AT THE FOREFRONT OF TRANSPLANT CARE

- Kidney
- Combined Kidney-Pancreas
- Pancreas
- Islets

Where World-Class Expertise and Genuine Compassion Come Together
transplants since the procedures were introduced—more than any other hospital in Illinois. And, year after year, our success rates consistently outpace national averages.

At the University of Chicago Hospitals, the bar for medical miracles continues to rise: Patients who have challenging illnesses or medical conditions are walking out our doors with newly transplanted organs … Islet transplants are quickly becoming a viable alternative for many who suffer from type 1 diabetes … More and more living and deceased donor organs are becoming available thanks to innovative new approaches … And medicines and other treatments developed here and elsewhere are helping to ensure that patients can keep transplanted organs for many, many years—with fewer side effects.

Where the Best Is Available…

Over the last half century, the University of Chicago Hospitals’ name has become synonymous with excellence—and with reason. No other hospital in Illinois has been consistently named one of the top hospitals in the United States by U.S. News and World Report.

Our formula for success is simple: Bring together the best and the brightest clinicians, and give them the support they need to discover new treatment approaches and deliver state-of-the-art care.

Consider the knowledge and experience of our transplant team: Together, our physicians and nurses have more than 250 years experience in kidney and pancreas care. Our surgeons have conducted thousands of transplant surgeries, earning national and international esteem for their surgical expertise and research. They work side-by-side with specially trained transplant nephrologists, endocrinologists, and nurses who provide unmatched expertise before and after a transplant.
Our team also includes a transplant pharmacist, social worker, financial counselor, and other support staff who work solely with transplant patients.

One of our patients put it best: “It takes a lot of pressure off when you have confidence in your doctors and in the hospital.” When you come to the University of Chicago Hospitals for transplant care, you can be certain that you are in expert hands. Another reassuring fact: If you or a loved one develops other medical problems, you will have access to hundreds of other knowledgeable experts. The University of Chicago Hospitals is home to some of the world’s most respected specialists in diabetes, kidney disease, cancer, heart disease, digestive problems, and other health problems.

**Where the Most Advanced Treatments Can Be Found**

The University of Chicago Hospitals is an academic medical center, which means that many of our physicians conduct research as well as provide care. This approach provides patients with a major advantage: You get access to new therapies and medicines before they’re commonly available elsewhere. If something is discovered in kidney and/or pancreas transplant care, chances are our physicians and researchers were involved in the discovery or are on top of what is going on.

For instance, our physicians have been investigating why transplant patients are at risk of losing organs from a common virus, called the polyoma virus. They are at the forefront of developing new methods for treating the virus, hopefully keeping more patients’ transplants healthier.

Our physicians and researchers are also considered leaders in immunosuppression—or the prevention and treatment of organ rejection. They have helped develop and refine many
Making Transplant a Viable Option for More People

Because of the level of expertise available at the University of Chicago Hospitals, our expert surgeons and physicians commonly take on patients who may be considered too sick or old for transplantation—saving or enhancing many lives each year. For instance in 1988, we were the first hospital in Illinois to perform a pancreas transplant on a patient with advanced diabetes.

More recently, we have been performing an increasing number of re-transplants on patients who received organs in the past. Re-transplant patients require more careful management than first-time transplants because the body is more likely to reject an organ after a second or third transplant. Before surgery, we may provide re-transplant patients—or “sensitized” individuals—with specialized immunosuppressive treatment to help ensure a successful re-transplant.

Our surgeons and physicians are also considered some of the most experienced in the world when it comes to multiple-organ transplants. The first successful heart-liver-kidney transplant in the world was performed at the University of Chicago Hospitals. We also performed the first heart-kidney-pancreas transplant in Illinois.

“Everybody I met at the hospital conveyed true concern and caring. I was really amazed that so many doctors came to talk to me, to sit down with me and ask ‘What did I think of this’ and say ‘Here are the possible pros and cons of this’. Everybody there really took care of me as one human being to another human being. They truly demonstrated to me what compassion and concern are all about.”

Sam, 49-year-old kidney-pancreas recipient
**Increasing the Number of Organs Available**

In the United States there are simply not enough organs available for transplant. To help correct this deficiency, we have made major efforts on several fronts to increase the number of organs available. We are helping more patients find appropriate living donors. Improvements in anti-rejection therapies now allow kidney transplants to occur between unrelated individuals. Donor kidney surgery is now almost always performed using a minimally invasive procedure, which requires much smaller incisions than traditional surgery. As a result, living donors are recovering much more quickly and are returning to work and other activities soon after surgery.

We are also working diligently to increase the number of organs from deceased donors that are available for transplant. For instance, we regularly use a special perfusion pump to rehabilitate deceased donor kidneys that may not have been usable in the past.

**Experience and Compassion Go Hand in Hand**

We realize that, from the outside, the University of Chicago Hospitals can seem rather big and imposing. But once you step inside and get to know our transplant team, we’re certain that you’ll see what a small place this really is. We may do a large number of transplants, but we become very close to each and every one of our patients. In fact, we like to think of ourselves as an extended family. We go out of our way to provide you with compassionate care.

To us, compassionate care is about the big things and the little things. It means getting laboratory tests back in a timely manner so we can quickly identify and treat any problems. But it’s also asking you about your family and how they’re handling life before or after transplant. It’s about giving you the education you need to understand all the ins and outs of caring for yourself after a transplant. And it’s also about being available 24 hours a day to calm any worries or answer any questions.

After taking into account all the medical miracles and advances that have occurred at the University of Chicago Hospitals, we are proudest of something much closer to our hearts: that our patients feel that we care about them as people, and that we look after their overall health and well being—not just their organs.

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"The nurses and doctors were all very good. They go out of their way to help you, doing little favors for you they don’t have to do."

Carmen, a 68-year-old kidney recipient
We Start by Sitting Down with You

The possibility of a transplant provides hope—hope for a better and healthier future. But the whole process can seem overwhelming, frightening, and confusing. That's why we take it one step at a time. The first step: We talk with you, one-on-one, to determine which specific surgical methods and medical treatments are best for you. These options may include:

- **Kidney-only transplants for people with kidney failure.** The surgery typically eliminates the need for dialysis, and patients report increased energy and other positive health changes. We perform both living and deceased donor kidney transplants. Organs from living donors typically last longer than organs from deceased donors. In addition, living organ recipients do not have to wait months or years for their surgery, as deceased organ recipients often do.

- **Pancreas-only transplants for people with type 1 diabetes who have healthy kidney function.** Many patients who receive a pancreas from a deceased donor no longer need insulin shots. Their risk for kidney disease and other diabetes complications may also be lower after a transplant.

- **Combined kidney-pancreas transplants for patients who have type 1 diabetes and significant kidney disease.** During the same operation, patients receive a kidney and pancreas from the same deceased donor. For many diabetics with kidney failure, this procedure provides the greatest hope for a life without dialysis or insulin injections.

- **Islet transplant for patients with type 1 diabetes.** We are among a select number of hospitals in the country initiating a clinical trial of islet transplantation. During this non-surgical procedure, islet cells from a donated pancreas are injected into a patient’s vein. The cells lodge within the liver and begin making insulin, regulating the patient’s blood sugar.
Islet Transplantation at the University of Chicago Hospitals

At the Forefront of Diabetes Research

The University of Chicago Hospitals has been a leader in diabetes research since the early 1900s. In fact, one of our researchers played a crucial role in the discovery of insulin—an event that has saved countless lives of people with type 1 diabetes. Now, our researchers are helping to test another exciting—but experimental—treatment for type 1 diabetes: islet transplantation.

What Is Islet Transplantation?

Islets are the groups of cells in the pancreas that make insulin, a hormone that helps the body use blood sugar (or glucose) for energy. When a person has type 1 diabetes, their body destroys the islet cells that make insulin. Their bodies cannot produce any insulin. So, they need to take daily insulin injections for life.

Who Is Eligible for an Islet Transplant?

People with type 1 diabetes who are between the ages of 18 and 58 are eligible. In addition, patients may also:

- Have serious complications from diabetes, such as eye, nerve, or blood vessel problems.
- Experience symptoms of low blood sugar, such as dizziness, sweating, or hunger—often without knowing they have low blood sugar.
- Have brittle or unstable diabetes.
- Have diabetes that is very hard to control.

People who are interested in islet transplants at the University of Chicago Hospitals will meet with a transplant coordinator and transplant surgeon to review all of the risks and benefits of islet transplantation. After this meeting, those who are interested will be asked to sign an informed consent form. This form describes the procedure in detail and outlines the possible risks.

In summary, islet transplantation is an experimental procedure that may provide excellent blood sugar control for people with type 1 diabetes—without insulin or the need for surgery.

How Do I Find Out More?

For more information about islet transplants, call our Clinical Islet Transplant Coordinator at 773-702-2504.
Islet transplants are intended to treat type 1 diabetes by replacing destroyed islets with new ones. No surgery is needed. The islets cells from a deceased donor's pancreas are removed and injected into a major blood vessel of the patient's liver. The islet cells then begin making insulin. The transplant patient must take special medicines, called anti-rejection medicines, to prevent his/her immune system from attacking the new islet cells.

However, islet transplants are still experimental. We still don’t know what the long-term benefits and risks are. This is why the University of Chicago Hospitals is conducting a clinical trial on islet transplantation. We plan to give 10 patients islet transplants and follow them for five years to see how well they do. We hope our findings will provide information on the procedure’s safety and success. Similar studies are being conducted around the world.

Islet transplants performed at a Canadian research hospital over the last several years show promising results. In one group of 12 patients who received islet transplants, nine no longer needed daily insulin injections 10 months later.

**When Should Patients Consider Transplantation?**

Many people with type 1 diabetes successfully control their disease with daily insulin injections. In these cases, transplantation is not needed.

But, over time, type 1 diabetes can lead to serious problems, including kidney failure, heart disease, blindness, and nerve damage. Some people also have a harder time controlling their diabetes than others. They have trouble keeping their blood sugar levels at normal levels, which is key to preventing serious problems. Taking insulin can also cause frequent episodes of hypoglycemia, or low blood sugar.

When type 1 diabetes cannot be controlled or is causing serious problems, a patient may want to think about transplantation. There are two possibilities: whole pancreas or islet transplantation.

### Islet Versus Whole Pancreas Transplantation

Both whole pancreas and islet transplants offer the hope of excellent blood sugar control—without insulin injections. But there are advantages and disadvantages to each procedure. Below is a comparison. Transplant physicians and surgeons at the University of Chicago Hospitals can help patients determine what type of transplant, if any, is best for them.

<table>
<thead>
<tr>
<th>Whole Pancreas Transplant</th>
<th>Islet Transplant</th>
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<tbody>
<tr>
<td>It's considered standard therapy. Thousands of these procedures have been performed around the world—and hundreds at the University of Chicago Hospital.</td>
<td>It's still experimental.</td>
</tr>
<tr>
<td>85-90% of patients transplanted with a whole pancreas have normal blood sugar without insulin one year after transplant.</td>
<td>33-80% of patients transplanted with isolated islets have normal blood sugar without insulin one year after transplant.</td>
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<tr>
<td>Surgery is necessary. Patients stay in the hospital for about seven days.</td>
<td>No surgery is needed. Patients only stay in the hospital one day.</td>
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<tr>
<td>It only requires one surgery.</td>
<td>It may require more than one procedure.</td>
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<tr>
<td>It requires taking anti-rejection medicines for the life of the transplant.</td>
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*see back for more islet information*