

**Subject:** Transplants, Organ

**Medical Policy #:** 20.6

**Status:** Reviewed

**Original Effective Date:** 02/22/2006

**Last Review Date:** 01-25-2023

## Disclaimer

Refer to the member's specific benefit plan and Schedule of Benefits 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 this Medical Policy.

## Description

For medical purposes, *transplant* 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.

This medical policy refers to **organ transplants** only.

- See **MPM 20.3** for *Transplants, Bone Marrow and Peripheral Stem Cell*
- See **MPM 3.2** for Matrix-Induced Autologous Chondrocyte Implantation (MACI) formerly, *Autologous Chondrocyte Implantation (Carticel)*
- See **MPM 13.3** for *Meniscal Allograft Transplant*

## Coverage Determination

**Prior Authorization is required. Logon to Pres Online to submit a request:** <https://ds.phs.org/preslogin/index.jsp>

**All transplant requests for evaluation and listings for transplantation must be reviewed by the Medical Director.**

The Presbyterian Medical Policy for this procedure has been **retired**. Presbyterian uses Optum Guidelines and Transplant program.

## Coding

The coding listed in this medical policy is for reference only. Covered and non-covered codes are within this list.

CPT Codes	Code Description for Heart & Heart-Lung transplantation ( <i>includes ventricular assist and artificial heart devices.</i> )
33927	Implantation of a total replacement heart system (artificial heart) with recipient cardiectomy
33928	Removal and replacement of total replacement heart system (artificial heart)
33929	Removal of a total replacement heart system (artificial heart) for heart transplantation (List separately in addition to code for primary procedure)
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 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
S2152	(See description below)

<b>CPT Codes</b>	<b>Code Description for Transplants of Lung and Lobar Lung:</b>
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
S2060	Lobar lung transplantation
S2061	Donor lobectomy (lung) for transplantation, living donor

<b>CPT Codes</b>	<b>Code Description for Transplants of Kidney:</b>
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
50325	Backbench standard preparation of living donor renal allograft (open or laparoscopic) 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 reconstruction of cadaver or living donor renal allograft prior to transplantation; venous anastomosis, each
50328	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; arterial anastomosis, each
50329	Backbench reconstruction of cadaver or living 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

<b>CPT Codes</b>	<b>Code Description for Transplants Pancreas and Kidney:</b>
48160	Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells
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 reconstruction of cadaver donor pancreas allograft prior to transplantation, venous anastomosis, each
48554	Transplantation of pancreatic allograft
48556	Removal of transplanted pancreatic allograft
S2065	Simultaneous pancreas kidney transplantation

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 [MPMPPC051001].

<b>CPT Codes</b>	<b>Code Description for Transplants Pancreas Islet Cell:</b>
S2102	Islet cell tissue transplant from pancreas; allogeneic
0584T	Islet cell transplant, includes portal vein catheterization and infusion, including all imaging, including guidance, and radiological supervision and interpretation, when performed; percutaneous
0585T	Islet cell transplant, includes portal vein catheterization and infusion, including all imaging, including guidance, and radiological supervision and interpretation, when performed; laparoscopic
0586T	Islet cell transplant, includes portal vein catheterization and infusion, including all imaging, including guidance, and radiological supervision and interpretation, when performed; open

<b>CPT Codes</b>	<b>Code Description for Transplant of Liver:</b>
47133	Donor hepatectomy (including cold preservation), from cadaver donor
47135	Liver allotransplantation, orthotopic, 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 2 partial liver grafts (ie, 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 2 partial liver grafts (ie, left lobe [segments II, III, and IV] and right lobe [segments I and V through VIII])
47146	Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; venous anastomosis, each
47147	Backbench reconstruction of cadaver or living donor liver graft prior to allotransplantation; arterial anastomosis, each
47399	Unlisted procedure, liver
S2152	(See description below)

<b>CPT Codes</b>	<b>Code Description for Procurement Transportation:</b>
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 posttransplant care in the global definition

<b>CPT Codes</b>	<b>Code Description for Transplant of Small Bowel/Liver:</b>
44132	Donor enterectomy (including cold preservation), open; from cadaver donor
44133	Donor enterectomy (including cold preservation), open; partial, from living donor

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 [MPMPPC051001].

CPT Codes	Code Description for Transplant of Small Bowel/Liver:
44135	Intestinal allotransplantation; from cadaver donor
44136	Intestinal allotransplantation; from living donor
44137	Removal of transplanted intestinal allograft, complete
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 reconstruction of cadaver or living donor intestine allograft prior to transplantation; venous anastomosis, each
44721	Backbench reconstruction of cadaver or living donor intestine allograft prior to transplantation; arterial anastomosis, each
S2053	Transplantation of small intestine and liver allografts
S2054	Transplantation of multivisceral organs
S2055	Harvesting of donor multivisceral organs, with preparation and maintenance of allografts; from cadaver donor

## Reviewed by / Approval Signatures

**Clinical Quality & Utilization Mgmt. Committee:** Gray Clarke MD

**Senior Medical Director:** David Yu MD

**Medical Director:** Ana Maria Rael MD

**Date Approved:** 01/25/2023

## References

1. Optum, Transplant Resources Services: The Centers of Excellence Network. [Cited 11-22-2022]

## Publication History

- 12-01-10 Annual review and revision
- 01-29-14 Presbyterian Policy Retired
- 01-29-14 Presbyterian now uses MCG Criteria # S-535, S-1015, and S-795
- 03-25-15 Presbyterian change from using MCG criteria to Optum guidelines and transplant program.
- 09-28-16 Annual Review. Presbyterian uses Optum Transplant Program and Guidelines.
- 07-26-17 Annual Review. Presbyterian continues to use Optum Transplant Program and Guidelines.
- 01-22-20 Annual Review. No changes. Approved by CQUMC to continue to use Optum Transplant Program and Guidelines on July 31, 2019.
- 03-24-21 Annual Review. No changes. Continue to use Optum Transplant Program Guideline. \*Optum is not a purchase criterion, it's the provider that defines the criteria not Optum. Will still forward to CQUMC for their review.
- 01-26-22 Annual review. Reviewed by PHP Medical Policy Committee on 12/08/2021. No changes. Continue to use Optum Transplant Program and Guidelines. All requests will continue to be reviewed by Medical Director. All new codes will be added to the prior authorization list. Valid codes on the PA list will continue to require prior authorization. Some invalid and deleted codes will be removed from Prior Authorization grid. CPT codes was added to policy.
1. Transplants – Heart and Lung (includes ventricular assist and artificial heart devices): Applicable codes verified for Heart & Heart-Lung transplantation are: 33927, 33928, 33929, 33930, 33933, 33935, 33940, 33944, 33945 and S2152. Continue PA requirement for: 33930, 33933, 33935, 33940, 33944, 33945 & S2152. Codes 33927, 33928, 33929 will now require prior authorization.
  2. Transplants Lung and Lobar Lung: Applicable codes verified for lung transplant are: 32850, 32851, 32852, 32853, 32854, 32855, 32856, S2060 and S2061. Continue PA for: 32850, 32851, 32852, 32853, 32854, 32855, 32856, S2060 and S2061
  3. Transplants – Kidney: Applicable codes verified for Kidney Transplant are: 50300, 50320, 50323, 50325, 50327, 50328, 50329, 50340, 50360, 50365, 50370 and 50380. Continue PA requirement for: 50300, 50320, 50323, 50325, 50327, 50328, 50329, 50340, 50360, 50365, 50370 and 50380. Codes on PA grid that are invalid or deleted will be removed from the PA grid: 50301 50302, 50303, 50304, 50305, 50306, 50307, 50308, 50309, 50310, 50311, 50312, 50313, 50314, 50315, 50316, 50317, 50318, 50319, 50322, 50324, 50326, 50330, 50331, 50332, 50333, 50334, 50335, 50336, 50337, 50338, 50339, 50341, 50342, 50343, 50344, 50345, 50346, 50347, 50348, 50349, 50351, 50352, 50353, 50354, 50355, 50356, 50357, 50358, 50359, 50361, 50362, 50363, 50364, 50366, 50367, 50368, 50369, 50371, 50372, 50373, 50374, 50375, 50376, 50377, 50378 and 50379.

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 [MPMPCC051001].

4. Transplants – Pancreas and Kidney: Applicable codes verified for Pancreas Transplant procedures are: 48160, 48550, 48551, 48552, 48554, S2065 and 48556. Continue PA requirement for: 48160, 48550, 48551, 48552, 48554 and S2065. Code (48556) will now require prior authorization. Invalid code (48553) will be removed from the PA grid.
5. Transplants – Pancreas Islet Cell: Applicable codes verified for pancreatic islet cell transplantation are: S2102, 0584T, 0585T and 0586T. Continue PA requirement for: S2102. Codes (0584T, 0585T and 0586T) will now require prior authorization.
6. Transplants – Liver: Applicable codes verified for Liver Transplant Procedures are: 47133, 47135, 47140, 47141, 47142, 47143, 47144, 47145, 47146, 47147, 47399 and S2152. Continue PA requirement for: 47133, 47135, 47140, 47141, 47142, 47143, 47144, 47145, 47146, 47147 and S2152. Code (47399) will now require prior authorization. Invalid code (47136) will be removed from the PA grid.
7. Transplants Small Bowel, Small Bowel/Liver: Applicable codes verified for Intestine Transplant procedure and backbench intestinal graft are: 44132, 44133, 44135, 44136, 44137, 44715, 44720, 44721, S2053, S2054 and S2055. Continue PA requirement for: 44132, 44133, 44135, 44136, 44715, 44720, 44721, S2053, S2054 and S2055. Code (44137) will now require prior authorization.

01-25-23 Annual review. Reviewed by PHP Medical Policy Committee on 11/23/2022. No change. Continue all transplant requests for evaluation and listings for transplantation to be reviewed by the Medical Director and continue use of Optum Guidelines. Continue PA for all listed codes in policy. Remove from PA grid the following invalid codes: 50321 and 50350.

*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 online at: [Click here for Medical Policies](#)*

**Web links:**

*At any time during your visit to this policy and find the source material web links has been updated, retired or superseded, PHP is not responsible for the continued viability of websites listed in this policy.*

*When PHP follows a particular guideline such as LCDs, NCDs, MCG, NCCN etc., for the purposes of determining coverage; it is expected providers maintain or have access to appropriate documentation when requested to support coverage. See the References section to view the source materials used to develop this resource document.*