function.

Crossmatch

A crossmatch provides information about how the transplant recipient will react to your kidney. A “positive” crossmatch means that your kidney would likely be rejected if placed in the recipient’s body. A “negative” crossmatch means that your kidney is compatible with the recipient.

A person’s blood antibodies may change over time, so the crossmatch is repeated between potential donors and recipient candidates just prior to transplant.

If the blood test is reported as a positive crossmatch, despite your blood type compatibility and the genetic matching, you may not be considered as a living donor for this recipient.

CHOOSING THE DONOR

Once all interested donors have been tested, one individual will be identified as the kidney donor of choice. This may be the person that has the closest genetic match to the recipient, but multiple factors are taken into account. If the identified donor is not able to continue the donor evaluation, another individual is chosen from those available.

Many things are considered beyond the initial blood testing. Your transplant nurse coordinator will discuss these issues with you when he or she calls with your results. Please write down questions you have so they can be answered. Tell your transplant nurse coordinator about any concerns you have. The transplant nurse coordinator must know how you are feeling about being a kidney donor, so never

hesitate to call. Be honest about your concerns, issues and questions. Your conversations with the transplant nurse coordinator will be confidential from the recipient.

LIVING KIDNEY DONOR EVALUATION

Evaluation Day

If your blood type is compatible with the potential kidney transplant recipient and you choose to proceed, you will be scheduled for a visit in the Transplant Clinic for a thorough medical and psychosocial evaluation that typically takes about six hours to complete. We suggest that you bring a lunch. You are encouraged to bring family members for support and for them to learn about the evaluation and donation process.

You will see the following transplant team members at your initial evaluation:

Transplant assistant

On the day of your evaluation appointment, the transplant assistant will collect the medical records you have brought with you and will coordinate your appointments with the individual members of the transplant team. Should you choose to proceed with further evaluation for donation, the transplant assistant will be available to help you schedule the tests that will be part of your kidney donation work-up.

Transplant nurse coordinator

The transplant nurse coordinator's role is to provide continuity of care while you are being evaluated for donating a kidney. Your transplant nurse coordinator is a liaison between the transplant team and you to be sure that accurate information is being shared and recorded in your medical record.

On the initial evaluation day, the transplant nurse coordinator will review this donor education book with you along with other educational materials. The nurse coordinator will answer your questions, or refer you to another transplant team member who can answer them more completely.

You will be informed about the potential success of kidney donation both for you and the recipient. You will be given a copy of the national statistics and our program's success rate (transplant recipient

outcomes) from the most recent Scientific Registry for Transplant Recipients (SRTR). You will be made aware about all Centers for Medicare & Medicaid (CMS) outcome requirements not being met by the transplant hospital if applicable.

You will be asked to sign a consent to proceed with further testing and donation. You may decline to be a donor at any time, even after signing this consent.

The transplant nurse coordinator will work closely with you to be sure that tests are being scheduled and completed, results are being sent to the transplant office for review, communication lines are staying open and questions are being answered. It is very important that you keep in touch with your transplant nurse coordinator. Any test results that you might have from other hospitals should be sent directly to your transplant nurse coordinator. Your work-up is successfully completed when all of the necessary medical information has been reviewed and approved by the transplant team.

Transplant social worker

The transplant social worker's role is to make sure you have adequate emotional support and resources to help in your decision to donate a kidney. At the time of your evaluation, the transplant social worker will meet with you, and possibly your support person.

The social worker will ask you many personal questions, including some about your sexual history, past or present substance use disorder (alcohol and/or recreational drugs) and current or past legal problems. It is important for you to answer these very personal questions honestly in order for your safety and the safety of your potential recipient.

The social worker will also discuss possible emotions that you may feel after donation. Most living donors report positive feelings after donation because they have helped improve the kidney transplant recipient's quality of life. However, some living donors report feeling depressed after donation. This feeling may be the result of fatigue following surgery, renewed demands on you by family and work while

you are still recovering, or the sudden letdown following a major life event that had been marked by lots of energy, anxiety and attention from others.

If you donate to a spouse, family member or friend, the nature of your relationship with that person may change. You or the recipient may feel guilt, indebtedness, conflict or regret and experience manipulation and other destructive behavior. Seek professional counseling if your relationship becomes dysfunctional.

Your mood may also be influenced by what happens to the recipient of your donated kidney. The recipient may reject the transplanted kidney or may die despite the transplant. It's natural to go through a grieving process in this circumstance.

The transplant social worker will be available to you throughout the evaluation and donation process to answer questions and offer resources for support.

Transplant financial coordinator/representative

The transplant financial coordinator/representative will participate in your donor evaluation by discussing any financial concerns you may have and counsel you regarding available resources. The financial representative is also available by phone to answer your questions.

In order for patients to receive full Medicare benefits for a transplant, they must go to a Medicare approved facility. These transplant programs must meet Medicare criteria for the number of transplants performed and the overall quality of patient outcomes. If a transplant is done in a non-Medicare approved transplant center, it could affect the transplant recipient's ability to have immunosuppressant medications paid under Medicare Part B. Beaumont is a Medicare approved kidney transplant center.

The Beaumont Kidney Transplant Program is Medicare approved.

Patients at a Medicare approved facility may have to meet certain selection requirements to be eligible for Medicare coverage. This criterion may include a patient's age, and the medical condition for

which they may need a transplant.

Patients transplanted at Medicare approved facilities, who have Medicare Part A at the time of transplant, are eligible for immunosuppressant medication coverage at a reimbursement rate of 80 percent. Patients must have Medicare Part B at the time they purchase medications.

The transplant donor carries no financial responsibility for services rendered as related to the kidney transplant donation.

All services related to transplant donation are covered either under the recipient's insurance coverage or by Medicare. Services rendered for predetermination of donor candidacy such as laboratory work up, outpatient procedures, inpatient services such as surgery and hospitalization, as well as post- surgical aftercare is covered under Medicare. However, a test is that is considered to be routine health maintenance (such a mammogram) is the responsibility of the donor.

Personal expenses of travel, housing, childcare costs, loss of wages related to donation, telephone and television while in the hospital are not covered. However, resources might be available to defray some donation-related costs. The transplant social worker or financial coordinator/representative may provide assistance with the application process.

Your required post-donation follow-up visits for health/social screening at six months, one year and two year intervals will be covered by Medicare. If you must have these post-donation health follow-up visits completed by your local family physician due to distance from Beaumont-Royal Oak, you will be provided information about what testing is required and covered as part of your follow-up care during the two years after donation. Physician fees related to the transplant donation are covered under the recipient's insurance.

In the event of unforeseen complications directly related to the transplant donation, the services rendered would be reviewed for possible payment under the recipient's insurance coverage. However,

there is a possibility that future problems related to donation may not be covered by insurance.

If you inadvertently receive a bill for a test directly related to your kidney donor evaluation, we apologize. Please immediately forward the bill to the transplant financial coordinator.

Donation may have a negative impact on the ability of the donor to obtain future employment. It may also impact the ability to subsequently obtain health, life and disability insurance.

Transplant surgeon

The transplant surgeon will ask you about your medical history, perform a physical exam and discuss the kidney donation operation. This is the doctor who will do the living kidney donor surgery and care for you after surgery.

Transplant nephrologist

The transplant nephrologist will complete a medical evaluation including a physical exam. It is vital to openly share your health history, your family health history, medical problems, hospitalizations and test results with the nephrologist.

The nephrologist will also ask you several questions about travel and other risk factors for infections that could be passed to a recipient.

Independent Living Donor Advocate

The independent living donor advocate (ILDA) is an individual who is independent of the transplant team, not involved with the potential recipient evaluation and who is independent of the decision to transplant the potential recipient. This individual will be available to assist the donor during the donor evaluation, donation, post donation and follow-up phases of care.

The purpose of the living donor advocate is to:

- focus on the donor's needs and questions
- protect and promote the best interests of the potential living donor
- ensure accountability of the protection of the rights of the living donor including the application of principles of medical ethics

and the use of informed consent standards

- respect the donor's decision and ensure that the donor's decision is informed and free from inducement and coercion
- make recommendations to the transplant team regarding the prospective donor's suitability for donation
- assure the potential donor that a decision not to proceed with the donation will be protected and confidential and that the reason will only be disclosed with the consent of the potential donor
- inform the donor that he/she may decline to donate at any time
- assist the potential donor with understanding information regarding the:
 - consent process
 - evaluation process
 - surgical procedure
 - medical and psychosocial risks
 - importance of post-donation follow-up

Other Transplant Team members who will be involved:

Transplant dietitian

The transplant dietitian will complete a nutritional assessment prior to donation to help determine if there are any nutritional contraindications to your kidney donation. Diet education will be completed as needed prior to donation. Weight management diet education will be provided to potential donors with a BMI \geq 30.

The transplant dietitian will also participate in your care during the donation and discharge phases of care by completing another nutritional assessment at the time of donation, and by making recommendations to the transplant team in preparation for your discharge.

Transplant pharmacist

The transplant pharmacist will participate in your donor evaluation by reviewing all pertinent medical history, medication use and laboratory data to determine if there are any contraindications to kidney donation. The transplant pharmacist will also participate in your medication management as needed after your kidney donation

surgery while you are in the hospital. The pharmacist will review your medications (including medications for pain management) prior to discharge and make recommendations to the transplant team.

TEAM DECISION

After your initial evaluation, the transplant team will meet to decide whether or not you are a suitable donor. If you are accepted as a donor, the team will decide what further testing that you need. The transplant team must be certain that you do not have any significant risk factors for this elective surgery. Health conditions such as heart disease, high blood pressure (hypertension – blood pressure to be checked on at least two different occasions), obesity (height, weight and body mass index [BMI] will be measured), or diabetes may eliminate you as a candidate for live kidney donation. Kidney donors will not knowingly be placed at risk.

The length of time to complete the diagnostic tests depends on you and your schedule. Testing is scheduled at your convenience, whenever possible. Your transplant nurse coordinator will work with you during this phase to get the testing done.

What tests will I have to do during the evaluation phase?

Laboratory

Your health status will be checked with blood tests for general and metabolic function, kidney function and transmissible diseases (such as hepatitis, HIV, syphilis, etc.). Some of the blood work will require fasting (no food or drink for 12 hours before the laboratory tests are drawn). A pregnancy test is also required for female patients of child-bearing age.

24-hour urine collection

A 24-hour urine collection provides us with information about your kidney function. If you have excessive protein in your urine (proteinuria) or your kidneys are not able to clear waste products from your body (low creatinine clearance), then you will be ruled out as a living kidney donor.

Glucose tolerance test

This test is required if there is a family history of diabetes or if your fasting blood sugar is above normal range.

Chest X-ray

A chest X-ray provides information about your lungs. If you have had this within the last six months, please bring the written report to your evaluation. You do not have to bring the actual X-ray films.

Electrocardiogram (EKG or ECG)

An EKG provides information about your heart function.

If you have had an EKG done within the last six months, please bring the report to your evaluation.

Colonoscopy

All donors over age 50 or who have a family history of colon cancer must have a current colonoscopy to screen for colon cancer. If you have had this exam within the last 12 months, please bring the report to your evaluation.

Cardiac stress test

A cardiac stress test is done on a treadmill. Donors over age 50 may need a current stress test. If you have had this within the last 12 months, please bring the report to your evaluation. If other risk factors are identified, you may need a stress test even if you are not yet 50 years of age.

CT angiogram scan

The CT (computed tomography) angiogram scan is an examination that produces a series of cross-sectional, 3-dimensional images of your kidneys. The CT angiogram confirms the presence of two kidneys, the structure of the kidneys, absence of stones, and the number of renal arteries, veins, and ureters. An intravenous, or IV, contrast is used, which will highlight your kidneys. The test takes approximately 20 to 30 minutes. Preparation for the CT angiogram is not to eat anything for 90 minutes prior to the test, but you may have clear liquids.

This test determines which kidney will be used for donation.

This test must be done at Beaumont Hospital, Royal Oak.

Females:

Pap smear and pelvic exam

This is done as a routine cancer screen. All females must have a current pap and pelvic (within 12 months). If you have had this within the last 12 months, please bring the report to your evaluation. If you have had a hysterectomy, please see your doctor and have a pelvic examination.

Mammogram

This is done as a routine cancer screen. All females over age 40 must have a current mammogram. If you have had this within the last 12 months, please bring the paper report to your evaluation. We do not need the films.

Males:

PSA (prostate specific antigen)

Men must have this blood test to screen for prostate cancer. African American or those with a family history of prostate cancer should have a PSA starting at age 40, otherwise starting at age 50.

Miscellaneous testing

Other testing may be required based on your medical, psychological and surgical history. Your transplant nurse coordinator will inform you of any further required testing as determined by the transplant team.

What happens when all the tests are completed satisfactorily?

The transplant team members review your testing as it is being completed. After all testing has been completed, your results will be presented at a transplant team meeting. The team includes nephrologists, surgeons, nurse coordinators, the social worker, independent living donor advocate, and the financial representative (or coordinator). There will be a discussion to determine your suitability to be a donor.

If the team feels that it is not possible for you to donate, you will be

given the option to be evaluated at another transplant center that may have different selection criteria. If you chose to do so, the results of your testing at Beaumont may be given to that transplant center for review at your request.

Being turned down as a donor may be very disappointing for you. Please remember living donor surgery is an elective surgery and the transplant team has made the decision that it would be against your best interests after carefully considering the results of your evaluation.

If the team decides that you may be a donor, your transplant coordinator will contact you to explain the next steps in the process. Remember that even after you have been accepted as a donor, you still have the option to opt out at any time. If you are having doubts, discuss your concerns with any member of the transplant team.

BEFORE SURGERY

Your transplant nurse coordinator will review specific timetables with you prior to surgery. Specific blood tests are required at certain intervals, so there will be several clinic appointments before surgery occurs. You will need to come in for an office visit immediately prior to the surgery date to meet with the doctor and transplant nurse coordinator for final instructions and blood tests for final crossmatching and pre-surgical testing. They will review information regarding the surgery. If you have any additional questions, make a list and bring it to this appointment.

KIDNEY DONATION SURGERY

If you decide to donate you will have a donor nephrectomy, or the removal of a kidney for donation.

Your transplant surgeon will explain the nature of open and hand-assisted laparoscopic donor nephrectomy to you and answer any questions regarding each technique. There is the possibility that a laparoscopic surgery could be converted to an open surgery depending on the findings during the operation.

Laparoscopic donor surgery

At Beaumont, Royal Oak our surgeons perform living kidney donor surgeries using the hand-assisted laparoscopic technique. Two or three half-inch incisions are made in the upper abdomen and a laparoscope (small, lighted telescope) and other instruments are placed into the abdomen to perform the surgery. The laparoscope provides the surgeons with images on a video monitor that guide them through the surgery. To create a working space, the abdomen is filled with gas. The kidney is removed through an incision in the abdomen, below the belly button. This incision is about four to six inches long (large enough to fit a hand). People tolerate these smaller incisions better than an open surgery, which shortens the hospital stay, significantly decreases recovery time at home, and produces a better cosmetic effect.

Another benefit of laparoscopy includes less blood loss due to the pressure of the gas in the abdominal cavity.

Usually the left kidney is removed for transplant, but occasionally the anatomy of some donors requires the right kidney to be removed instead.

Cases are considered individually, but some donors may not qualify for laparoscopic surgery if they:

- have had previous abdominal surgery
- are significantly overweight
- have abnormal anatomy of their kidney

You will be asked to drink a lot of water the day before surgery. This will keep your kidneys full of fluid (hydrated). The night before surgery do not eat or drink after midnight. It is important for your stomach to be empty.

For the laparoscopic kidney surgery, you will be asked to take a bowel prep the day before surgery. This is an over-the-counter medication that will cause your bowels to move a number of times. This is important in laparoscopy to reduce the risk to your intestines.

Conversion of laparoscopic to open surgery

Certain difficulties (such as scarring in the abdomen from previous surgeries; bleeding or other issues) may occur during laparoscopic surgery which will make it necessary for the surgeon to switch to an open operation. This would be done by creating a larger incision. Fortunately, these situations are rare, but a laparoscopic surgery might be converted to an open operation for your safety or to protect the donated kidney.

You will have the opportunity to discuss these options in detail with the surgeon performing the procedure, and the surgeon will answer any questions you may have prior to the procedure.

DAY OF SURGERY

You will be admitted to Beaumont Hospital, Royal Oak early on the morning of surgery.

At the time of the procedure you will be asked to sign a formal hospital operative consent, which is required for all patients undergoing surgery.

The kidney donor will go to surgery before the kidney recipient. Your surgeon and anesthesiologist will meet you in the pre-op area and discuss the procedure and what to expect.

The pre-surgical nurses will place an IV in your arm and give you fluid. This keeps your kidneys hydrated.

You will receive general anesthesia and will not be awake during surgery. You will be intubated (a breathing tube is placed through your mouth into your trachea).

Once anesthesia is begun, a catheter tube is placed in the bladder to drain your urine. You will be positioned on one side or the other depending on which kidney is removed. Physicians are careful with positioning you under general anesthesia in order to avoid injury, yet despite best attempts, minor injury can occur. Skin or nerves can be damaged from pressure to small areas. These complications are rare.

The kidney is removed from the donor and is flushed with a special cold solution and immersed in sterile ice slush to protect it from the lack of blood flow. The kidney is then taken by the recipient surgeon, who prepares it further for the actual transplantation.

In general, the operation will take between three and five hours. During the operation, the kidney to be donated will be removed, along with the important blood vessels and the ureter, which drains urine from the kidney to the bladder.

Once the kidney has been removed, your incisions will be closed and you will be transferred to the recovery room. Your kidney will then be transplanted into the recipient.

Will I need a blood transfusion during surgery?

Kidney donation surgery usually involves minimal blood loss. It is unlikely that you will need a blood transfusion during or after your kidney donation. However, in the event that you would need a blood transfusion, the current blood supply meets the highest standards and is judged safe by the medical community. If you are still concerned, you can donate a unit of blood to yourself before surgery. This is called autologous donation. Your transplant nurse coordinator can help you arrange this. Autologous blood donation needs to be completed at least seven days prior to surgery, so if you are interested please let your transplant nurse coordinator know several weeks prior to surgery.

The blood you donate to yourself will only be used for you. If you do not need a blood transfusion, the unit of blood will be discarded. No other patient, including your recipient, will be able to use this blood. Feel free to discuss any transfusion questions with your donor surgeon.

AFTER SURGERY

After the surgery, you will go to the recovery room, also known as Post Anesthesia Care Unit, or PACU. The anesthesia slowly wears off. You will feel tired after surgery. Nurses will take your blood pressure,

monitor your urine output, provide you with pain medication and answer your questions. When you are medically stable, you will be transferred to the inpatient nursing floor.

You should anticipate incisional pain after the surgery. Pain tolerance varies by individual, and the nurses will assess your pain regularly and treat it individually. All donors will have intravenous narcotic pain medication at first, usually in the form of a Patient Controlled Anesthesia (PCA) pump. If this does not control your pain adequately, you will be given additional medications to make you more comfortable. Most donors are able to switch to pain medications taken by mouth after a day or two.

You will have an IV (intravenous) catheter in your arm in order to receive pain medication and to give you fluids to keep you hydrated.

You will have a catheter in your bladder to drain urine. This is to monitor that your remaining kidney is functioning properly. The catheter is usually removed at the bedside 24 hours after your surgery.

The recipient will be taken from the operating room directly to the Intensive Care Unit, or ICU. Nurses will carefully monitor the recipient and the new kidney transplant. Approximately 24 hours later, the recipient will be moved to the transplant nursing floor.

The donor and the recipient will recover on the same floor once the recipient has been transferred from the ICU.

COMPLICATIONS

Complications may occur following your donor surgery, but many may be avoided by following the directions of your physicians and nurses. Getting out of bed and walking on the day after your surgery will help to prevent blood clots, pneumonia and bowel problems. Gas build-up and constipation may put pressure on your incision and increase your pain; therefore walking will help ease your pain as well, as it will help move gas out of your system and help you to move your bowels.

You will also be asked to cough and breathe deeply every one to two hours to clear fluid from your lungs to prevent pneumonia.

Complications of donor nephrectomy (in addition to those listed in the informed consent portion of this booklet) include but are not limited to the following:

- Bleeding: this rarely requires a blood transfusion.
- Adverse reaction to anesthesia.
- Infection such as in the wound, in the abdominal cavity, in the urinary tract or in the lung (pneumonia).
- Damage done to the donated kidney itself during the process of surgery, which might jeopardize the ability of the transplant to function. In extraordinarily rare circumstances, the kidney may be damaged so greatly that it cannot be transplanted.
- Damage to surrounding organs or blood vessels. This could include damage to the spleen, the pancreas, the intestines or colon. These injuries are rare.
- Blood clots in the leg(s) which may cause a potentially life threatening clot to travel to the lung(s).
- Chronic incisional pain, unusual scar tissue or development of an incisional hernia.
- Abdominal problems, including obstruction of the bowels.
- Many minor complications, such as an infection in an IV site, numbness in the area of an incision, or numbness or tingling in a leg or arm that is usually temporary due to positioning during surgery.
- Males may have temporary swelling in the scrotum.

Laparoscopic-donor nephrectomy patients usually require two to four days in the hospital. You must be walking regularly, urinating without difficulty, tolerating food and have adequate pain control before being discharged. You will need someone to drive you home.

The surgeon will see you for a follow-up visit within four weeks of discharge. You may call nurse coordinator or your surgeon with concerns.

Usually pain is well managed with oral pain medicines for one to two weeks. It is unusual to require significant pain medication after two weeks.

Full healing of your incisions will probably not occur for at least four weeks and your physician will counsel you about activities to avoid.

What guidelines should I follow after surgery?

- Drink extra fluids. Water is the best fluid to drink. Drink at least eight (8) ounce glasses of fluid per day.
- Eat a healthy diet (see diet guidelines under “Eating Sensibly” in this booklet).
- Avoid driving for two to three weeks, and while you are taking pain medicines.
- Avoid lifting items heavier than 10 pounds for six weeks after donation. You may do light housework or similar activities.
- Avoid vigorous activity until cleared by your surgeon.
- You may feel very tired when you get home. Gradually increase activity and exercise as tolerated. Walking is a great form of exercise.
- You may resume sexual relations in two to four weeks as you feel ready.

How long will my recovery take?

Every donor is unique and therefore each donor’s recovery time frame varies. You can help your recovery by keeping an active and healthy lifestyle before surgery. Many donors find that regaining their previous energy level takes four to six weeks. You should start by walking and increasing your activity as soon as you feel able. Each day plan on doing just a little bit more, but always within reason.

When can I drive?

You may usually start driving two to three weeks after surgery. If you are still on narcotics, or your ability to make quick movements is still limited, returning to driving may be longer. Check with your surgeon for permission to drive. Remember to always wear your seat belt, starting with your ride home after discharge.

When can I go back to work?

Kidney donors generally return to work in four to six weeks. Your own return to work is determined by the nature of your work and activity levels among other things. Some patients consider returning to work for half days for the first week.

If you have a job that requires heavy lifting, the surgeon may ask you not to return to work for up to six weeks to allow adequate time for the incision to heal and strengthen.

Time off work is not reimbursable by the recipient's insurance.

How can you protect your remaining kidney?

Monitoring

Transplant programs are required to report donor information to the Organ Procurement and Transplant Network (OPTN) and the United Network for Organ Sharing (UNOS) at six months, one year and two years post-donation. You must commit to this follow-up in order to be a kidney donor.

In addition, you should follow-up with your primary care physician at least yearly to monitor your kidney function by checking your blood pressure and testing your urine and blood once a year.

Normal blood pressure is considered to be 120/80 or lower. You have high blood pressure if it is over 140/90. People with kidney disease or one kidney should keep their blood pressure below 130/80.

Controlling blood pressure is especially important because high blood pressure can damage your remaining kidney.

Your doctor should monitor your urine for protein, which is an indicator of kidney dysfunction.

Measuring your level of kidney function, also sometimes called GFR (short for glomerular filtration rate, which shows how efficiently your kidney is filtering your blood) requires a simple blood test for creatinine. Serial blood tests over the years should show a stable creatinine, reflecting stable kidney function. An increase in your creatinine may reflect a decline in the ability of your kidney

to adequately filter your blood and requires closer attention to determine further action. Kidney donors should have this checked every year.

Controlling blood pressure

If your blood pressure is above normal, work with your doctor to keep it below 130/80. Great care should be taken in selecting blood pressure medicines for people with a solitary kidney. Angiotensin-converting enzyme, or ACE, inhibitors and angiotensin receptor blockers, or ARBs, are two classes of blood pressure medicine that may provide additional protection for kidney function and reduce proteinuria. However, these medicines may be harmful to someone with renal artery stenosis, which is narrowing of the arteries that enter the kidneys. They may also be harmful in situations that lead to dehydration. Controlling your blood pressure may require a combination of two or more medicines, plus changes in diet and activity level.

Eating sensibly

Having a single kidney does not mean that you have to follow a special diet. You simply need to make healthy choices, including fruits, vegetables, grains and low-fat dairy foods. Limit your daily salt (sodium) intake to 2,000 milligrams or less if you already have high blood pressure. Reading nutrition labels on packaged foods to learn how much sodium is in one serving may help. Limit alcohol and caffeine intake as well.

Avoid high-protein diets. Protein breaks down into the waste materials that the kidneys must remove, so excessive protein puts an extra burden on the kidneys. Eating moderate amounts of protein is still important for proper nutrition. A dietitian can help you calculate the right amount of protein for you.

Avoiding injury

Avoid contact sports such as boxing, football and hockey. Having a solitary kidney should not automatically disqualify you from sports participation. Protective gear such as padded vests worn under a uniform can make limited contact sports like basketball or soccer

safe. Doctors and patients should discuss the risks of any activity and decide whether the benefits outweigh those risks.

Pregnancy

The risk for gestational hypertension (high blood pressure) and preeclampsia may be increased in living kidney donors. However, there is no difference with respect to rates of preterm birth, low birth weight, maternal death, stillbirth or neonatal death. In other words, having a small increase in gestational hypertension and preeclampsia does not have an adverse effect on maternal or fetal outcomes. These risks can be managed and monitored through regular physical exams, blood tests and urine tests.

Feel free to ask questions

We hope this booklet has answered your questions about kidney donation. Throughout this process, please ask questions to clear up any information you do not understand.

Discussions between you and members of the transplant team will be strictly confidential from the recipient. The transplant team will support your decision, no matter what it is.

Your living donor advocate will also be available to discuss any further questions or concerns you may have. The information in this booklet is general. Your individual treatment and experience may vary.

Closing thoughts

The decision to donate a kidney and the act of doing so is an important and personal process. Giving of oneself in this way is a generous gift to a family member or friend. It is of immeasurable value. We feel privileged to be involved in this work. We will always strive to make this a positive and successful experience for you and your recipient.

Thank you for your interest in kidney donation at Beaumont Transplant.

DEFINITIONS OF TERMS

Acute rejection

Acute rejection can happen at any time after a kidney transplant. During an acute rejection episode, the serum (blood) creatinine rises. This can usually be treated by taking a higher dose or a different type of immunosuppressive medicine until the creatinine returns to a baseline.

Antibody

Product of the immune system that helps the body fight infections and foreign substances.

Antigen

The “marker” that stimulates the body to produce antibodies.

Anti-rejection medicine

These drugs are taken by the recipient every day through the life of the transplanted kidney. They are also known as immunosuppressive medicine. They help prevent the immune system from rejecting the new kidney.

Autologous blood

Your own blood donated for yourself before surgery.

Bladder

The part of the urinary tract that receives urine from the kidneys and stores it until you urinate.

Blood typing

A blood test that indicates blood group. You can be type O, A, B or AB. The recipient’s blood type needs to be compatible with the donor’s blood type to receive the kidney transplant.

BUN

Blood urea nitrogen, or BUN, a waste product from the kidney. Your BUN value is an indication of waste products being created by the body.

Chronic rejection

Chronic rejection is a process that may happen after a kidney transplant. It can develop over months or even years. During this process, the creatinine slowly rises. There is no known reversal of chronic rejection.

Chronic renal (kidney) failure

Permanent damage to both kidneys that cannot be reversed; it is treated by dialysis or a kidney transplant.

Creatinine

A product of muscle metabolism. Creatinine level serves as a very good indicator of kidney function.

Crossmatching

A test to find out if the blood of the kidney donor and the person receiving the kidney are compatible

Deceased donor

An individual whose tissues or organs are donated after his or her death. Such donations come from two sources: patients who have suffered brain death and patients whose hearts have irreversibly stopped beating. The latter group is referred to as "donation after cardiac death" (DCD) donors.

Dialysis

A process that cleans and balances the chemicals in the blood when a person's kidneys have failed. Dialysis may refer to hemodialysis or peritoneal dialysis.

Donor nephrectomy

Removal of a kidney for donation from a living person.

End-stage renal (kidney) disease

Condition in which the kidneys no longer function and dialysis or a transplant is needed to replace lost kidney function and support life.

Glucose

A type of sugar found in the blood.

Hypertension

Another word for high blood pressure.

Immunosuppressive medicines

Medications taken by the recipient every day the transplanted kidney is functioning. They help prevent the recipient's immune system from fighting against and rejecting the new kidney. Also known as anti-rejection medicine.

Intravenous, or IV

A small catheter placed into a vein; refers to the fluids and medicines that are injected into a vein through a needle or catheter.

Kidneys

Two bean-shaped organs located beside the spine, just above the waist. They remove waste and balance fluids in the body by producing urine.

Living non-related kidney

A kidney donated from someone who is living, but not blood related, such as the spouse, or a friend.

Living-related kidney

Donated by a blood relative such as a mother, father, sister, brother, son, daughter, cousin, aunt or uncle.

Nephrectomy

Surgically removing one or both kidneys.

Rejection

The process by which the body responds to a "foreign object," such as a new kidney. Rejection can be acute or chronic (see definitions: acute rejection and chronic rejection).

Renal

Having to do with the kidneys or referring to them.

Tissue typing

A blood test that evaluates if there is a tissue match between organ donor and recipient antigens that is done before a transplant.

Transplant

Transferring organs or tissues from a donor to a recipient.

Ureters

The tube that carries urine from each kidney to the bladder.

Urethra

The tube from the bladder that allows urine to flow out of the body.

Urinary tract

The system made up of the kidneys, ureters, bladder and urethra. It produces, moves, stores and eliminates urine.

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NOTES AND QUESTIONS

BEAUMONT MULTI-ORGAN TRANSPLANT CENTER

Living Kidney Donor Signature Sheet

Our transplant center believes this booklet “Your Kidney Donation Decision: What You Need to Know” has important written information to assist your decision making and to learn about the kidney donation process in addition to short and long-term considerations. Please also note that it is a federal crime for any person to knowingly acquire, obtain or otherwise transfer any human organ for valuable consideration (i.e., anything of value such as cash property, vacations). Your signature below confirms that you have received and read the donor education booklet along with the materials listed below, and have had the opportunity to have all your questions or concerns answered regarding being a potential Kidney Donor candidate. Our center will keep this form on file in your medical record.

Materials:

- Your Kidney Donation Decision: What you need to Know
- Transplant Team Profile Sheets
- Patient Rights and Responsibilities
- “Consensus Statement on the Live Organ Donor”
- Pamphlet “You May Need a Blood Transfusion” Some things to know
- Pamphlet “Managing Your Pain”
- What You Should Know About HIV
- OPTN/UNOS: Your Resource for Organ Transplant Information
- “Advantages of Living Donor Kidney Transplants/Did You Know?”
- Long Term Recommendations for Kidney Donors
- Pamphlet ‘UNOS Facts and Figures’
- Pamphlet ‘OPTN Kidney Paired Donation Pilot Program’
- Low Cost Free Clinics
- Beaumont Kidney Transplant Program Evening Seminar listings
- SRTR Data comparing Beaumont Transplant Center to the Nation
- Notice of Privacy Practices

I consent to proceeding with testing and donation as a potential Kidney Donor free from inducement and coercion. I have received and read the booklet "Your Kidney Donation Decision: What You Need to Know" along with the materials listed above, and have had the opportunity to have my questions and concerns answered regarding being a potential Kidney Donor candidate.

Additionally, in the event that I go through kidney donation surgery, I commit to follow-up at the transplant clinic at **6 months, 1 year, and 2 years** post operatively so that my kidney function can be checked to monitor my wellbeing and to allow the transplant center to conform to UNOS reporting regulations (alternative arrangements will be made for those patients with special circumstances; i.e. out-of-town donors, to fulfill this requirement).

I have been informed that I may decline to donate at any time. I understand that I can speak with the appropriate members of my team at any time during my evaluation, should I have further questions.

Signature of Living Donor Candidate Date Time

Printed Name Living Donor Candidate

Signature of Transplant Center Staff Date Received Time

Member Providing Booklet

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Beaumont