Clinical Policy Title: Pancreas transplants

Clinical Policy Number: 08.02.07

Effective Date: April 1, 2016
Initial Review Date: October 21, 2015
Most Recent Review Date: February 17, 2016
Next Review Date: February 2017

Related policies:

CP# 08.02.07 Artificial pancreas device system
CP# 04.02.06 Heart valve transplants
CP# 14.02.06 Bone marrow transplants
CP# 13.02.01 Kidney transplants
CP# 04.02.05 Heart transplants
CP# 07.02.07 Lung transplants
CP# 08.02.05 Liver transplants

ABOUT THIS POLICY: AmeriHealth Caritas Pennsylvania has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas Pennsylvania’s clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of “medically necessary,” and the specific facts of the particular situation are considered by AmeriHealth Caritas Pennsylvania when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas Pennsylvania’s clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas Pennsylvania’s clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas Pennsylvania will update its clinical policies as necessary. AmeriHealth Caritas Pennsylvania’s clinical policies are not guarantees of payment.

Coverage policy

AmeriHealth Caritas Pennsylvania considers the use of pancreas transplantation (PT) to be clinically proven and, therefore, medically necessary in persons with type 1 diabetes mellitus (T1DM) when the following criteria are met:

- For simultaneous pancreas-kidney transplant (SPK) using deceased donor pancreas and kidney or deceased donor pancreas and live donor kidney, members must meet all of the criteria for a kidney transplant (See Clinical Policy 13.02.01 Kidney transplants).
- For PT after a previous kidney transplant (PAK) in members with stable kidney graft function.
• For pancreas transplantation alone (PTA) using deceased donor whole organ or living-donor segmental organ in members who meet all of the following criteria:
  o Members must have a diagnosis of type I diabetes and one of the following:
    ▪ Be beta cell autoantibody positive.
    ▪ Demonstrate insulinopenia defined as a fasting C-peptide level that is less than or equal to 110% of the lower limit of normal of the laboratory’s measurement method. Fasting C-peptide levels will only be considered valid with a concurrently obtained fasting glucose ≤ 225 mg/dL.
  o A history of medically-uncontrollable labile (brittle) T1DM with documented recurrent, severe, acutely life-threatening metabolic complications that require hospitalization (e.g., frequent hypoglycemia unawareness or recurring severe ketoacidosis, or recurring severe hypoglycemic attacks).
  o Optimally and intensively managed by an endocrinologist for at least 12 months with the most medically-recognized advanced insulin formulations and delivery systems.
  o Member has satisfactory kidney function (creatinine clearance greater than 40 ml/min).
  o Member has adequate cardiac status (e.g., no angiographic evidence of significant coronary artery disease, ejection fraction greater than or equal to 40 %, no myocardial infarction in last 6 months, negative stress test).
  o Documentation of compliance with medical management.
  o The emotional and mental capacity to understand the significant risks associated with surgery and to effectively manage the lifelong need for immunosuppression.
  o Otherwise a suitable candidate for transplantation.

AmeriHealth Caritas Pennsylvania considers the use of pancreas re-transplantation to be clinically proven and, therefore, medically necessary upon individual case review.

AmeriHealth Caritas Pennsylvania considers the use of autologous or allogeneic islet cell transplantation to be investigational and, therefore, not medically necessary.

Limitations:

• Requests for PT in patients with the following conditions require secondary review:
  o Chronic liver disease.
  o Clinical evidence of severe cerebrovascular or peripheral vascular disease (e.g., ischemic ulcers, previous amputation secondary to vascular disease). Adequate peripheral arterial supply should be determined by standard evaluation in the vascular laboratory including Doppler examination and plethysmographic readings of systolic blood pressure.
  o Older than 50 years of age.
  o Past psychosocial abnormality.
  o Persons with body mass index (BMI) of 35 or higher and type 2 diabetes mellitus (T2DM) (bariatric surgery should be considered).
  o Structural genito-urinary abnormality or recurrent urinary tract infection.
  o Substance use history (other than persistent substance use).
  o Treated malignancy (SPK transplantation is considered medically necessary in persons with malignant neoplasm if the neoplasm has been adequately treated and the risk of recurrence is small).
  o Uncontrolled hypertension.
• Absolute contraindications to PT include, but are not limited to, the following:
Acquired immune deficiency syndrome (AIDS) (diagnosis based on Centers for Disease Control and Prevention [CDC] definition of CD4 count, 200 cells/mm$^3$) unless all of the following criteria are met:

- CD4 count greater than 200 cells/mm$^3$ for more than six months.
- HIV-1 RNA undetectable.
- On stable anti-retroviral therapy for more than three months.
- No other complications from AIDS (e.g., opportunistic infection, Kaposi’s sarcoma or other neoplasm).
- Meeting all other criteria for pancreas or pancreas and kidney transplantation.

- Active drug use and alcohol-dependence.
- Active hepatitis and/or cirrhosis.
- Active or recent malignancy.
- Active peptic ulcer.
- Demonstrated patient non-adherence to medical recommendations (e.g., failure to comply with prescribed drug regimens).
- Ongoing or recurring infections that are not effectively treated.
- Potential complications from immunosuppressive medications unacceptable to the patient.
- Psychiatric disease that may compromise patient compliance.
- Serious cardiac or other ongoing insufficiencies that create an inability to tolerate transplant surgery.
- Serious conditions unlikely to be improved by transplantation as life expectancy can be finitely measured.

- PT is not medically necessary for organs sold rather than donated to a recipient.
- PT is not medically necessary for artificial organs or human organ transplant service for which the cost is covered or funded by governmental, foundation or charitable grants.
- All other uses of PT are not medically necessary.

For Medicare members:

AmeriHealth Caritas Pennsylvania considers the use of PT to be clinically proven and, therefore, medically necessary in persons with T1DM when criteria for coverage in the following policies are met:

- National Coverage Determination (NCD) for Pancreas Transplants (260.3).
- Medicare Benefit Policy Manual Chapter 11 - End Stage Renal Disease (ESRD).

AmeriHealth Caritas Pennsylvania considers the use of transplantation of partial pancreatic tissue or islet cells (except in the context of a clinical trial (see section 260.3.1 of the NCD Manual) not to be medically necessary.

Note: The following CPT/HCPCS codes are not listed in the Pennsylvania Medicaid fee schedule:

48551 - Backbench standard preparation of cadaver donor pancreas allograft prior to transplantation, including dissection of allograft from surrounding soft tissues, splenectomy, duodenotomy, ligation of bile duct, ligation of mesenteric vessels, and Y-graft arterial anastomoses from iliac artery to superior mesenteric artery and to splenic artery

48552 - Backbench reconstruction of cadaver donor pancreas allograft prior to transplantation, venous anastomosis, each
48554 - Transplantation of pancreatic allograft

48556 - Removal of transplanted pancreatic allograft

G0341 - Percutaneous islet cell transplant, includes portal vein catheterization and infusion

G0342 - Laparoscopy for islet cell transplant, includes portal vein catheterization and infusion

Alternative covered services:

- Exogenous insulin therapy.
- Hemodialysis.
- Peritoneal dialysis.

Background

The pancreas is a gland located behind the stomach that produces digestive enzymes and insulin. Diabetes results from defects in the pancreas' ability to produce insulin and/or the body's ability to use insulin. To prevent complications of diabetes, normalization of carbohydrate and glucose metabolism is required (CDC, 2015). Exogenous insulin is effective therapy for most diabetics, but wide deviations of plasma glucose levels may occur despite optimal management (National Pancreas Foundation [NPF], 2015).

A PT is a means of providing an endogenous, self-regulated source to achieve physiologic insulin regulation without inducing adverse effects associated with administration of exogenous insulin (National Kidney Foundation [NKF], 2015). The goal of PT is to produce a lasting normoglycemic state that enhances quality of life. PT may involve the whole pancreas, a pancreas segment or a large group of pancreatic islet cells.

In 2013 1,018 PTs (excluding islet cell) were performed; in more than 80 percent of transplants, the primary cause of disease was T1DM; other causes of disease were T2DM, chronic pancreatitis, cancer and cystic fibrosis (Kandaswamy, 2015). Whole organ transplants from deceased donors are the most common, but segmental transplants may be done if a living donor is involved (NPF, 2015). The majority of transplants were SPK, as many people suffering from pancreas failure also have renal failure. PT may also include transplantation of the duodenum in some patients with digestive disorders (Kandaswamy, 2015; OPTN, 2015).

Allogeneic islet cell transplantation may be a potential alternative for persons with T1DM in whom the insulin-producing beta cells have been destroyed. Clusters of islet cells are usually transplanted directly into the liver, where they begin to produce insulin, and may be able to replace the function of the pancreas.
Regulatory status:

The Health Resources Services Administration (HRSA) within the Department of Health and Human Services (DHHS) has oversight responsibility for the organ allocation system in the United States (U.S.) through the Organ Procurement and Transplantation Network (OPTN). The United Network for Organ Sharing (UNOS) administers the OPTN to which transplant centers are required to report (OPTN, 2015a). The U.S. Food and Drug Administration (FDA) does not regulate the transplantation of human organs containing blood vessels such as kidney, liver, heart, lung or pancreas (FDA, 2015). However, FDA does regulate allogeneic islet cell transplantation as somatic cell therapy. Clinical studies to determine safety and effectiveness outcomes of allogeneic islet cell transplantation must be conducted under an FDA investigational new drug regulation (FDA, 2014).

Searches

AmeriHealth Caritas Pennsylvania searched PubMed and the databases of:
- UK National Health Services Center for Reviews and Dissemination.
- Agency for Healthcare Research and Quality’s National Guideline Clearinghouse and other evidence-based practice centers.
- The Centers for Medicare & Medicaid Services (CMS).

We conducted searches on October 8, 2015. Search terms were “pancreas transplantation”[MeSH] and “islets of Langerhans transplantation”[MeSH].

We included:
- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews**.
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.

Findings

We identified four systematic reviews, one survival analysis, one economic analysis and three evidence-based guidelines for this policy. Whole organ PT is an acceptable alternative to exogenous insulin in carefully selected patients with T1DM. The majority of the evidence assessed PT in persons with difficult-to-control T1DM in whom a kidney transplant (KT) had been performed or was imminent. PT techniques were PTA, SPK, PAK and allogeneic islet cell. Evidence from a limited number of living-related donor segmental PT suggests these grafts have a lower rejection rate and may provide a more satisfactory long-term outcome than whole pancreas grafts from deceased donors. PT is associated with significant perioperative risks, including graft thrombosis, hemorrhage, pancreatitis, wound infection, peripancreatic abscesses and duodenal stump leakage.

As with other solid organ transplants, contraindications to any PT procedure include the presence of active or recent malignancy, chronic active hepatitis and/or cirrhosis, morbid obesity, psychiatric disease, recent history of noncompliance, active alcoholism and/or drug dependency, inability to
withstand surgery and immunosuppression, active sepsis, cardiovascular disease, or active peptic ulcer. Increasing age has been a part of the exclusion criteria used when determining eligibility for a PT. While an upper age limit has not been established in the literature, a UNOS database review of all adult PT and kidney-pancreas transplants between 1996 and 2012 found PT performed in patients of increasing age demonstrate decreased patient and graft survival when compared to PT in patients younger than 50 years of age (Siskind, 2014).

There is sufficient evidence to support PTA (deceased or living-donor segmental) in patients with T1DM and preserved renal function to correct severe metabolic complications. PTA has been performed mostly in patients with hypoglycemic unawareness or labile diabetes (including patients with frequent episodes of ketoacidosis) who have failed insulin-based management and may have incapacitating clinical or emotional problems with exogenous insulin therapy. Successful PTA can eliminate the acute complications commonly experienced by individuals with T1DM, stabilize neuropathy and improve quality of life primarily by eliminating the need for exogenous insulin, frequent daily blood glucose measurements, and many of the dietary restrictions imposed by the disorder. Patient survival rates of PTA and pancreas-kidney transplants are similar, and graft survival rates of PTA and PAK are similar.

Two OPTN/UNOS database analyses underscore the importance of monitoring kidney function before and after PTA. Approximately 10 percent of patients developed kidney failure at five years follow up and required kidney transplants (Nata, 2013). Kidney function before PTA is a strong independent predictor of end-stage renal disease (ESRD) (Kim, 2014). Patients with an estimated glomerular filtration rate (eGFR) less than 60 and 60 to 89.9 mL/min/1.73 m^2 were 7.74 (95 percent confidence interval [CI] 4.37 to 13.74) and 3.25 (95 percent CI 1.77 to 5.97) times more likely to develop ESRD, respectively, than patients with an eGFR greater than or equal to 90 mL/min/1.73 m^2. The ideal management of candidates for PTA with an eGFR less than 60 mL/min/1.73 m^2 remains to be determined. These results may inform patient selection and the use of targeted interventions to reduce the risk of progressive kidney impairment in this patient population.

There is sufficient evidence to support the use of pancreas-kidney transplant either simultaneously (SPK) or sequentially (PAK) in carefully selected uremic patients with T1DM. Successful PT does not jeopardize patient survival, may improve kidney survival, will restore normoglycemia and improve quality of life. As a single procedure, SPK offer the potential benefits of shorter waiting time, expansion of the organ donor pool, and improved short-term and long-term renal graft function. For those who have a living kidney donor, PAK is preferable to waiting years for a cadaver SPK.

There is insufficient evidence to support the use of islet cell transplantation for treatment of T1DM. Islet cell transplant holds significant potential advantages over whole-gland transplants and for patients with benign prostatic disease (e.g., chronic pancreatitis), but its long-term survival has yet to be achieved. At this time, it is a rapidly evolving technology that also requires systemic immunosuppression and should be performed only within the setting of controlled research studies.

There is insufficient evidence to support PT for patients with T2DM. Results from a small number of case series suggest SPK appears comparable for patients with and T1DM and T2DM, but long term outcomes are lacking.
<table>
<thead>
<tr>
<th>Citation</th>
<th>Content</th>
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<tbody>
<tr>
<td><strong>Hayes (2013, updated 2015)</strong></td>
<td><strong>Key points:</strong></td>
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</tbody>
</table>
| **Simultaneous pancreas-kidney (SPK) transplantation** | - Systematic review of 21 retrospective nonrandomized analyses and three prospective cohort studies, including large-scale analyses of the transplant registries (2000-March, 2015), sample size range 101 to 15,282 patients.  
- Overall quality: Moderate. Patient characteristics-mostly T1DM, mean age 35 to 45 years.  
- Criteria for SPK: Established ESRD (e.g., creatinine clearance < 30 milliliters [mL] per minute), and confirmed diabetic nephropathy on insulin.  
- Compared to KT alone (KTA) or wait listing, SPK increased patient survival and kidney graft survival rates in T1DM patients with imminent or established ESRD for many years after transplantation.  
- Insufficient evidence for SPK among T2DM patients but low quality evidence suggests SPK results are comparable for patients with T1DM and T2DM.  
- Insufficient evidence comparing SPK to PT alone or pancreas after KT.  
- Low quality evidence suggests SPK may not offer benefits over KTA from a living kidney donor. |

| **Wilson (2015)** | **Key points:** |
| **Cost-effectiveness analysis of medical versus surgical management of minimal change chronic pancreatitis (MCCP)** | - Detailed perioperative outcomes from 46 patients with MCCP populated a Markov model comparing medical management to total pancreatectomy and islet cell autotransplantation (TPIAT).  
- Mortality, complications, readmission rates, insulin and narcotic use, imaging and endoscopy were included.  
- Cost and survival for TPIAT versus medical management were $153,575/14.9 QALYs and $196,042/11.5 QALYs, respectively. |

| **Sung (2015)** | **Key points:** |
| **SPK versus KTA in T1DM** | - Analysis of average treatment-specific survival curves, adjusting for differences in case mix.  
- At 10 years, kidney graft survival time was greater by 0.18 years (P = 0.045) for SPK versus KTA mainly in younger SPK recipients. Patient survival was 0.17 years greater (P = 0.033) for SPK versus KTA.  
- SPK is associated with modest survival benefit over KTA, but overall survival is equivalent at about two years. |

| **Bramis (2012)** | **Key points:** |
| **TPIAT for chronic pancreatitis.** | - Systematic review of five cohort studies published through 2011.  
- TPIAT significantly reduced pain, opiate requirements after procedure based on two studies.  
- Concurrent IAT reduced insulin requirement after TP; the rate of insulin independence ranged from 46 percent of patients at five years’ mean follow-up to 10 percent at eight years.  
- The impact on quality of life was poorly reported.  
- Insufficient evidence of optimal timing of TPIAT in relation to the evolution of chronic pancreatitis. |

| **Speight (2010)** | **Key points:** |
| **Islet cell or PT for T1DM** | - Systematic review of 12 studies assessing patient reported outcomes (PRO) of PAK, PTA, islet-after kidney (IAK) and islet transplant alone (ITA).  
- Sample sizes ranged from 7 to 205 patients, included nine specified and two unspecified PRO measures.  
- Overall quality: Poor. Small sample sizes, some PRO measures may lack sensitivity to detect actual changes post-transplantation.  
- Insufficient evidence of full impact of islet cell or PT (alone or after kidney) on quality of life (QoL). Some PRO measures excluded issues and domains of life likely to be important for QoL post-transplantation and when patients may no longer perceive themselves to have diabetes. Satisfaction not assessed. |
### CMS policy:

<table>
<thead>
<tr>
<th>CMS NCDs and LCDs</th>
<th>Summary</th>
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<tbody>
<tr>
<td><a href="http://www.cms.hhs.gov/CertificationandCompliance/20_Transplant.asp#TopOfPage">http://www.cms.hhs.gov/CertificationandCompliance/20_Transplant.asp#TopOfPage</a></td>
<td>Effective for services performed on or after July 1, 1999, whole organ pancreas transplantation is nationally covered by Medicare when performed simultaneous with or after a kidney transplant. If the pancreas transplant occurs after the kidney transplant, immunosuppressive therapy begins with the date of discharge from the inpatient stay for the pancreas transplant. Partial pancreas and islet cell transplantations are not nationally covered.</td>
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<tr>
<td>NCD for Pancreas Transplants (260.3)</td>
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</table>
Stage 1 Slight kidney damage with normal or increased filtration (GFR > 90).
Stage 2 Mild decrease in kidney function (GFR 60 to 89).
Stage 3 Moderate decrease in kidney function (GFR 30 to 59).
Stage 4 Severe decrease in kidney function (GFR 15 to 29).
Stage 5 Very severe (End stage renal failure) (GFR < 15 [or dialysis]).

**Diabetes** — A metabolic disease in which the body’s inability to produce any or enough insulin causes elevated levels of glucose in the blood.

**Glomerular filtration rate (GFR)** — A measure of overall kidney function that describes the flow rate (GFR, mL/min/1.73 m\(^2\)) of filtered fluid through the kidney. Several techniques are used to calculate or estimate the GFR.

**Hemodialysis** — Renal replacement therapy used for the extracorporeal removal of waste products such as creatinine and urea and free water from the blood after which the cleansed blood is returned to the patient’s body. Hemodialysis is accomplished usually in three to five hour sessions, three times a week.

**Hyperglycemia** — Abnormally high level of glucose in the blood.

**Islet cells (Islets of Langerhans)** — Clusters of pancreatic cells mostly comprised of two types of cells: alpha cells that produce glucagon, a hormone that raises the level of glucose (sugar) in the blood, and beta cells that produce insulin.

**Insulinopenia** — Deficient secretion of insulin by the pancreas, resulting in hyperglycemia.

**Kidney transplantation** — The surgical removal and transfer of a kidney from a living related or unrelated donor or cadaver donor into a recipient, so the patient will no longer need dialysis.

**Non-adherence** — Deviation from the prescribed medication regimen sufficient to adversely influence the regimen’s intended effect. Non-adherence encompasses primary (at initiation) and secondary (subsequent) non-adherence, partial and/or total non-adherence, as well as the timing of medication use. Risk factors include non-adherence behavior prior to transplantation, substance use, long duration of treatment (with decline in rates of adherence over time), poor communication and inadequate social support.

**Pancreas** — A gland about 5 to 6 inches long, located behind the stomach and extends horizontally between the duodenum and the spleen. It produces enzymes for digestion and insulin.

**Pancreas transplant** — A surgical procedure to place a healthy pancreas, either whole from a deceased donor or partial from a living donor, into a person whose pancreas no longer functions properly.

**Peritoneal dialysis** — Renal replacement therapy that uses the patient’s peritoneum in the abdomen as a membrane across which fluids and dissolved substances are exchanged from the blood. A bath solution (dialysate) is introduced through a permanent tube in the abdomen and flushed out on a regular basis. Less commonly used than hemodialysis.

**Renal replacement therapy** — Life-supporting treatments for renal failure including hemodialysis, peritoneal dialysis and kidney transplantation.
**Type 1 diabetes mellitus (T1DM)** — An autoimmune disease that selectively destroys the insulin-producing pancreatic beta cells resulting in a deficiency of insulin and hyperglycemia. Also referred to as insulin-dependent or juvenile diabetes.

**Type 2 diabetes mellitus (T2DM)** — A form of diabetes in which insulin is present but does not work adequately because the body either does not produce enough insulin or the cells are resistant to insulin.

**Uremia** — A toxic condition resulting from kidney failure in which there is retention in the bloodstream of waste products normally excreted in the urine. Also called azotemia.

**References**

**Professional society guidelines/other:**


**Peer-reviewed references:**


Clinical trials:

Searched clinicaltrials.gov on October 13, 2015 using terms "pancreas transplant" | Open Studies. 17 studies found, four relevant.


**CMS National Coverage Determination (NCDs):**


**Local Coverage Determinations (LCDs):**

No LCDs identified as of the writing of this policy.

**Commonly submitted codes**

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill in accordance with those manuals.

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>Comment</th>
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<tbody>
<tr>
<td><strong>NOTE</strong></td>
<td>See Clinical Policy 13.02.01 Kidney transplants, for CPT, ICD and HCPCS codes related to kidney transplant. For simultaneous pancreas-kidney transplant (SPK) members must meet all of the criteria for a kidney transplant,</td>
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<tr>
<td>48160</td>
<td>Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells</td>
<td>Considered investigational, and therefore, not medically necessary</td>
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<tr>
<td>48551</td>
<td>Backbench standard preparation of cadaver donor pancreas allograft prior to transplantation, including dissection of allograft from surrounding soft tissues, splenectomy, duodenotomy, ligation of bile duct, ligation of mesenteric vessels, and Y-graft arterial anastomoses from iliac artery to superior mesenteric artery and to splenic artery</td>
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<td>48552</td>
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<tr>
<td>48554</td>
<td>Transplantation of pancreatic allograft</td>
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<tr>
<td>48556</td>
<td>Removal of transplanted pancreatic allograft</td>
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<tr>
<td>ICD-10 Code</td>
<td>Description</td>
<td>Comment</td>
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<tr>
<td>E08.0-E08.9</td>
<td>Diabetes mellitus due to underlying condition</td>
<td></td>
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<tr>
<td>E10.1-E10.9</td>
<td>Type 1 diabetes mellitus</td>
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<tr>
<td>N18.6</td>
<td>End stage renal disease</td>
<td>Required by Medicare</td>
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<tr>
<td>T86.890-T86.899</td>
<td>Complications of other transplanted tissue</td>
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<tr>
<td>Z90.410</td>
<td>Acquired total absence of pancreas</td>
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<tr>
<td>Z90.411</td>
<td>Acquired partial absence of pancreas</td>
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<tr>
<td>Z94.83</td>
<td>Pancreas transplant status</td>
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<thead>
<tr>
<th>HCPCS Level II</th>
<th>Description</th>
<th>Comment</th>
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<tr>
<td>G0341</td>
<td>Percutaneous islet cell transplant, includes portal vein catheterization and infusion</td>
<td>AmeriHealth Caritas Pennsylvania considers the use of transplantation of partial pancreatic tissue or islet cells (except in the context of a clinical trial (see section 260.3.1 of the National Coverage Determinations Manual) not to be medically necessary.</td>
</tr>
<tr>
<td>G0342</td>
<td>Laparoscopy for islet cell transplant, includes portal vein catheterization and infusion</td>
<td>AmeriHealth Caritas Pennsylvania considers the use of transplantation of partial pancreatic tissue or islet cells (except in the context of a clinical trial (see section 260.3.1 of the National Coverage Determinations Manual) not to be medically necessary.</td>
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<tr>
<td>G0343</td>
<td>Laparotomy for islet cell transplant, includes portal vein catheterization and infusion</td>
<td>AmeriHealth Caritas Pennsylvania considers the use of transplantation of partial pancreatic tissue or islet cells (except in the context of a clinical trial (see section 260.3.1 of the National Coverage Determinations Manual) not to be medically necessary.</td>
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<tr>
<td>S2055</td>
<td>Harvesting of donor multivisceral organs, with preparation and maintenance of allografts; from cadaver donor</td>
<td>Refer to Kidney Transplant Clinical, Policy 13.02.01</td>
</tr>
<tr>
<td>S2065</td>
<td>Simultaneous pancreas kidney transplantation</td>
<td>Refer to Kidney Transplant Clinical, Policy 13.02.01</td>
</tr>
<tr>
<td>S2102</td>
<td>Islet cell tissue transplant from pancreas; allogeneic</td>
<td>AmeriHealth Caritas Pennsylvania considers the use of transplantation of partial pancreatic tissue or islet cells (except in the context of a clinical trial.</td>
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<tr>
<td><strong>S2152</strong></td>
<td>Solid organ(s), complete or segmental, single organ or combination of organs; deceased or living donor(s), procurement, transplantation, and related complications; including: drugs; supplies; hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services, and the number of days of pre- and post-transplant care in the global definition</td>
<td>(see section 260.3.1 of the National Coverage Determinations Manual) not to be medically necessary</td>
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