Questions and Answers for Transplant Candidates about

Kidney Allocation

Questions and Answers for Transplant Candidates about the New Kidney Allocation System

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. This process involves continuously evaluating new advances and discoveries so policies can be adapted to best serve patients waiting for transplants.

The current kidney matching system has helped tens of thousands of people get successful transplants. But there are ways it can be further improved. One issue was that some kidney recipients have not received a kidney that works as long as they may need. Another issue was that some patients must wait much longer than others for a kidney due to their blood type or their immune response to most available kidneys.

The revised system is a result of years of review and consensusbuilding among transplant professionals and people who have personal experience with donation and transplantation. Their primary goal was to make the system better without making major changes to the parts of the system that work well.

The new matching system will take effect in late 2014. It should help more people have longer function with their transplanted kidney. It should also help shorten the waiting time for some groups of people who often wait a very long time because they are hard to match with most kidneys.

This brochure explains the new system and what it will mean for people needing a kidney transplant.

What will change? What will stay the same?

Many people will not see any major change. The time you spend waiting for a kidney is still a major factor in matching. You will not lose credit for any time you have already spent waiting. If you began dialysis before you were listed for a transplant, your transplant waiting time will be backdated to your first dialysis date.

People who are expected to need a kidney for the longest time will be matched more often with kidneys that have the longest expected function. Groups of people who are hard to match with kidneys, based on their blood type or immune sensitivity, will also get additional priority.

How will kidneys be classified?

Every kidney offered for a transplant will have a Kidney Donor Profile Index (KDPI) score. This is a percentage score that ranges from zero to 100 percent. The score is associated with how long the kidney is likely to function when compared to other kidneys. A KDPI score of 20 percent means that the kidney is likely to function longer than 80 percent of other available kidneys. A KDPI score of 60 percent means that the kidney is likely to function longer than 40 percent of other available kidneys.

If you have been listed for some time, you may have heard of kidneys being classified as "standard" or "expanded criteria." These classifications will no longer be used in the new system.

What goes into a KDPI score?

The KDPI 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
- Stroke as cause of death
- History of high blood pressure
- History of diabetes
- Exposure to the hepatitis C virus
- Serum creatinine (a measure of kidney function)

How will transplant candidates be classified?

Each kidney candidate will get an individual Estimated Post-Transplant Survival (EPTS) score. This is a percentage score that ranges from zero to 100 percent. The score is associated with how long the candidate will need a functioning kidney transplant when compared with other candidates. A person with an EPTS score of 20 percent is likely to need a kidney longer than 80 percent of other candidates. Someone with an EPTS score of 60 percent will likely need a kidney longer than 40 percent of other people. Your transplant team can calculate your EPTS score for you.

What goes into an EPTS score?

The EPTS is calculated based on facts about the candidate that affect how long you are likely to need a kidney.

These factors include:

- Age
- Length of time spent on dialysis
- Having received a previous transplant (of any organ)
- Current diagnosis of diabetes

How will the KDPI and EPTS scores be used in allocating kidneys?

The 20 percent of kidneys that are expected to last the longest—those with a KDPI score of 20 percent or less—will first be offered to patients likely to need a transplant the longest – those with an EPTS of 20 percent or less. If a kidney with a KDPI of 20 percent or less is not accepted for any of these patients, it will then be offered to any other person who would match, regardless of their EPTS score.

Kidneys with high KDPI scores are expected to function for a shorter amount of time than others. They may be best used to help candidates who are less able to stay on dialysis for a long time.

The 15 percent of donated kidneys likely to function the shortest time (those with a KDPI greater than 85 percent) will be offered first 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.

Your transplant team can discuss with you the best options for matching based on your EPTS score and the types of kidneys that would best meet your need.

How will children and teenagers be matched?

There are not many pediatric kidney candidates (those who are younger than age 18), but they risk having growth and developmental issues if they must wait a long time for a transplant. For this reason, they will have priority for the 35 percent of kidneys that are likely to function the longest – those with a KDPI score of 35 percent or lower.

What will change for hard-to-match patients?

Some patients are hard to match with most kidney offers because they have uncommon blood types. Others are likely to have an immune system rejection for most kidneys. The new system will seek to boost their chances of getting a matching offer.

People with blood type B often wait longer for a kidney than people with other blood types, in part because it is harder to find a donor with type B blood.

Donors with blood type A generally can't donate to a person with blood type B. However, some blood type A donors have a "subtype" that allows them to match a type B candidate. The new system will give first priority for these donor kidneys for type B patients. Since blood type A donors are more common than blood type B donors, more offers now should be available for type B candidates.

In other cases, people have developed immune system responses that make it very hard to find a kidney their body won't reject. This may happen because of having a previous transplant or blood transfusion, or even from pregnancy. People who are "highly sensitized" often wait five or more years before receiving even one kidney offer.

The new system will give immune sensitized candidates more priority for kidneys they aren't likely to reject. People who have a slightly higher sensitivity will get slightly more priority than they would have under the previous system. People who are very highly sensitized (98 percent or above) will get much more priority. Kidneys that are offered first to highly sensitized candidates, but don't get accepted for them, will then be offered to other patients.

Your transplant team can discuss with you whether you are sensitized and, if so, the additional priority you would receive for matching kidneys.

Will my waiting time calculation change?

If you were listed for a transplant at the time you either began dialysis or met a medical definition of kidney failure (having a creatinine clearance below 20 ml/minute), your waiting time will not change under the revised policy.

If you began dialysis before you were listed for a transplant, your waiting time will now be calculated from your dialysis date. This is the most objective and consistent way to measure when your need for a transplant began.

A transplant program may evaluate and list you for a transplant even before you start dialysis. If you are listed early, you can be matched for deceased donor kidneys based on medical matching criteria in the kidney allocation policy. You would not receive additional priority for waiting time until you either start dialysis or have kidney failure.

If I am listed when the new system goes into effect, how will it affect me?

The new system has been carefully designed to help people who need more access to kidney offers without significantly affecting the needs of others.

People who have the longest potential need for a transplant, and those who have been hard to match under the current system, will get more priority in the new system. Since they make up a fairly small proportion of everyone needing a kidney transplant, the effect on the vast majority of candidates should not be very large. In addition, the new system should provide more transplant opportunities, so that everyone has a better chance to be transplanted.

UNOS will continue to study the system closely to make sure it is performing as expected. UNOS will address any issues that suggest that the policy is not meeting needs, or if other issues arise.

If you are already listed at the time of the transition, you don't need to be re-evaluated or re-listed. Your transplant program may need to contact you for additional information, but only to make sure everything is accurate and up to date when the system goes into effect.

As always, stay in touch with your medical team and follow their instructions and recommendations for your care. Feel free to discuss with your medical team whether you will receive different priority under the new system, as well as the types of kidney offers that would be best for you.

What if I'm not listed for a transplant but want to be?

Talk to your doctor about your current health and your treatment options. If you want to be considered for a kidney transplant, it would be best to get evaluated and listed by a transplant hospital when, or just before, you start dialysis or reach end-stage kidney failure. This will allow you to be considered as early as possible for a kidney offer.

For more information

Start with your doctor or the medical team at your transplant center. They know the most about your specific medical condition and treatment. Don't be afraid to ask questions. It will help you to have a detailed understanding of all your treatment options.

UNOS' Patient Services phone line (888-894-6361) can provide information about the OPTN and UNOS, allocation policy and other resources available to you. Additional information is available online on the following websites:

http://www.transplantliving.org http://optn.transplant.hrsa.gov http://www.unos.org http://www.srtr.org

The UNOS mission is to advance organ availability and transplantation by uniting and supporting its communities for the benefit of patients through education, technology and policy development.



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