

## Transplants, Organ

### MPM 20.6

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<b>Disclaimer</b>	<b>Refer to the member's specific benefit plan and <i>Schedule of Benefits</i> to determine coverage. This may not be a benefit on all plans or the plan may have broader or more limited benefits than those listed in these criteria.</b>
<b>Description</b>	<p>For medical purposes, <i>transplant</i> generally refers to the transfer of an organ, tissue or cells from a donor to a recipient. A transplant center, as defined by the United Network of Organ Sharing (UNOS), is a hospital that performs transplants, and may have one or more transplant programs overseeing transplantation of one or more organ types. The transplant center evaluates candidates on a case-by-case basis. Criteria may differ from one facility to the next. PHP reviews and applies transplant specific criteria as it relates to the transplant.</p> <p>This medical policy refers to organ transplants only.</p> <ul style="list-style-type: none"><li>• See MPM 20.3 for <i>Transplants, Bone Marrow and Peripheral Stem Cell</i></li><li>• See MPM 3.2 for <i>Autologous Chondrocyte Implantation (Carticel)</i></li><li>• See MPM 13.3 for <i>Meniscal Allograft Transplant</i></li></ul>
<b>Coverage Determination and Clinical Indications</b>	<p><b>Benefit Certification is required. Logon to Pres Online to submit a request: <a href="https://ds.phs.org/preslogin/index.jsp">https://ds.phs.org/preslogin/index.jsp</a></b></p> <p><b>All transplant requests must be reviewed by the Medical Director.</b></p> <p><b>Phases of Transplant:</b> Throughout the transplant process, PHP care coordinators will work with the member, the referring physician and the transplant center to ensure appropriate utilization of in-plan providers for diagnostic, laboratory and specialty follow-up care.</p> <ul style="list-style-type: none"><li>• <b>Transplant Evaluation:</b> Potential transplant candidates must undergo detailed and extensive testing, including psychological testing, to ensure proper selection and treatment. Transplant evaluations are done at the transplant centers and typically involve two or more days of testing, interviews and education.</li><li>• <b>Pre-Transplant Care:</b> Members approved for deceased donor transplant will be placed on the UNOS waiting list, which is a national computerized list of candidates waiting to be matched with specific donor organs in hope of receiving a transplant. If a living donor is available, he/she will be evaluated per transplant center protocols, and in compliance with CMS recommendations.<sup>5</sup> Each transplant center has specific guidelines on member follow-up care during this time period. Transplant centers also work with local providers to ensure appropriate care.</li></ul>

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- Transplant Surgery: A compatible donor organ is identified and transplanted, per transplant center and UNOS protocols
- Post-Transplant Care: Immediate post-transplant care will be provided at the transplant center. Complications of transplant and periodic follow up will be directed per transplant center guidelines, for at least one year. Facility guidelines vary, but generally speaking, an annual follow-up evaluation is required.

**General Criteria for Organ Transplants**

**ALL** of the following criteria apply throughout the transplant process, i.e., the transplant evaluation, the pre-transplant phase and transplant itself:

1. The transplant candidate has severe organ injury, dysfunction or symptomatic organ failure that is not amendable to other medical or surgical alternatives and meets the organ-specific criteria on the following pages for transplantation.
2. The treating physician recommends transplant evaluation. Documentation supporting the need for evaluation may include history and physical (H&P), appropriate consult notes and pertinent diagnostic work up.
3. There are no additional disease processes, infectious processes or severe comorbidities that are likely to limit or preclude survival or rehabilitation after transplant. This includes, but is not limited to, the following:
  - Drug/alcohol/smoking or psychosocial issues considered likely to interfere significantly with compliance to a lifelong disciplined medical regimen are carefully considered and treated as appropriate (per transplant facility guidelines). While addictions and psychosocial issues remain controversial in the transplant arena, carefully selected patients who have undergone appropriate treatment often have a positive transplant outcome. PHP may request additional documentation as appropriate.
  - BMI  $\geq 35$  kg/m<sup>2</sup> (per transplant facility guidelines). BMI  $\geq 40$  is considered an absolute contraindication.
  - Severe cerebrovascular or peripheral vascular disease.
  - Indication of metastatic malignancy or malignant neoplasm in solid organ transplants other than non-melanomatous skin cancer that has a significant risk or recurrence (except cancer limited to the liver and a liver transplant is anticipated).
  - Irreversible brain damage.
  - Advanced neurological diseases such as Huntington's disease, Tay-Sachs, Niemann-Pick and other advanced, severely debilitating diseases.

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4. Where appropriate, PHP will direct members to CMS approved facilities. CMS has approved facilities for the following transplants: kidney, heart, lung, heart-lung, liver and intestinal transplants. In addition, CMS requires pancreas transplants to be performed in a facility with a Medicare-approved kidney transplant program. CMS has approved facilities for ventricular assist device destination therapy.<sup>5</sup>
5. Patient and/or caregiver must have the emotional and mental capacity to understand the significant risks associated with surgery, and to effectively manage the lifelong need for immunosuppression.

**Transplant Specific Clinical Requirements****A. Heart**

A heart transplant replaces a damaged or diseased heart with a healthy heart from a deceased donor. In addition to the general criteria noted on page 2, **one** of the following indications must be met, and accompanied with recommendation from a cardiologist:

1. Cardiogenic shock or low output state requiring mechanical assistance for end stage organ damage, i.e., ventricular assist device as bridge to transplant, intra-aortic balloon, **or**
2. Refractory heart failure or low output state requiring continuous intravenous inotropic support with or without invasive monitoring, **or**
3. Recurrent or rapidly progressive heart failure symptoms unresponsive to optimal medical management (drugs and/or devices), **or**
4. Refractory angina (incapacitating) on maximally tolerated medications, with failure of conservative treatments and not amenable to revascularization, **or**
5. Recurrent symptomatic life threatening ventricular arrhythmias despite maximal medications, ICD, ablation, and/or surgery, **or**
6. Cardiac tumors confined to the myocardium with low likelihood of metastasis at time of transplant, **or**
7. Complex congenital heart disease such as hypoplastic left heart, **or**
8. Marked or severe limitation in activity due to symptoms with **any** of the following:
  - Documentation of VO<sub>2</sub> max < 14/ml/kg/min with progressive symptoms, clinical instability or marked serial decline in VO<sub>2</sub> max, **or**
  - Severe hypertrophic or restrictive cardiomyopathy.

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**Ventricular Assist Devices** are covered when used as a bridge to cardiac transplant or destination therapy (for patients who have chronic end stage heart failure and are not candidates for heart transplant). These procedures are covered as a separate medical procedure and will not count toward the transplant lifetime benefit maximum.

PHP follows CMS guidelines as detailed in National Coverage Determination (NCD) 20.9 entitled "Artificial Hearts and Related Devices." General criteria on page 2 continue to apply. CMS NCD 20.9 may be accessed on the Internet at:

[http://www.cms.hhs.gov/mcd/viewncd.asp?ncd\\_id=20.9&ncd\\_version=4&basket=ncd%3A20%2E9%3A4%3AArtificial+Hearts+and+Related+Devices](http://www.cms.hhs.gov/mcd/viewncd.asp?ncd_id=20.9&ncd_version=4&basket=ncd%3A20%2E9%3A4%3AArtificial+Hearts+and+Related+Devices)

**For Medicare members only: Artificial Heart** as bridge-to-transplant or destination therapy is only covered when performed in a clinical trial that meets CMS guidelines. See CMS NCD 20.9 for further detail.

**B. Intestinal, Intestinal-Liver and Multi-Visceral**

Intestinal transplant replaces a diseased small bowel with a healthy one from a deceased donor for the purpose of restoring intestinal function. Irreversible intestinal failure is the loss of absorptive capacity of the small bowel secondary to severe primary gastrointestinal (GI) disease, or surgically induced short bowel syndrome. General criteria on page 2 continue to apply. For intestinal transplant alone, the following criteria must be met and accompanied by recommendation from a gastroenterologist:

1. Candidates with irreversible intestinal failure who are dependent on long-term TPN, **and**
2. Absence of other gastrointestinal diseases such as bleeding peptic ulcer, diverticulitis or chronic hepatitis.

Intestinal-liver transplant may be indicated when there is documented end stage liver disease, along with irreversible intestinal failure or intestinal failure from a hypercoagulable state associated with enzyme deficiencies that may be corrected by a liver transplant.

Multivisceral transplant may be indicated for patients with irreversible failure of their abdominal visceral organs, including the small bowel. Symptomatic extensive thrombosis of the splanchnic vascular system, massive GI polyposis or neoplasm, and generalized hollow visceral myopathy or neuropathy may cause the irreversible failure necessitating Multivisceral transplant.

**C. Kidney**

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A kidney may be obtained from a living or deceased donor for a recipient with end stage renal disease (ESRD) or progression towards ESRD. In addition to the general criteria noted on page 2, **all** of the following are required:

1. Member should have creatinine clearance or calculated GFR of <20 ml/minute, **AND**
2. **One** of the following must be met:
  - Chronic irreversible renal failure or progression toward organ failure with recommendation by nephrologist for transplant, **or**
  - For living donor renal transplant, pre-emptive renal transplant may be considered in members with impending end stage renal disease (ESRD), with recommendation by nephrologist.

**D. Liver**

A liver transplant replaces a diseased liver with a healthy liver; the donor may be living or deceased. In addition to the general criteria noted on page 2, **one** of the following indications must be met, and accompanied with recommendation from a gastroenterologist or hepatologist.

1. End stage liver disease, as demonstrated by **one** of the following:
  - Current or past history of acute/fulminant hepatic failure and/or variceal hemorrhage **or**
  - Platelets < 120,000, increased prothrombin time, decreased albumin, **and** increased bilirubin

**OR**
2. Primary hepatocellular carcinoma **and all** of the following:
  - The patient is not a candidate for subtotal liver resection, **and**
  - The tumor is less than or equal to 5 cm in diameter, or no more than 3 lesions, the largest being less than 3 cm in size. **and**
  - There is no macrovascular involvement, **and**
  - There is no identifiable extrahepatic spread of tumor to surrounding lymph nodes, lungs, abdominal organs, or bone.

**OR**
3. Biliary atresia or other life-threatening diseases of the liver in pediatric candidates who are unresponsive to treatment.

**OR**
4. Trauma with uncontrollable hemorrhage or toxic reactions causing fulminant hepatic failure.

**OR**
5. Liver dysfunction or impending failure secondary to total parenteral nutrition (TPN).

**E. Lung and Lung/Heart**

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A lung transplant replaces a diseased lung (one or both) with a healthy one from a living or deceased donor. Potential recipients of a living donor's lung should be unable to wait for a cadaveric lung allograft due to imminent risk of death, or at risk of becoming ineligible for transplant due to clinical deterioration. In addition to the general criteria noted on page 2, **one** of the following indications must be met for all lung transplants, and accompanied by recommendation from a pulmonologist.

1. End stage chronic obstructive lung diseases including COPD, emphysema, cystic fibrosis or bronchopulmonary dysplasia, **or**
2. Restrictive lung diseases such as pulmonary fibrosis, **or**
3. Pulmonary vascular diseases including pulmonary hypertension or chronic pulmonary embolism.

Lung/Heart transplant is covered when severe, irreversible and progressively disabling end stage pulmonary disease exists with end stage cardiac disease, and medical therapy has been ineffective.

**F. Pancreas Transplant Alone, Simultaneous Pancreas Kidney Transplant, Pancreas after Kidney Transplant**

Pancreas transplant replaces a nonfunctioning pancreas with a healthy pancreas from a deceased donor. In addition to the general criteria located on page 2, **all** of the following indications must be met and accompanied by recommendation from an endocrinologist:

1. Patient has Type I diabetes mellitus, and has been optimally and intensively managed by an endocrinologist who certifies that the medical managements of the patient has been maximized and evaluation for pancreas transplant is the most appropriate course of action.

**AND**

2. Patient has at least **one** of the following:
  - A history of frequent, acute and severe metabolic complications (hypoglycemia, severe hypoglycemic unawareness, hyperglycemia, ketoacidosis), **or**
  - Clinical and emotional problems with exogenous insulin therapy so severe as to be incapacitating, **or**
  - Experienced consistent failure of exogenous insulin-based management in preventing acute and/or chronic complications.

Pancreas transplant alone is performed in patients with adequate renal function.

Pancreas transplant may also be performed simultaneously with or after

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a kidney transplant. Kidney transplant criteria are applicable for the simultaneous kidney-pancreas transplant.

**G. Pancreatic Islet Cell Transplantation**

Pancreatic islet cell transplantation is covered for Medicare members participating in a National Institutes of Health (NIH) sponsored clinical trial. Allogeneic islet cell transplant is considered investigational in all other circumstances.

Islet cell auto transplantation is covered for members undergoing near-total or total pancreatic resection for severe, refractory chronic pancreatitis.

**H. Combination Transplants**

In order for combination transplants to be approved, there must be documented progression toward organ failure of the second organ which, left uncorrected, could endanger the first transplanted organ. Examples of combination transplants not previously discussed in this medical policy are liver-kidney transplant (secondary to hepatorenal syndrome) or liver-lung transplant (secondary to hepatopulmonary syndrome). The general criteria located on page 2 continue to apply, and the transplant candidate must meet disease-specific indications.

**Immunosuppressive Therapy**

Post-transplant immunosuppressive drug therapy may be subject to a maximum lifetime benefit, as well as copays and/or coinsurances. Benefit plans vary. Refer to the member's GSA and/or Member Services or a Transplant Care Coordinator for more information and possible exclusions from coverage.

**Living Donor Coverage**

Hospital, surgical, laboratory, radiology services and reasonable (least costly) alternatives for round-trip travel expenses for a donor who is not entitled to benefits under any other health plan are covered. Donor charges must be directly related to a covered and benefit certified transplant of an organ or body tissue to a member of Presbyterian Health Plan. All services for a donor must be benefit certified.

**Travel and Lodging**

Travel and lodging benefit may be available to the member and a companion. Benefit plans vary; travel reimbursement may be limited, and may be subject to a maximum lifetime benefit. More information about travel and lodging can be found in the member's GSA and/or with Member Services or a Transplant Care Coordinator.

**Coding**

**The coding listed in this medical policy is for reference only.**

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**Covered and non-covered codes are within this list.**

<b>CPT Codes</b>	<b>Description</b>
32480	Removal of lung; other than total pneumonectomy; single lobe (lobectomy)
32482	Removal of lung, other than total pneumonectomy; two lobes (bilobectomy)
32850	Donor pneumonectomy(s) (including cold preservation) from cadaver donor
32851	Lung transplant, single, without cardiopulmonary bypass
32852	Lung transplant, single, with cardiopulmonary bypass
32853	Lung transplant, double (bilateral sequential or en bloc); without cardiopulmonary bypass
32854	Lung transplant, double (bilateral sequential or en bloc); with cardiopulmonary bypass
32855	Backbench standard preparation of cadaver donor lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare pulmonary venous/atrial cuff, pulmonary artery, and bronchus; unilateral
32856	Backbench standard preparation of cadaver donor lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare pulmonary venous/atrial cuff, pulmonary artery, and bronchus; bilateral
33930	Donor cardiectomy-pneumonectomy (including cold preservation)
33933	Backbench standard preparation of cadaver donor heart/lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare aorta, superior vena cava, inferior vena cava and trachea for implantation
33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy
33940	Donor cardiectomy (including cold preservation)
33944	Backbench standard preparation of cadaver donor heart/lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare aorta, superior vena cava, inferior vena cava, pulmonary artery and left atrium for implantation
33945	Heart transplant, with or without recipient cardiectomy
33960	Prolonged extracorporeal circulation for cardiopulmonary insufficiency; initial 24 hours
33961	Prolonged extracorporeal circulation for cardiopulmonary insufficiency; each additional 24 hours
33975	Insertion of ventricular assist device; extracorporeal, single ventricle
33976	Insertion of ventricular assist device; extracorporeal, biventricular
33979	Insertion of ventricular assist device, implantable intracorporeal, single ventricle
44132	Donor enterectomy (including cold preservation), open; from cadaver donor
44133	Donor enterectomy (including cold preservation), partial; from living donor

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CPT Codes	Description
44135	Intestinal allotransplantation; from cadaver donor
44136	Intestinal allotransplantation; from living donor
44715	Backbench standard preparation of cadaver or living donor intestine allograft prior to transplantation, including mobilization and fashioning of the superior mesenteric artery and vein
44720	Backbench standard preparation of cadaver or living donor intestine allograft prior to transplantation; venous anastomosis, each
44721	Backbench standard preparation of cadaver or living donor intestine allograft prior to transplantation; arterial anastomosis, each
47133	Donor hepatectomy (including cold preservation), from cadaver donor
47135	Liver allotransplantation; orthotopic, partial or whole, from cadaver or living donor, any age
47136	Liver allotransplantation; heterotopic, partial or whole, from cadaver or living donor, any age
47140	Donor hepatectomy (including cold preservation), from living donor; left lateral segment only (segments II and III)
47141	Donor hepatectomy (including cold preservation), from living donor; total left lobectomy (segments II, III and IV)
47142	Donor hepatectomy (including cold preservation), from living donor; total right lobectomy (segments V, VI, VII, and VIII)
47143	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; without trisegment or lobe split.
47144	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; with trisegment split of whole liver graft into two partial liver grafts (i.e., left lateral segment (segments II and III and right trisegment (segments I and IV through VIII))
47145	Backbench standard preparation of cadaver donor whole liver graft prior to allotransplantation, including cholecystectomy, if necessary, and dissection and removal of surrounding soft tissues to prepare the vena cava, portal vein, hepatic artery, and common bile duct for implantation; with lobe split of whole liver graft into two partial liver grafts (i.e., left lobe (segments II, III and IV) and right lobe (segments I and V through VIII)

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CPT Codes	Description
47146	Backbench standard preparation of cadaver or living donor liver graft prior to allotransplantation, venous anastomosis, each
47147	Backbench standard preparation of cadaver or living donor liver graft prior to allotransplantation, arterial anastomosis, each
48160	Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells
48400	Injection procedure for intraoperative pancreatography
48500	Marsupialization of pancreatic cyst
48510	External drainage, pseudocyst of pancreas; open
48511	External drainage, pseudocyst of pancreas; percutaneous
48520	Internal anastomosis of pancreatic cyst to gastrointestinal tract; direct
48540	Internal anastomosis of pancreatic cyst to gastrointestinal tract; Roux-en-Y
48545	Pancreatorrhaphy for injury
48547	Duodenal exclusion with gastrojejunostomy for pancreatic injury
48548	Pancreaticojejunostomy, side-to-side anastomosis (Puestow-type operation)
48550	Donor pancreatectomy (including cold preservation), with or without duodenal segment for transplantation
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 standard preparation of cadaver donor pancreas allograft prior to transplantation, venous anastomosis, each
48554	Transplantation of pancreas allograft
48556	Removal of transplanted pancreatic allograft
50300	Donor nephrectomy (including cold preservation) from cadaver donor, unilateral or bilateral
50320	Donor nephrectomy (including cold preservation); open, from living donor
50323	Backbench standard preparation of cadaver donor renal allograft prior to transplantation, including dissection and removal of perinephric fat, diaphragmatic and retroperitoneal attachments, excision of adrenal gland, and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary

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<b>CPT Codes</b>	<b>Description</b>
50325	Backbench standard preparation of cadaver donor renal allograft prior to transplantation, including dissection and removal of perinephric fat, and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary
50327	Backbench standard preparation of cadaver donor renal allograft prior to transplantation; venous anastomosis, each
50328	Backbench standard preparation of cadaver donor renal allograft prior to transplantation; arterial anastomosis, each
50329	Backbench standard preparation of cadaver donor renal allograft prior to transplantation; ureteral anastomosis, each
50340	Recipient nephrectomy (separate procedure)
50360	Renal allotransplantation, implantation of graft; without recipient nephrectomy
50365	Renal allotransplantation, implantation of graft; with recipient nephrectomy
50370	Removal of transplanted renal allograft
50380	Renal autotransplantation, reimplantation of kidney
50547	Donor nephrectomy (including cold preservation), from living donor
65710	Keratoplasty (corneal transplant); lamellar
65730	Keratoplasty (corneal transplant); penetrating (except in aphakia)
65750	Keratoplasty (corneal transplant); penetrating (in aphakia)
65755	Keratoplasty (corneal transplant); penetrating (in pseudophakia)
0141T	Pancreatic islet cell transplantation through portal vein, percutaneous
0142T	Pancreatic islet cell transplantation through portal vein, open
0143T	Laparoscopy, surgical, pancreatic islet cell transplantation through portal vein
0048T	Implantation of a ventricular assist device, extracorporeal, percutaneous transseptal access, single or dual cannulation

<b>HCPCS® Codes</b>	<b>Description</b>
G0341	Percutaneous islet cell transplant, includes portal vein catheterization and infusion
G0342	Laparoscopy for islet cell transplant, includes portal vein catheterization and infusion
G0343	Laparotomy for islet cell transplant, includes portal vein catheterization and infusion
S2053	Transplantation of small intestine, and liver allografts

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S2054	Transplantation of multivisceral organs
S2055	Harvesting of donor multivisceral organs, with preparation and maintenance of allografts; from cadaver donor
S2060	Lobar lung transplantation
S2061	Donor lobectomy (lung) for transplantation, living donor
S2065	Simultaneous pancreas kidney transplantation
S2152	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
V2785	Processing, preserving and transporting corneal tissue

- Reviewed by:**
1. Julie Farrer, MD, Presbyterian Medical Group, Gastroenterology, December 2005
  2. Kirby Gabrys, MD, Renal Medicine, January 2006, June 2007, September 2009
  3. Jo Ellen Habas, MD, Presbyterian Medical Group, Multispecialty Clinic, January 2006, July 2007
  4. Charles Karaian, MD, Medical Director, Presbyterian Heart Program, November 2005, June 2007, September 2009
  5. Richard Ming, MD, Presbyterian Medical Group, Gastroenterology, December 2005
  6. Nicholas Volpicelli, MD, Presbyterian Medical Group, Gastroenterology, December 2005
  7. Presbyterian Medical Group Southwest Pulmonary, June 2007, September 2009
  8. Jon R. Friedman, MD, National Medical Director, Transplants. OptumHealth. September 2009

- References:**
1. Hayes Medical Technology Directory, © Winifred Hayes, Inc. 2007, multiple reports from Hayesinc.com, Hayes Rating Reports:
    - Small Bowel, Small Bowel-Liver, and Multivisceral Transplantation, February 8, 2005. Update search: 04-07-09
    - Pancreas-After-Kidney (PAK) Transplantation in Diabetic Patients, 6-30-06. Update Search 06-24-09.
    - Pancreas Transplantation Alone (PTA). February 27, 2006. Update Search 03-0-09.
    - Islet Cell Transplantation for the Treatment of Type 1 Diabetes. August 1, 2004. Update Search -7-24-09.
  2. Hayes Brief. Copyright © 2009 Winifred S. Hayes, Inc. Liver Transplantation for Obese Adults. January 30, 2009.
  3. Organ Transplant Association, Child Pugh & MELD, Nov. 5, 2001
  4. Presbyterian Salud Policy, Criteria for Covering Bone Marrow Transplants, PAMED 9, May 24, 1999

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5. Centers for Medicare and Medicaid Services, multiple reports:
  - Certification and Compliance: Transplant. Last modified 07-22-09. accessed on the Internet 10-02-09:  
[http://www.cms.hhs.gov/CertificationandCompliance/20\\_Transplant.asp#TopOfPage](http://www.cms.hhs.gov/CertificationandCompliance/20_Transplant.asp#TopOfPage)
  - Ventricular Assist Device Destination Therapy Facilities. Last updated 09-08-09. Accessed on the Internet 10-02-09:  
<http://www.cms.hhs.gov/MedicareApprovedFacilities/VAD/list.asp#TopOfPage>
  - Medicare Program: Hospital Conditions of Participation: Requirements of Approval and Re-Approval of Transplant Centers to Perform Organ Transplants; Final Rule, March 30, 2007. Accessed on the Internet 10-02-09:  
<http://www.cms.hhs.gov/CertificationandCompliance/downloads/Transplantfinal.pdf>
  - NCD for Heart Transplants (260.9), Implementation date: 12-01-08.
  - NCD for Intestinal and Multi-Visceral Transplantation (260.5), Effective Date: May 11, 2006.
  - NCD for Adult Liver Transplantation (260.1), Effective Date: June 19, 2006.
  - NCD for Pediatric Liver Transplantation (260.2), Effective Date: April 21, 1991.
  - NCD for Pancreas Transplants (260.3), Effective Date: April 26, 2006
  - NCD for Islet Cell Transplantation in the Context of a Clinical Trial (260.3.1), Effective Date: October 1, 2004.
6. Medical Assistance Division Guidelines for Salud, MAD 764, Transplant Services
7. Mayo Foundation for Medical Education and Research, Recent Advances in Liver Transplantation, Russell H. Wiesner, et al, Mayo Clin Proc. 2003; 78:197-210
8. Steinman, Theodore I., et al. Transplantation, Guidelines for the Referral and Management of Patients Eligible for Solid Transplantation. 2001; 71(9): 1189-204.
9. Milliman Care Guidelines ®, Inpatient and Surgical Care, 13<sup>th</sup> Edition, three reports, each last updated on February 5, 2009:
  - Heart Transplant, ORG: S-535(ISC)
  - Renal Transplant, ORG: S-1015(ISC)
  - Liver Transplant, ORG: S-795(ISC)
  - Ventricular Assist Devices, ACG: A-0477(AC)
10. Andrews, PA. Renal Transplantation, Recent Developments, BMJ 2002 March; 324:530-4
11. Presbyterian Hospital, Albuquerque, NM, Renal Transplant Evaluation Protocols, 2004.
12. Journal of Critical Illness, Jaime Villaneuva, Edward R. Garrity, Jr., How to Select Patients for Lung Transplantation, March 2001
13. United Network for Organ Sharing (UNOS), UNOS Ethics Committee General Considerations in Assessment for Transplant Candidacy, accessed 10-02-09 at: <http://www.unos.org/resources/bioethics.asp?index=4>
14. International Society for Heart and Lung Transplantation, Addison, TX. Listing Criteria for Heart Transplantation: International Society for Heart and Lung Transplantation Guidelines for the Care of Cardiac Transplant Candidates— 2006. June 16, 2006.

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15. Murray KF, and Carithers, Jr RL. American Association for the Study of Liver Diseases. AASLD Practice Guidelines: Evaluation of the Patient for Liver Transplantation, March 4, 2005. Last reviewed September 2008.
16. National Institute for Health and Clinical Excellence. Interventional Procedure Guidance 274. Autologous pancreatic islet cell transplantation for improved glycaemic control after pancreatectomy. September 2008.
17. Fishbein TM. Review Article: Current Concepts, Intestinal Transplantation. N Engl J Med 361:10. September 9, 2009.

**Approval  
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- 02-22-06: Original effective date, PHP ICR 20.3 "Transplants"
- 08-22-07: Annual Review and Revision
- 09-24-08: Transition to Medical Policy, "Transplants" divided into 2 separate policies. Annual review and revision.
- 10-28-09: Annual review and revision
- 12-01-10: Annual review and revision

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This Medical Policy is intended to represent clinical guidelines describing medical appropriateness and is developed to assist Presbyterian Health Plan and Presbyterian Insurance Company, Inc. (Presbyterian) Health Services staff and Presbyterian medical directors in determination of coverage. The Medical Policy is not a treatment guide and should not be used as such.

For those instances where a member does not meet the criteria described in these guidelines, additional information supporting medical necessity is welcome and may be utilized by the medical director in reviewing the case. Please note that all Presbyterian Medical Policies are available on the Internet at:

<http://www.phs.org/phs/healthplans/providers/healthservices/Medical/index.htm>

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Not every Presbyterian health plan contains the same benefits. Please refer to the member's specific benefit plan and *Schedule of Benefits* to determine coverage.

[MPMPPC111003]