Helping transplant patients embrace new lives.

Indiana University Health
Indiana University Health was the first hospital system in Indiana to perform a kidney transplant (1965), liver transplant (1988), pancreas transplant (1988) and intestinal and multivisceral transplants (2003). In 2010, our center performed its 100th multivisceral transplant. In just seven short years since performing our first such procedure, we now own 20 percent of the world’s market share.

IU Health Transplant is affiliated with Indiana University School of Medicine and is one of a few Medicare-approved centers to offer expertise in multivisceral and intestinal transplants. All IU Health Transplant programs are Medicare-approved.

Our primary goal is to help return patients to self-sufficient and active lives. We encourage early referrals for two main reasons: First, we want to reach as many people as possible before they have additional complications. Second, the timing of referrals and evaluations is critical to the placement of patients on the transplant wait list, especially those who may require multiple organs.

How We Rank
IU Health Transplant is ranked as the sixth largest transplant center in the U.S. by volume for 2009.

#1 for intestinal transplant
#1 for pancreas transplant (pancreas plus kidney/pancreas)
#3 for all abdominal organs
#6 for all solid organ transplants

How to Refer
To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

Learn More
If you would like more patient-focused information about IU Health Transplant, please call 800.622.4989 or visit us at iuhealth.org/transplant.
“I chose [IU Health Transplant] because its programs are as highly regarded as any in the nation, and I felt more comfortable here. They treat me like a person, not a number.”

Brad, kidney transplant in 1987
The kidney program at Indiana University Health Transplant ranks as one of the largest in the nation by volume. We accomplished this by using both living and deceased donors. In fact, IU Health Transplant pioneered the laparoscopic donor nephrectomy procedure for living donors.

IU Health Transplant performs more than 200 kidney transplants each year. The fact that we perform so many surgeries means we have firsthand experience with both common and complicated procedures.

Our surgeons are committed to maximizing the health of the patient even before the surgery takes place. And, through our kidney desensitization program, IU Health Transplant surgeons are able to perform kidney transplants on patients who normally would be ineligible.

Shorter wait times, better outcomes
- Unlike many other programs, a transplant surgeon personally reviews each potential donor, which increases the number of organs accepted for transplant and decreases wait times.
- IU Health Transplant is one of only a few programs in the nation that performs steroid-free desensitization.

IU Health Transplant continues to lead the way for kidney transplants
- First living-related kidney transplant in Indiana (1965)
- First pediatric kidney transplant in Indiana (1969)
- First adult deceased donor kidney transplant in Indiana (1969)
- First laparoscopic living donor nephrectomy in Indiana (1998)

One-year adult graft survival
- IU Health 94.64%
- National Average 93.47%

One-year pediatric graft survival
- IU Health 97.06%
- National Average 95.04%

Months on waitlist (Median)
- IU Health 39
- National Average 47

Transplant rate* (per year on waitlist)
- IU Health 0.21
- National Average 0.19

*Transplant Rate (per year on waitlist)
The rate shown is calculated by dividing the number of waitlist patients removed from the waitlist (whose reason for waitlist removal was listed as receipt of a transplant) by the total number of person years. Person Years for the Transplant Rate
Since candidates may be waitlisted for all or only part of a full year, person years of the patients on the waitlist for the whole period is reported. Person years are calculated as days and converted to fractional years for each patient, then summed across all patients. The number of days is calculated from the latter of the start date of the period and the date of first wait listing, until the earliest of the date of death, transplant, removal from the waitlist, or the end of the period.

When to Refer
Patients with existing or impending end-stage renal disease are eligible for a kidney transplant.
Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer
To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

Adult & Pediatric Kidney Transplant Surgeons
William Goggins, MD — Surgical Director
John Pewelison, MD

Adult Kidney Transplant Nephrologists
Tim Taber, MD — Medical Director
Dennis Mihaler, MD
Asif Sharfuddin, MD
Muhammad Sohail Yaqub, MD
M. Ahmad Mujtaba, MD

Pediatric Kidney Transplant Nephrologist
Corina Nailescu, MD — Medical Director

IU Health Transplant Administrative Director
David Alvar, FACHE

Tamika suffered from juvenile diabetes and was on hemodialysis before her kidney and pancreas transplant in 2007. This mother of two now has more time for family.
The pancreas program at Indiana University Health Transplant has a committed team of surgeons, nephrologists, clinical transplant coordinators and nurses that handles each patient’s case, every step of the way.

As a full-service transplant center and the only program in Indiana offering comprehensive transplant services, IU Health Transplant is prepared for any type of complicated case.

Wait times measured in weeks or months, not years
- While other programs decline organs based on a single criterion, IU Health Transplant surgeons review each organ individually — which means we are able to use more organs and significantly reduce wait times.
- IU Health Transplant works diligently to get patients listed and transplanted. Even the most complex patients are evaluated for a possible transplant.

Not just more cases, but more first cases
- First pancreas transplant in Indiana (1988)
- First simultaneous kidney/pancreas transplant in Indiana (1988)
- First adult simultaneous liver/pancreas transplant in Indiana (2003)
- First pediatric simultaneous liver/pancreas transplant in Indiana (2004)
- First simultaneous lung/pancreas transplant in the world (2006)

Pancreas Transplant Surgeons
Jonathan Fridell, MD — Surgical Director
John Powelson, MD

Pancreas Transplant Physicians
Tim Tabor, MD — Medical Director
Dennis Mishler, MD
Asif Sharfuddin, MD
Muhammad Sohail Yaquib, MD
M. Ahmad Mujtaba, MD

IU Health Transplant Administrative Director
David Alvar, FACHE

When to Refer
Patients with these disorders are eligible for a pancreas transplant:
- Difficult-to-control Type 1 Diabetes
- Hypoglycemic unawareness
- Existing or impending end-stage renal disease (only for a combined kidney/pancreas transplant)

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer
To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

Pancreas Outcomes

Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>62</td>
<td>84</td>
</tr>
<tr>
<td>2009</td>
<td>67</td>
<td>65</td>
</tr>
</tbody>
</table>

One-year graft survival rates

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.71%</td>
<td>79.39%</td>
</tr>
</tbody>
</table>

Months on waitlist (Median)

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Transplant rate*

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.92</td>
<td>0.23</td>
</tr>
</tbody>
</table>

*Transplant Rate (per year on waitlist)

The rate shown is calculated by dividing the number of waitlist patients whose reason for waitlist removal was listed as receipt of a transplant by the total number of person years.

Pancreas Outcomes

Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>62</td>
<td>84</td>
</tr>
<tr>
<td>2009</td>
<td>67</td>
<td>65</td>
</tr>
</tbody>
</table>

One-year graft survival rates

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.71%</td>
<td>79.39%</td>
</tr>
</tbody>
</table>

Months on waitlist (Median)

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Transplant rate*

<table>
<thead>
<tr>
<th>IU Health</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.92</td>
<td>0.23</td>
</tr>
</tbody>
</table>

*Transplant Rate (per year on waitlist)

The rate shown is calculated by dividing the number of waitlist patients whose reason for waitlist removal was listed as receipt of a transplant by the total number of person years.

Pancreas Transplant Surgeons
Jonathan Fridell, MD — Surgical Director
John Powelson, MD

Pancreas Transplant Physicians
Tim Tabor, MD — Medical Director
Dennis Mishler, MD
Asif Sharfuddin, MD
Muhammad Sohail Yaquib, MD
M. Ahmad Mujtaba, MD

IU Health Transplant Administrative Director
David Alvar, FACHE
Joy enjoys working out and riding horses when she’s not teaching equestrian skills to children.

In 2009, Joy walked down the aisle and said, “I do” as the result of two things: A friend’s matchmaking skills and the liver transplant she received four years earlier.
Indiana University Health Transplant provides a full spectrum of liver disease and transplant services for adults and children. Patients who are referred to us not only have shorter wait times, but also enjoy better outcomes.

More than 90 percent of IU Health patients who are listed are transplanted, which is one of the highest percentages of any transplant program in the nation. Of course, our first priority is to avoid transplant if at all possible. But once it is determined that surgery is required, we work quickly and efficiently to get your patient listed and transplanted.

A full range of care for patients with liver disease

- Specialized, complex care is required for patients with end-stage liver disease.
- From medical therapy to transplantation, IU Health Transplant provides a full range of care for patients with liver disease in our dedicated transplant unit.
- Our liver specialists provide leading-edge treatments and procedures. As a result, patients may be candidates to participate in the latest clinical trials.
- Certified clinical transplant coordinators and nurses have specialized training to provide the highest quality patient care.
- We continue to develop new and innovative surgical techniques. Today’s liver transplants take a lot less time, blood loss is decreased and fewer blood transfusions are needed than in the past.

Shorter wait times before surgery decrease recovery time after surgery

- Our liver transplant surgeons travel, sometimes across the country, to evaluate patients. Organ recipients are all placed on the same national registry, but commitment to finding usable organs significantly reduces our program’s wait times.
- Since our wait times are among the shortest in the nation, our patients often receive successful transplants before they become extremely ill or debilitated.
- In addition, our patients experience excellent graft survival and a less than one percent incidence of primary graft non-function (PNF).

A leader in clinical research

- Expansion of the donor pool and use of Hepatitis C positive (HCV+) grafts
- Transplant for hepatocellular carcinoma (HCC) beyond Milan criteria
- Transplant for cholangiocarcinoma
- Combined liver/pancreas transplant for cystic fibrosis (CF) therapy
- Induction therapy immunosuppression for the purpose of decreasing chronic need for immunosuppressive medication
- Treatment for diffuse mesenteric thrombosis
- Research at IU Health and Indiana University School of Medicine related to liver includes: immunosuppression, Hepatitis C before and after transplant, Hepatitis B, obesity-related liver disease, diseases of the bile ducts, fibrosis reversal, xenotransplantation and alternative transplantation options.

Liver Outcomes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IU</td>
<td>224</td>
<td>246</td>
<td>276</td>
<td>298</td>
<td>324</td>
</tr>
<tr>
<td>National</td>
<td>224</td>
<td>246</td>
<td>276</td>
<td>298</td>
<td>324</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One-year adult graft survival</th>
<th>85.23%</th>
<th>85.23%</th>
<th>85.23%</th>
<th>85.23%</th>
<th>85.23%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU Health</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
</tr>
<tr>
<td>National</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
<td>85.23%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One-year pediatric graft survival</th>
<th>87.88%</th>
<th>87.88%</th>
<th>87.88%</th>
<th>87.88%</th>
<th>87.88%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU Health</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
</tr>
<tr>
<td>National</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
<td>87.88%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Months on waitlist (Median)</th>
<th>12.4</th>
<th>12.4</th>
<th>12.4</th>
<th>12.4</th>
<th>12.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU Health</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
</tr>
<tr>
<td>National</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
<td>12.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transplant rate*</th>
<th>2.39</th>
<th>2.39</th>
<th>2.39</th>
<th>2.39</th>
<th>2.39</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU Health</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
</tr>
<tr>
<td>National</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
</tr>
</tbody>
</table>

*Transplant rate per year on waitlist

More transplant patients underwent surgery at IU Health Transplant than at the national average, which is expected due to the unique needs of each patient. Our team recommends the best type of surgery for each patient based on their individual needs.

Summary:

- On average, patients wait for 12.4 months before surgery.
- IU Health Transplant has a 2.39 transplant rate per year on waitlist, which is higher than the national average.

When to Refer

Patients who are candidates for liver transplants fall into four categories:

- Patients with chronic liver failure
- Patients with acute liver failure
- Patients with inborn errors of metabolism
- Patients with primary liver malignancies that are confined to the liver but are unable to be removed by surgery

Patients with specific liver diseases may be considered for liver transplantation as well.

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer

To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant

550 N. University Blvd., Room 4601
Indianapolis, IN 46202
At age 2, David was IU Health’s first intestinal transplant recipient. Now, David is healthy and happy and enjoys what many children love best—sports and playing with friends.

David, intestinal transplant in 2003
Indiana University Health consistently ranks among the top transplant programs in the United States and is one of only a handful of Medicare-approved programs that provide intestinal and multivisceral transplants.

Our ongoing successes have led to our designation as the only Medicare-approved transplant center in the region to perform intestinal and multivisceral (intestine combined with two or more abdominal organs) transplants, less than a dozen centers in the nation. Shorter wait times, more procedures and better outcomes give our patients the ideal combination of pre- and post-surgical care.

More experience means more specialized procedures

- Indiana University Health Transplant is nationally ranked for both wait times and outcomes year after year. Due to the number of surgeries we perform, we have experience with both routine and complicated procedures.
- IU Health Transplant is a full-service transplant center, utilizing three hospitals and hundreds of specialists. As a result, we have immense experience and are well prepared for any type of complication.

Shorter wait times, shorter recovery times

- The wait time at IU Health Transplant is among the shortest in the nation because we work diligently to procure organs that other programs do not.
- IU Health Transplant is a model for other transplant centers.

First pediatric isolated intestinal transplant in Indiana (2003)
First adult isolated intestinal transplant in Indiana (2004)

In 2007, the Health Resources and Services Administration (HRSA) visited IU Health Transplant with hospital administrators from around the country, using us as a model for other transplant programs.

IU Health Transplant is a full-service transplant center, utilizing three hospitals and hundreds of specialists. As a result, we have immense experience and are well prepared for any type of complication.

IU Health Transplant is a model for other transplant centers.

When to Refer

Patients with these disorders are eligible for an intestinal or multivisceral transplant:

- Intestinal atresia
- Mid-gut volvulus
- Gastroesophageal reflux
- Necrotizing enterocolitis (NEC)
- Hirschsprung’s disease
- Mesenteric thrombosis
- Trauma
- IBD/Crohn’s disease
- Gardner’s syndrome
- Pseudo-obstruction
- Neuroendocrine and Desmoid tumors

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer

To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

Adult & Pediatric Intestinal Transplant Surgeons
Rodrigo Vianna, MD — Surgical Director
Jonathan Fridell, MD
Richard S. Mangus, MD
A. Joseph Tector, MD, PhD

Adult Transplant Hepatologist
Marco Lacerra, MD — Medical Director

IU Health Transplant Administrative Director
David Alvar, FACHE

Intestinal Outcomes (Combined isolated intestine and multivisceral)

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>15</td>
</tr>
<tr>
<td>2006</td>
<td>14</td>
</tr>
<tr>
<td>2007</td>
<td>22</td>
</tr>
<tr>
<td>2008</td>
<td>20</td>
</tr>
<tr>
<td>2009</td>
<td>29</td>
</tr>
</tbody>
</table>

One-year adult patient survival rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Health</th>
<th>National</th>
<th>Benchmark</th>
<th>Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One-year pediatric patient survival rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Health</th>
<th>National</th>
<th>Benchmark</th>
<th>Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Months on waitlist (Median)

<table>
<thead>
<tr>
<th>Year</th>
<th>Health</th>
<th>National</th>
<th>Benchmark</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Transplant rate*

<table>
<thead>
<tr>
<th>Year</th>
<th>Health</th>
<th>National</th>
<th>Benchmark</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td>4.81</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td>4.60</td>
</tr>
</tbody>
</table>

*Transplant Rate (per year on waitlist)


When to Refer

Patients with these disorders are eligible for an intestinal or multivisceral transplant:

- Intestinal atresia
- Mid-gut volvulus
- Gastroesophageal reflux
- Necrotizing enterocolitis (NEC)
- Hirschsprung’s disease
- Mesenteric thrombosis
- Trauma
- IBD/Crohn’s disease
- Gardner’s syndrome
- Pseudo-obstruction
- Neuroendocrine and Desmoid tumors

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer

To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

Adult & Pediatric Intestinal Transplant Surgeons
Rodrigo Vianna, MD — Surgical Director
Jonathan Fridell, MD
Richard S. Mangus, MD
A. Joseph Tector, MD, PhD

Adult Transplant Hepatologist
Marco Lacerra, MD — Medical Director

IU Health Transplant Administrative Director
David Alvar, FACHE
Missy received a modified multivisceral transplant (intestine, pancreas and stomach) but within weeks her body began to reject those organs. Surgeons performed a second multivisceral transplant to replace the intestine, pancreas, liver and a portion of the stomach. Missy feels lucky to have been in the right place at the right time and at “one of the finest transplant centers in the nation.”
Indiana University Health Transplant is the largest, most comprehensive transplant program of its kind. With a direct affiliation with Indiana University School of Medicine, IU Health Transplant is able to offer the benefits of combined clinical expertise, research and teaching excellence.

Our individual transplant programs are consistently ranked among the top in the nation. Because of decades of experience and expertise, along with one of the most technologically advanced facilities, IU Health is able to offer one of the highest-ranked and most comprehensive transplant programs.

More surgical options—more types of procedures
- IU Health Transplant performs more transplants than all other Indiana transplant centers combined.
- We are one of only a few health systems approved by Medicare to perform multivisceral (intestine combined with two or more abdominal organs) and isolated intestinal transplants.

Shorter wait times, better outcomes
- Our wait times are among the shortest in the nation because of our team’s unmatched diligence in finding compatible organs.
- Because IU Health Transplant performs so many surgeries, we are able to handle both routine and complicated procedures, which makes our nationally ranked outcomes that much more impressive.

Multivisceral firsts
- The first pediatric multivisceral transplant in Indiana (2003)
- The first adult multivisceral transplant in Indiana (2004)
- Performed 100 multivisceral transplants, one-fifth the total performed in the world

Intestinal Outcomes
(Combined isolated intestine and multivisceral)

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
<th>IU Health</th>
<th>National</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>15</td>
<td>17</td>
<td>25</td>
<td>13.5</td>
</tr>
<tr>
<td>2006</td>
<td>14</td>
<td>17</td>
<td>21</td>
<td>13.5</td>
</tr>
<tr>
<td>2007</td>
<td>19</td>
<td>16</td>
<td>20</td>
<td>12.5</td>
</tr>
<tr>
<td>2008</td>
<td>15</td>
<td>17</td>
<td>19</td>
<td>12.5</td>
</tr>
<tr>
<td>2009</td>
<td>21</td>
<td>17</td>
<td>20</td>
<td>12.5</td>
</tr>
</tbody>
</table>

One-year adult patient survival rates

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>91.62%</td>
<td>79.02%</td>
<td>78.75%</td>
</tr>
<tr>
<td>2006</td>
<td>92.31%</td>
<td>79.02%</td>
<td>78.75%</td>
</tr>
<tr>
<td>2007</td>
<td>91.62%</td>
<td>78.86%</td>
<td>78.50%</td>
</tr>
<tr>
<td>2008</td>
<td>92.31%</td>
<td>78.86%</td>
<td>78.00%</td>
</tr>
<tr>
<td>2009</td>
<td>92.31%</td>
<td>78.86%</td>
<td>78.00%</td>
</tr>
</tbody>
</table>

One-year pediatric patient survival rates

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>91.62%</td>
<td>79.02%</td>
<td>78.75%</td>
</tr>
<tr>
<td>2006</td>
<td>92.31%</td>
<td>79.02%</td>
<td>78.75%</td>
</tr>
<tr>
<td>2007</td>
<td>91.62%</td>
<td>78.86%</td>
<td>78.50%</td>
</tr>
<tr>
<td>2008</td>
<td>92.31%</td>
<td>78.86%</td>
<td>78.00%</td>
</tr>
<tr>
<td>2009</td>
<td>92.31%</td>
<td>78.86%</td>
<td>78.00%</td>
</tr>
</tbody>
</table>

Months on waitlist (Median)

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>2006</td>
<td>1.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>2007</td>
<td>1.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>2008</td>
<td>1.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>2009</td>
<td>1.5</td>
<td>4.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Transplant rate*

<table>
<thead>
<tr>
<th>Year</th>
<th>IU Health</th>
<th>National</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>4.49</td>
<td>4.49</td>
<td>4.49</td>
</tr>
<tr>
<td>2006</td>
<td>4.49</td>
<td>4.49</td>
<td>4.49</td>
</tr>
<tr>
<td>2007</td>
<td>4.49</td>
<td>4.49</td>
<td>4.49</td>
</tr>
<tr>
<td>2008</td>
<td>4.49</td>
<td>4.49</td>
<td>4.49</td>
</tr>
<tr>
<td>2009</td>
<td>4.49</td>
<td>4.49</td>
<td>4.49</td>
</tr>
</tbody>
</table>

*Transplant Rate (per year on waitlist)
The rate shown is calculated by dividing the number of waitlist patients removed from the waitlist (whose reason for waitlist removal was listed as receipt of a transplant) by the total number of person years.

When to Refer
Patients with these disorders are eligible for a multivisceral or intestinal transplant:
- Intestinal atresia
- Mid-gut volvulus
- Gastrochisis
- Necrotizing enterocolitis (NEC)
- Hirschsprung’s disease
- Mesenteric thrombosis
- Trauma
- IBD/Crohn’s disease
- Gardner’s syndrome
- Pseudo-obstruction
- Neuroendocrine and Desmoid tumors

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer
To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202

When to Refer
Patients with these disorders are eligible for a multivisceral or intestinal transplant:
- Intestinal atresia
- Mid-gut volvulus
- Gastrochisis
- Necrotizing enterocolitis (NEC)
- Hirschsprung’s disease
- Mesenteric thrombosis
- Trauma
- IBD/Crohn’s disease
- Gardner’s syndrome
- Pseudo-obstruction
- Neuroendocrine and Desmoid tumors

Not sure? Call IU Health Transplant at 800.622.4989.

How to Refer
To refer a patient to IU Health Transplant, call 800.622.4989. You may also contact us by e-mail at transplantinfo@iuhealth.org.

For additional information about our program and excellent patient outcomes, visit iuhealth.org/transplant or call us to request a tour of our center.

Indiana University Health Transplant
550 N. University Blvd., Room 4601
Indianapolis, IN 46202
Kidney Program

Adult & Pediatric Kidney Transplant Surgeons
William Goggins, MD — Surgical Director
John Powelson, MD

Adult Kidney Transplant Nephrologists
Tim Taber, MD — Medical Director
Dennis Mishler, MD
Asif Sharfuddin, MD
Muhammad Sohail Yaqub, MD
M. Ahmad Mujtaba, MD

Pediatric Kidney Transplant Nephrologist
Corina Nailescu, MD — Medical Director

Pancreas Program

Pancreas Transplant Surgeons
Jonathan Fridell, MD — Surgical Director
John Powelson, MD

Pancreas Transplant Physicians
Tim Taber, MD — Medical Director
Dennis Mishler, MD
Asif Sharfuddin, MD
Muhammad Sohail Yaqub, MD
M. Ahmad Mujtaba, MD

Liver Program

Adult & Pediatric Liver Transplant Surgeons
A. Joseph Tector, MD, PhD — Surgical Director
Jonathan Fridell, MD
Richard S. Mangus, MD
Rodrigo Vianna, MD

Adult Transplant Hepatologists
Paul Kwo, MD — Medical Director
Marwan Ghabel, MD
Marco Lacerta, MD
Rakesh Vinayak, MD
Hwan Yoo, MD

Pediatric Transplant Hepatologists
Girish Subbarao, MD — Medical Director
Jean Melleston, MD

Intestinal Program

Adult & Pediatric Intestinal Transplant Surgeons
Rodrigo Vianna, MD — Surgical Director
Jonathan Fridell, MD
Richard S. Mangus, MD
A. Joseph Tector, MD, PhD

Adult Transplant Hepatologist
Marco Lacerta, MD — Medical Director

Multivisceral Program

Adult & Pediatric Multivisceral Transplant Surgeons
Rodrigo Vianna, MD — Surgical Director
Jonathan Fridell, MD
Richard S. Mangus, MD
A. Joseph Tector, MD, PhD

Adult Transplant Hepatologist
Marco Lacerta, MD — Medical Director

IU Health Transplant Administrative Director
David Alvar, FACHE

To make a referral, call 800.622.4989.
Physician Bios

Jonathan A. Fridell, MD
Pancroas Transplant Surgical Director
jfridell@iupui.edu

Jonathan Fridell, MD, is a native of Montreal, Canada, and received his medical degree and residency training from McGill University. Fridell obtained his fellowship training from Thomas E. Starzl Transplant Institute at the University of Pittsburgh Medical Center. A member of 10 medical organizations, Fridell is listed in the Marguilis Who's Who in Medicine and Healthcare. His expertise and research interests include pancreas and liver transplantation.

William C. Goggins, MD
Kidney Transplant Surgical Director
wgoggins@iupui.edu

William Goggins, MD, is from Worcester, Massachusetts, and received his undergraduate degree from the College of Holy Cross. He received his medical degree from McGill University. Goggins completed a clinical fellowship in transplantation at Mayo Clinic. Recognized as one of America's best physicians by several published "top doctors" series, Kwo is an attending physician with Indiana University Health Transplant. He specializes in gastroenterology and hepatology, with a particular interest in liver transplantation and the treatment of viral hepatitis.

Marco A. Lacerda, MD
Adult Intestinal Transplant Medical Director
mlacerda@iupui.edu

Marco A. Lacerda, MD, had his medical training at the Federal University of Paraná in Brazil, where he became certified in internal medicine and gastroenterology. He completed his fellowship and liver transplantation training initially at the Mayo Clinic in Rochester, Minn. After several years of practice and implementing liver transplant programs in his native town of Curitiba, Brazil, Lacerda joined Indiana University Health Transplant and Indiana University School of Medicine. He has dedicated his attention to hepatology, especially liver transplantation, and the medical care of intestinal transplant patients.

Richard S. Mangus, MD, MS
Transplant Surgeon
rmangus@iupui.edu

Richard Mangus, MD, MS, received his medical degree from Johns Hopkins University and his graduate degree from University of Maryland. He obtained his medical degree from Oregon Health Sciences University and completed his surgery residency followed by a transplant fellowship at Indiana University School of Medicine. Mangus is actively involved in several transplant associations and manages the clinical research database for Indiana University Health Transplant. His research and expertise includes intestinal, liver and multi-organ transplantation.

John Powelson, MD
Transplant Surgeon
jpowelson@iupui.edu

John Powelson, MD, received his undergraduate degree from Harvard University and his graduate degree from Boston University School of Medicine. He received his postdoctoral degrees and completed a fellowship at the University of Massachusetts Medical Center and Massachusetts General Hospital. Powelson completed his surgical and research fellowships in surgery at Harvard and Massachusetts General. Powelson has been recognized with the Henry J. Baskin Award for qualities of personal commitment to individuals in need of care, social awareness and excellence in clinical medicine. His expertise and research interests include laparoscopic donor nephrectomy, pancreas and kidney transplantation.

Tim Taber, MD
Kidney and Pancreas Transplant Medical Director
ttaber@iupui.edu

Tim Taber, MD, received his medical degree from Indiana University School of Medicine and completed his nephrology fellowship at IU Health Methodist Hospital in Indianapolis. His research interests include renal transplantation in high PRA patients, kidney and pancreas transplantation, and manipulation of immunosuppressants. Taber’s clinical interests include cardiac risk factor management and paired living kidney donor exchange. He serves in various medical and research advisory positions.

A. Joseph Tector, MD, PhD
Chief of Transplantation
atector@iupui.edu

A. Joseph Tector, MD, PhD, received his medical degree from St. Louis University School of Medicine and his postdoctoral degree from McGill University in Montreal, Canada. He completed an abdominal transplant fellowship at the University of Miami/Jackson Memorial Hospital before joining Indiana University Health Transplant in 2003. Viana is a member of several professional medical associations. His clinical research interests include intestinal, liver and multivisceral transplantation.

Rodrigo Vianna, MD
Intestinal Transplant Surgical Director
rvianna@iupui.edu

Rodrigo Vianna, MD, received his medical degree from Federal University of Paraná in Brazil. He completed research and clinical fellowships while at the University of Miami/Jackson Memorial Hospital before joining Indiana University Health Transplant in 2003. Vianna is a member of several professional medical associations. His clinical research interests include intestinal, liver and multivisceral transplantation.

To make a referral, call 800.622.4989.
A private, nonprofit organization, Indiana University Health is Indiana's largest comprehensive health system and is comprised of hospitals, physicians and allied services dedicated to providing preeminent care throughout Indiana and beyond. Our unique partnership with the Indiana University School of Medicine gives our highly skilled physicians access to innovative treatments using the latest research and technology. 

Discover the strength at iuhealth.org.

© 2011 IUHealth 01/11 IUHT#13436