NO. 91272

TRANSPLANTATION OF SOLID ORGANS

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Policy scope: This policy outlines the coverage criteria, medical necessity requirements, and limitations for all solid organ transplantation services, including evaluation, transplant procedures, donor services, and post-transplant care.

Related policies:

- Stem Cell or Bone Marrow Transplantation - 91066

I. MEDICAL NECESSITY CRITERIA

A. The following applies to all solid organ transplants (except cornea):

1. One evaluation per transplant. A second opinion consult only to determine transplant candidacy would be approved at a contracted or in network transplant facility if a second transplant evaluation is requested and the member has been previously turned down for transplant.
2. Solid organ transplants are covered as defined in coverage documents. Related services including evaluation, donor expenses, and donor searches are limited as defined in coverage documents.
3. All transplant evaluations and transplants must be pre-authorized by Priority Health and performed at a Priority Health approved facility. Requests for authorization should be submitted on the Solid Organ Transplant prior authorization form.
4. Transplant referrals are directed to facilities in Priority Health's network or contracted networks. For more information, please refer to the Provider Manual.

5. Patients with a history of substance misuse (including but not limited to alcohol, tobacco, and other substances of abuse) must be abstinent prior to approval of the transplant by Priority Health. The length of the period of abstinence required prior to transplant is at the discretion of the transplant center.
6. Drug testing may be required at the discretion of Priority Health.
7. Use of marijuana for medical purposes requires documentation from the treating physician and transplant eligibility is subject to the transplanting institution's criteria.
8. Evaluations for transplantation are covered even for patients who have active substance abuse at the time of the evaluationPatients must be willing and able to adhere to post-transplant lifestyle restrictions and medical regimen.
9. Donor expenses
    a. Expenses incurred after the harvesting of the organ and discharge from the hospital are not covered for donors who are not Priority Health members and have other active health insurance.
    b. For donors without other health insurance, medical expenses directly related to or as a result of the surgery to donate the organ will be covered for 30 days post discharge from the hospital immediately following the transplant.
10. Transportation and lodging for the patient, donor, or family are not covered benefits, unless otherwise specified in coverage documents.
11. Post-transplant care
    a. Follow-up care and services are covered at the transplant facility for one year following the transplant, for both contracted and non-contracted transplant facilities.
    b. Follow-up care beyond one-year post-transplant:
        i. Covered at contracted transplant facilities
        ii. Non-contracted facilities: Only physician services are covered. Testing, labs, and imaging are covered in network only.
12. Priority Health does not cover re-transplantation when evidence exists, in the opinion of the Plan, that patient non-compliance with treatment recommendations was a significant contributor to transplant failure.

B. Solid organ transplants are eligible for coverage as follows:
    1. Corneal Transplants: corneal dystrophies and corneal opacities. Prior authorization is not required for corneal transplants.
    2. Kidney Transplants: When the transplanting institution's selection criteria are met.
    3. Heart Transplants: When the transplanting institution's selection criteria are met.
    4. Heart-Lung Transplants: When the transplanting institution's selection criteria are met.
    5. Liver Transplants:
        a. Liver transplants (cadaver or living donor) are covered for adolescents and adults when the transplanting institution's selection criteria are met AND one of the following (i or ii):
            i. A Model of End-stage Liver Disease (MELD) score greater than 15 [MELD score used for patients > 12 years old not

designated 1A or 1B per Organ Procurement and Transplantation Network (OPTN) Policies Criteria], or
        ii. Approval for transplant received from the United Network for Organ Sharing (UNOS) Regional Review.
    b. Liver transplants are covered for children < 12 years of age when the transplanting institution's selection criteria are met
    c. Liver transplantation is not a covered benefit for patients with malignancy outside the liver, except metastatic neuroendocrine tumors (carcinoid, apudoma, gastrinoma, glucagonoma) if metastasis is restricted to the liver, who are unresponsive to adjuvant therapy after aggressive surgical resection and reduction of hepatic metastasis or hepatic involvement in malignant epithelioid hemangioendothelioma.
    d. Patients with Hepatocellular Carcinoma (HCC) who do not meet UNOS or Milan criteria for liver transplant: The size or number of HCC lesions may exclude a patient from transplant eligibility. If the lesions are amenable to treatment with an ablative procedure (radiofrequency or chemo), the ablative procedure is a covered benefit. Following ablation, liver transplant coverage is determined as defined in a. above.
    e. The following are considered investigational and are not covered because their safety and effectiveness has not been established:
        i. Heterotopic (also known as ectopic or auxiliary) liver transplantation
        ii. Xenotransplantation
        iii. Hepatocellular transplantation
        iv. Bioartificial liver transplantation
6. Lung Transplants: When the transplanting institution's selection criteria are met.
7. Pancreas Transplants-Simultaneous Pancreas-Kidney (SPK): When the transplanting institution's selection criteria are met.
8. Pancreas after Kidney (PAK) Transplantation: When the transplanting institution's selection criteria are met.
9. Pancreas Transplant Alone (PTA): When the transplanting institution's selection criteria are met.
10. Islet Cell Transplantation
    a. Autologous pancreas islet cell transplantation (i.e., transplantation of the member's own islet cells) is a covered benefit for patients undergoing near-total or total pancreatectomy for severe refractory chronic pancreatitis.
    b. Autologous pancreas islet cell transplantation is not a covered benefit for any indication other than 10a.
    c. Allogenic islet cell transplantation (i.e., transplantation of islet cells from a donor) is not a covered benefit.
        i. For cellular therapy (e.g. Lantidra) see the Cellular and Gene Therapy policy # 91638
    d. Islet cell xenografts are not a covered benefit.
    e. Retransplantation is not a covered benefit
11. Intestinal Transplantation, Small Bowel/Liver or Multivisceral (small bowel/liver and or stomach, pancreas, colon) Transplant: All of the following (a, b & c) must be met:

a. Irreversible intestinal failure when the patient can no longer be safely maintained on total parenteral nutrition (TPN). Examples of failed TPN include:
    i. impending or overt liver failure due to TPN-induced liver injury.
    ii. thrombosis of the major central venous channels (jugular, femoral, subclavian).
    iii. frequent line infection and sepsis.
    iv. frequent episodes of severe dehydration despite IV fluids in addition to TPN.
b. All of the following must be present:
    i. Adequate kidney function, defined as a creatinine clearance of greater than 50 ml/min; and
    ii. Adequate cardiovascular function (ejection fraction greater than or equal to 40%); and
    iii. Absence of acute or chronic active infections that are not effectively treated; and
    iv. No uncontrolled and/or untreated psychiatric disorders that interfere with compliance to a strict treatment regimen; and
    v. Absence of inadequately controlled HIV/AIDS. Controlled HIV is defined as:
        i. CD4 count greater than 200 cells/mm3 for greater than6 months; and
        ii. HIV-1 RNA (viral load) undetectable; and
        iii. On stable antiviral therapy greater than 3 months; and
        iv. No other complications from AIDS, such as opportunistic infection or neoplasms.
c. None of the following:
    i. Sepsis;
    ii. Multi-organ failure;
    iii. Advanced neurological disorders (e.g., neuroaxonal dystrophy, Tay-Sachs disease, Niemann-Pick disease and variants, neuronal ceroid lipofuscinosis, and Huntington disease);
    iv. Presence of other gastrointestinal diseases (e.g., bleeding peptic ulcer, diverticulitis, chronic hepatitis);
    v. Malignancy, other than non-melanomatous skin cancer,
    vi. Congestive heart failure with refractory symptoms and ejection fraction less than 40%.

12. Xenotransplantation of any organ is considered experimental and is not a covered benefit.

C. TransMedics Organ Care System for preservation and transport of donor organs is not covered as it is considered experimental and investigational. Routine patient care costs may be covered in a clinical trial as defined for Investigational Devices in the Experimental /Investigational/ Unproven Care medical policy. The device is not a covered benefit. (Coverage for IDE trials is defined by product in Appendix C of the Experimental/Investigational/ Unproven Care medical policy.)

II. CENTERS FOR MEDICARE & MEDICAID SERVICES (CMS) COVERAGE DETERMINATION

Any applicable federal or state mandates will take precedence over this medical coverage policy.

Medicare: Refer to the CMS Online Manual System (IOMs) and Transmittals.
For the most current applicable CMS National Coverage Determination (NCD)/Local Coverage Determination (LCD)/Local Coverage Article (LCA) refer to CMS Medicare Coverage Database.

The information below is current as of the review date for this policy. However, the coverage issues and policies maintained by CMS are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. MAC jurisdiction for purposes of local coverage determinations is governed by the geographic service area where the Medicare Advantage plan is contracted to provide the service. Please refer to the Medicare Coverage Database website for the most current applicable NCD, LCD, LCA, and CMS Online Manual System/Transmittals.

National Coverage Determinations (NCDs)
NCD 260.1 – Adult Liver Transplantation
NCD 260.2 – Pediatric Liver Transplantation
NCD 260.3 – Pancreas Transplants
NCD 260.3.1 - Islet Cell Transplantation in the Context of a Clinical Trial
NCD 260.5 - Intestinal and Multi-Visceral Transplantation
NCD 260.9 – Heart Transplants
Local Coverage Determinations (LCDs)
No applicable LCDs

III. BACKGROUND

Solid organ transplants are covered as defined in coverage documents.

Tobacco use (e.g., cigarettes, pipe, cigar, chew etc.) is a contraindication to transplant surgery. Nicotine and its metabolites are biomarkers that can be tested to distinguish active tobacco use from passive exposure. Cotinine, a nicotine metabolite, is commonly used in tobacco cessation testing because it has a longer half-life than nicotine and can be tested in urine, plasma, or serum. Tobacco products also contain alkaloids such as anabasine and nornicotine which can be tested to distinguish between use of tobacco products and nicotine replacement therapies. Anabasine is present in tobacco products, but not nicotine replacement therapies. The presence of nornicotine without anabasine is consistent with use of nicotine replacement products. Neither anabasine nor nornicotine accumulates from passive exposure. Urine testing is recommended over serum or plasma testing because it is less invasive and analytes are detectable for a longer period of time. There are no optimal cut-off values for cessation testing; urinary cotinine thresholds may vary between 10-50 ng/ml, and in general the presence of anabasine greater than 10 ng/mL or nornicotine greater than 30 ng/mL in urine indicates current tobacco use. In addition, reference ranges may vary by laboratory. The laboratory's threshold should be used to determine if there is a positive or negative indication of tobacco use.

Corneal Transplants

Corneal transplantation (CT) is the most frequently performed type of transplant worldwide. It restores visual function when impairment caused by corneal damage is deemed too severe to provide acceptable quality of life in the country where it is performed. Corneal blindness is the third leading cause of blindness worldwide after cataract and glaucoma,1 with 10 million people having bilateral corneal blindness.2

Organ and tissue transplantation is a complex process with many legal, ethical, religious, and cultural barriers. However, the cornea presents several characteristics that make storage and transplantation easier than other tissue and organs, and eye banks (EB), responsible for storage, quality, and safety controls, are instrumental in CT success worldwide.

From a surgical viewpoint, conventional CT is also called penetrating keratoplasty. It is the dominant technique worldwide and involves replacing the full corneal thickness. In the past 10 years, lamellar grafts have developed quickly through progress in concepts and instrumentation.3 Posterior lamellar graft (endothelial keratoplasty) has grown exponentially in developed countries and is indicated for one-third of all CTs. There is currently no practical alternative to CT for most cases worldwide. (Gain et al., 2016)

Kidney Transplants

Kidney transplantation is the optimal treatment for patients with end-stage kidney disease, offering superior survival and quality of life compared with dialysis. Despite advancements in immunosuppression, surgical techniques and perioperative care, long-term graft survival remains limited, with chronic allograft failure often necessitating dialysis or retransplantation. Approximately 20% of kidney transplant (KT) recipients experience allograft failure within 5 years, nearly 50% within 10 years and 50%–60% will lose their graft over their lifetime, with retransplantation accounting for up to 20% of all procedures.

Retransplantation offers a survival advantage over dialysis, even in high-risk populations such as older adults and highly sensitized patients. While outcomes for second transplants are comparable to primary transplants, third and subsequent transplants present higher risks, including infection, malignancy, surgical complications and hyperacute rejection linked to elevated panel-reactive antibody levels. Despite these challenges, advancements in transplant medicine continue to improve outcomes for recipients.

Although the total number of candidates added to the KT waitlist has steadily increased, the proportion of those awaiting retransplantation has declined, while the total number of failed allografts has remained steady over two decades. Since 2007, the absolute number of candidates with prior transplants has remained relatively flat, decreasing from 14% in 2004 to 10% in 2018. (Kanbay et al., 2025)

Heart Transplants

Heart transplant is an established modality for the treatment of heart disease refractory to medical therapy. The last 50 years have seen the evolution of immune suppression therapy and standardization of protocols which have significantly improved outcomes following cardiac transplants. Donor availability is the main limiting factor and has restricted the number of heart transplants worldwide. Simultaneously, left ventricular assist devices have evolved to provide a “bridge” for recovery and transplant and alternatively as destination therapy to those waiting for the availability of a donor. (Kumar et al., 2023)

Lung, heart-lung, and heart transplantation have evolved over the past several decades to become a common treatment option for patients with advanced pulmonary and cardiac disease. According to the most recent report of the International Society for Heart and Lung Transplantation (ISHLT), through June 2016, more than 60,000 adult lung, 3900 adult heart-lung, and 135,000 adult heart transplants have been reported to the ISHLT Registry worldwide. In 2016, 140 centers reported lung transplant activity and 285 centers reported heart transplant activity to the ISHLT Registry, combining for more than 8000 thoracic transplants (McCurry et al., 2019)

Liver Transplants
According to the American Association for the Study of Liver Diseases (AASLD) and American Society of Transplantation (AST) Practice Guideline on adult liver transplantation: Candidate evaluation (December 2025), “Length of alcohol abstinence should not be a criterion for listing exclusion, especially when the severity of the patient’s liver disease prevents achieving a longer length of sobriety. (Strong, Level 3)”. This guideline also states that “discontinuing tobacco, smoked/inhaled marijuana, and drug misuse should be an expectation for liver transplant candidates. Monitoring for cessation of these substances should be performed. (Strong, Level 2)”
Lung Transplants

Pancreas and Islet Cell Transplants
Pancreas transplant has become an accepted treatment modality for both uremic and non-uremic patients with type 1 diabetes mellitus (T1DM). Pancreas transplant restores glucose homeostasis, relieving the patient from the need of ongoing glucose monitoring, insulin injections and the risk of life-threatening diabetic hypoglycemia or ketoacidosis. Nonetheless, considering the transplant-related morbidity and mortality plus the lifetime need for immunosuppression, not all T1DM patients should be considered for pancreas transplant.
Pancreas transplant has also become a viable option on T1DM patients with poorly controlled diabetes despite conventional treatment, insulin intolerance, hypoglycemia unawareness, brittle diabetes or end-stage kidney disease. There are currently 7 types of pancreas transplant: (1) simultaneous pancreas and kidney transplant (SPK). As per UNOS guidelines, SPK is indicated for T1DM patients or those with detectable C-peptide levels [as a surrogate indicator of type 2 diabetes mellitus (T2DM)], who are insulin dependent, have a body mass index (BMI) < 30 kg/m2, and end stage renal disease,

who are currently on dialysis or expected to require dialysis within 6 mo; (2) pancreas transplant alone (PTA), indicated primarily for T1DM with hypoglycemia unawareness, non-compliance with insulin treatment and/or impaired quality of life and adequate glomerular filtration rate to render the need of kidney transplant unlikely; (3) pancreas-after-kidney transplant (PAK), indicated for patients who would qualify for a PTA and already have a viable renal allograft; (4) simultaneous deceased donor pancreas and live donor kidney transplant, indicated for patients who would qualify for SPK. This approach is expected to result in reduced waiting times, lower delayed graft function (DGF) rates and better outcome; (5) total pancreatectomy and islet cell autotransplant (TPIAT). According to the PancreasFest consensus, TPIAT is indicated in selected patients with intractable pain related to chronic pancreatitis despite other appropriate treatment modalities, and no psychosocial or medical contraindications. In the United States, TPIAT is subject only to regulation of human cells and tissues (the tissue rules). The centers performing it should be registered with the Federal Drug Administration (FDA) and follow the Current Good Tissue Practices, without being required to submit FDA drug application; (6) laparoscopic donor distal pancreatectomy for living donor solid pancreas or islet allotransplant and pancreas-kidney transplant; and (7) islet allotransplant. The implantation of deceased donor islets of Langerhans is a promising treatment for T1DM with labile diabetes, recurrent hypoglycemia and hypoglycemia unawareness. In the United States, islet cell allotransplant is currently investigational and subject to both the FDA published guidelines on the tissue rules and the biologic and drug provisions.

SPK is by far the most common pancreas transplant type. According to the SRTR data (United States), in 2014, 77% of pancreas transplants were SPKs, while PAK and PTA accounted for 13.6% and 9% of the transplants performed, respectively (Giorgakis et al., 2018)

Intestinal Transplants

Permanent intestinal failure (IF) is the anatomic or functional reduction of the intestinal mass so that nutritional requirements for the fluids, macro- and micronutrients, are not met, leading to severe dehydration and malnutrition and inevitable death in the absence of any nutritional intervention. About 50% of adult patients with benign chronic IF can achieve enteral autonomy within the first 2 years. After that significant adaptation occurs in the minority, up to 94% of the adult patients have the probability of permanent IF requiring life-long PN. Whereas in pediatric patients, intestinal adaptation and enteral autonomy can occur over a prolonged period in sharp contrast to adult. Since its introduction, more than 50 years ago, parenteral nutrition (PN) is the gold standard of therapy for patients with benign chronic IF. From high morbidity and mortality in the past, PN has evolved significantly, and a recent series demonstrated that PN-dependent patients without complications and candidates of PN failure were able to achieve a 5-year survival of 87% and 73%, respectively. Despite these advancements in PN, the PN-related complications are the most probable cause of death 2 years after the start of PN.

Various series have demonstrated a complication rate of 19% to 26% in patients who are PN dependent. The high rates of permanent IF after 2 years of total parenteral nutrition (TPN) coupled with high rate of PN-related complications in this window of time may lead to the selection of intestinal transplantation and other treatments, instead of PN in patients with permanent IF. Over these decades intestinal transplantation has emerged as an established and efficacious therapy for permanent IF. Most adult patients resume work and enjoy a good quality of life (QOL), whereas most pediatric patients gain nutritional autonomy, catch up growth, and enjoy a good QOL. The outcomes of intestinal transplantation have significantly improved. The latest intestinal transplant registry reveals 1-, 5-, and 10-year graft survival rates to be 71%, 50%, and 40% and the patient survival rates to be 77%, 58%, and 47%, respectively. Despite the improved results of intestinal early transplantation currently in terms of comparable survival compared with home parenteral nutrition–dependent IF, a better QOL, and improved value of health care, early transplantation has yet to become a standard of care. (Kahn et al., 2019)

APPENDIX A

INDICATOR OF TOBACCO USE

	Tobacco Product User	Nicotine Replacement Product User	Non-tobacco user with passive exposure	Non-tobacco user with no passive exposure
Nicotine	+	+	+	-
Cotinine	+	+	+	-
Anabasine	+	-	-	-
Nornicotine	+	+	-	-

IV. GUIDELINES / POSITION STATEMENTS

Medical/Professional Society	Guideline
American Association for the Study of Liver Diseases (AASLD) and American Society of Transplantation (AST)	Practice Guideline on adult liver transplantation: Candidate evaluation (2025)
European Society for Organ Transplantation Working Group	European Guideline for the Management of Kidney Transplant Patients With HLA Antibodies: By the European Society for

	Organ Transplantation Working Group (2022)
Dallas Consensus	Meeting Report: The Dallas consensus conference on liver transplantation for alcohol related hepatitis (2021)

V. REGULATORY (US FOOD AND DRUG ADMINISTRATION)

See U.S. Food & Drug Administration (FDA) Medical Device Databases for the most current information.

VI. CODING

ICD-10 Codes that may support medical necessity
Not specified – see criteria

CPT/HCPCS Codes
Corneal Transplant – *No preauthorization required*

65710	Keratoplasty (corneal transplant); anterior lamellar
65730	Keratoplasty (corneal transplant); penetrating (except in aphakia or pseudophakia)
65750	Keratoplasty (corneal transplant); penetrating (in aphakia)
65755	Keratoplasty (corneal transplant); penetrating (in pseudophakia)
65756	Keratoplasty (corneal transplant); endothelial
65757	Backbench preparation of corneal endothelial allograft prior to transplantation (List separately in addition to code for primary procedure)
V2785	Processing, preserving and transporting corneal tissue (Corneal tissue reimbursement for ASC, OP Hosp)
65780	Ocular surface reconstruction; amniotic membrane transplantation , multiple layers
65781	Ocular surface reconstruction; limbal stem cell allograft (eg, cadaveric or living donor)
65782	Ocular surface reconstruction; limbal conjunctival autograft (includes obtaining graft)

Not separately payable:

66999	Unlisted procedure, anterior segment of eye. If billed for corneal incisions in the recipient cornea created using a laser, in preparation for penetrating or lamellar keratoplasty (explanatory notes must accompany claim for unlisted procedures)

Kidney Transplant

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), 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

<u>Heart Transplant</u>

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

<u>Heart-Lung Transplant</u>

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

<u>Liver Transplant</u>

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 (i.e., 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

<u>Lung Transplant</u>

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

Pancreas Transplant

48160	Pancreatectomy, total or subtotal, with autologous transplantation of pancreas or pancreatic islet cells (*Not covered for Priority Health Medicare)*
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

Pancreatic Islet Cell Transplant

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

Intestinal Transplantation

44132	Donor enterectomy (including cold preservation), open; from cadaver donor
44133	Donor enterectomy (including cold preservation), open; partial, from living donor
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

Lab tests for tobacco cessation verification

(No prior authorization required; subject to drug testing limits; See *policy 91611 Drug Testing)*

80307*	Drug test(s), presumptive, any number of drug classes, any number of devices or procedures; by instrument chemistry analyzers (e.g., utilizing immunoassay [e.g., EIA, ELISA, EMIT, FPIA, IA, KIMS, RIA]), chromatography (e.g., GC, HPLC), and mass spectrometry either with or without chromatography, (e.g., DART, DESI, GC-MS, GC-MS/MS, LC-MS, LC-MS/MS, LDTD, MALDI, TOF) includes sample validation when performed, per date of service
80323*	Alkaloids, not otherwise specified
G0480*	Drug test(s), definitive, utilizing (1) drug identification methods able to identify individual drugs and distinguish between structural isomers (but not necessarily stereoisomers), including, but not limited to, GC/MS (any type, single or tandem) and LC/MS (any type, single or tandem and excluding immunoassays (e.g., IA, EIA, ELISA, EMIT, FPIA) and enzymatic methods (e.g., alcohol dehydrogenase)), (2) stable isotope or other universally recognized internal standards in all samples (e.g., to control for matrix effects, interferences and variations in signal strength), and (3) method or drug-specific calibration and matrix-matched quality control material (e.g., to control for instrument variations and mass spectral drift); qualitative or quantitative, all sources, includes specimen validity testing, per day; 1-7 drug class(es), including metabolite(s) if performed

Not Medically Necessary

0494T	Surgical preparation and cannulation of marginal (extended) cadaver donor lung(s) to ex vivo organ perfusion system, including decannulation, separation from the perfusion system, and cold preservation of the allograft prior to implantation, when performed
0495T	Initiation and monitoring marginal (extended) cadaver donor lung(s) organ perfusion system by physician or qualified health care professional,

	including physiological and laboratory assessment (e.g., pulmonary artery flow, pulmonary artery pressure, left atrial pressure, pulmonary vascular resistance, mean/peak and plateau airway pressure, dynamic compliance and perfusate gas analysis), including bronchoscopy and X ray when performed; first two hours in sterile field
0496T	Initiation and monitoring marginal (extended) cadaver donor lung(s) organ perfusion system by physician or qualified health care professional, including physiological and laboratory assessment (e.g., pulmonary artery flow, pulmonary artery pressure, left atrial pressure, pulmonary vascular resistance, mean/peak and plateau airway pressure, dynamic compliance and perfusate gas analysis), including bronchoscopy and X ray when performed; each additional hour (List separately in addition to code for primary procedure)
0894T	Cannulation of the liver allograft in preparation for connection to the normothermic perfusion device and decannulation of the liver allograft following normothermic perfusion
0895T	Connection of liver allograft to normothermic machine perfusion device, hemostasis control; initial 4 hours of monitoring time, including hourly physiological and laboratory assessments (eg, perfusate temperature, perfusate pH, hemodynamic parameters, bile production, bile pH, bile glucose, biliary bicarbonate, lactate levels, macroscopic assessment)
0896T	Connection of liver allograft to normothermic machine perfusion device, hemostasis control; each additional hour, including physiological and laboratory assessments (eg, perfusate temperature, perfusate pH, hemodynamic parameters, bile production, bile pH, bile glucose, biliary bicarbonate, lactate levels, macroscopic assessment) (List separately in addition to code for primary procedure)
S2102	Islet cell tissue transplant from pancreas; allogeneic
S2103	Adrenal tissue transplant to brain
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
S9975	Transplant related lodging, meals and transportation, per diem
81560	Transplantation medicine (allograft rejection, pediatric liver and small bowel), measurement of donor and third-party-induced CD154+T-cytotoxic memory cells, utilizing whole peripheral blood, algorithm reported as a rejection risk score
0542U	Nephrology (renal transplant), urine, nuclear magnetic resonance (NMR) spectroscopy measurement of 84 urinary metabolites, combined with patient data, quantification of BK virus (human polyomavirus 1) using

	real-time PCR and serum creatinine, algorithm reported as a probability score for allograft injury status
0581U	Transplantation medicine, antibody to non-human leukocyte antigens (non-HLA), blood specimen, flow cytometry, single-antigen bead technology, 39 targets, individual positive antibodies reported

VII. MEDICAL NECESSITY REVIEW

Prior authorization for certain drugs, devices, services and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service or procedure is medically necessary. For more information, refer to the Priority Health Provider Manual.

To access EviCore, InterQual, or TurningPoint guidelines: Log into Priority Health Prism → Authorizations → Authorization Criteria Lookup.

Individual case review may allow coverage for care or treatment that is investigational yet promising for the conditions described. Requests for individual consideration require prior plan approval. All determinations of coverage for experimental, investigational, or unproven treatment will be made by a Priority Health medical director or clinical pharmacist. The exclusion of coverage for experimental, investigational, or unproven treatment may be reviewed for exception if the condition is either a terminal illness, or a chronic, life threatening, severely disabling disease that is causing serious clinical deterioration.

VIII. APPLICATION TO PRODUCTS

Coverage is subject to the member's specific benefits. Group-specific policy will supersede this policy when applicable.

- **HMO/EPO**: This policy applies to insured HMO/EPO plans.
- **POS**: This policy applies to insured POS plans.
- **PPO**: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- **ASO**: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- **INDIVIDUAL**: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- **MEDICARE**: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.
- **MEDICAID/HEALTHY MICHIGAN PLAN**: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual, the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

IX. REFERENCES

Liver Transplants

1. American Society of Transplant Surgeons' position paper on adult-to-adult living donor liver transplantation. Liver Transpl. 2000 Nov;6(6):815-7. doi: 10.1053/jlts.2000.18465. PMID: 11084076.
2. Centers for Medicare & Medicaid Services. NCD for Adult Liver Transplantation (260.1). (Accessed April 3, 2025).
3. Cheng XS, VanWagner LB, Costa SP, Axelrod DA, Bangalore S, Norman SP, Herzog CA, Lentine KL; American Heart Association Council on the Kidney in Cardiovascular Disease and Council on Cardiovascular Radiology and Intervention. Emerging Evidence on Coronary Heart Disease Screening in Kidney and Liver Transplantation Candidates: A Scientific Statement From the American Heart Association: Endorsed by the American Society of Transplantation. Circulation. 2022 Nov 22;146(21):e299-e324. doi: 10.1161/CIR.0000000000001104. Epub 2022 Oct 17. PMID: 36252095; PMCID: PMC10124159.
4. Godfrey EL, Malik TH, Lai JC, Mindikoglu AL, Galván NTN, Cotton RT, O'Mahony CA, Goss JA, Rana A. The decreasing predictive power of MELD in an era of changing etiology of liver disease. Am J Transplant. 2019 Dec;19(12):3299-3307. doi: 10.1111/ajt.15559. Epub 2019 Sep 4. PMID: 31394020.
5. Kim WR, Mannalithara A, Heimbach JK, Kamath PS, Asrani SK, Biggins SW, Wood NL, Gentry SE, Kwong AJ. MELD 3.0: The Model for End-Stage Liver Disease Updated for the Modern Era. Gastroenterology. 2021 Dec;161(6):1887-1895.e4. doi: 10.1053/j.gastro.2021.08.050. Epub 2021 Sep 3. PMID: 34481845; PMCID: PMC8608337.
6. Mazumder NR, Fontana RJ. MELD 3.0 in Advanced Chronic Liver Disease. Annu Rev Med. 2024 Jan 29;75:233-245. doi: 10.1146/annurev-med-051322-122539. Epub 2023 Sep 26. PMID: 37751367.
7. Smith CM, Davies DB, McBride MA. Liver transplantation in the United States: a report from the Organ Procurement and Transplantation Network. In: Cecka JM, Terasaki PI, eds. Clinical Transplants 2000. Los Angeles, CA: UCLA Immuogenetics Center; 2000:19-30.
8. Dove, L., Chadha, R. M., Lai, J. C., DiMartini, A., Liapakis, A., Parikh, N., Firpi-Morell, R., Conteh, L., Fallon, M., Trotter, J., Ladner, D., Sapisochin, G., & Lucey, M. (2025). AASLD AST Practice Guideline on adult liver transplantation: Candidate evaluation. *Hepatology (Baltimore, Md.)*, 10.1097/HEP.0000000000001644. Advance online publication. https://doi.org/10.1097/HEP.0000000000001644
9. Asrani SK, Trotter J, Lake J, Ahmed A, Bonagura A, Cameron A, DiMartini A, Gonzalez S, Im G, Martin P, Mathurin P, Mellinger J, Rice JP, Shah VH, Terrault N, Wall A, Winder S, Klintmalm G. Meeting Report: The Dallas Consensus Conference on Liver Transplantation for Alcohol Associated Hepatitis. Liver Transpl. 2020 Jan;26(1):127-140. doi: 10.1002/lt.25681. PMID: 31743578; PMCID: PMC8151800.

Heart Transplants

10. Centers for Medicare & Medicaid Services. NCD for Heart Transplants (260.9). (Accessed April 3, 2025).
11. Kumar S, Tiwari N, Singh S, Chowdlu Kalappa K. 50-years journey of heart transplant. Med J Armed Forces India. 2023 Nov-Dec;79(6):616-620. doi: 10.1016/j.mjafi.2023.03.008. Epub 2023 Jun 28. PMID: 37981922; PMCID: PMC10654392.
12. McCurry K. R. (2019). Brief Overview of Lung, Heart, and Heart-Lung Transplantation. *Critical care clinics*, *35*(1), 1–9. https://doi.org/10.1016/j.ccc.2018.08.005

Corneal Transplants

13. Gain, P., Jullienne, R., He, Z., Aldossary, M., Acquart, S., Cognasse, F., & Thuret, G. (2016). Global Survey of Corneal Transplantation and Eye Banking. *JAMA ophthalmology*, *134*(2), 167–173. https://doi.org/10.1001/jamaophthalmol.2015.4776

Kidney Transplants

14. Mamode, N., Bestard, O., Claas, F., Furian, L., Griffin, S., Legendre, C., Pengel, L., & Naesens, M. (2022). European Guideline for the Management of Kidney Transplant Patients With HLA Antibodies: By the European Society for Organ Transplantation Working Group. *Transplant international : official journal of the European Society for Organ Transplantation*, *35*, 10511. https://doi.org/10.3389/ti.2022.10511
15. Durand CM, Massie A, Florman S, Liang T, Rana MM, Friedman-Moraco R, Gilbert A, Stock P, Mehta SA, Mehta S, Stosor V, Pereira MR, Morris MI, Hand J, Aslam S, Malinis M, Haidar G, Small CB, Santos CAQ, Schaenman J, Baddley J, Wojciechowski D, Blumberg EA, Ranganna K, Adebiyi O, Elias N, Castillo-Lugo JA, Giorgakis E, Apewokin S, Brown D, Ostrander D, Eby Y, Desai N, Naqvi F, Bagnasco S, Watson N, Brittain E, Odim J, Redd AD, Tobian AAR, Segev DL; HOPE in Action Investigators. Safety of Kidney Transplantation from Donors with HIV. N Engl J Med. 2024 Oct 17;391(15):1390-1401. doi: 10.1056/NEJMoa2403733. PMID: 39413376; PMCID: PMC11606542.
16. Kanbay M, Abdel-Rahman SM, Brinza C, Ozbek L, Yayci E, Aktas O, Genc C, Guldan M, Alper EN, Burlacu A, Covic A, Covic A. A meta-analysis of graft survival, patient survival and delayed graft function in first-time and repeat kidney transplants. Nephrol Dial Transplant. 2025 Sep 29;40(10):1906-1918. doi: 10.1093/ndt/gfaf066. PMID: 40234207; PMCID: PMC12477473.

Pancreatic/Islet Cell Transplants

17. Centers for Medicare & Medicaid Services. NCD for Islet Cell Transplantation in the Context of a Clinical Trial (260.3.1) (Accessed April 3, 2025).
18. Centers for Medicare & Medicaid Services. NCD for Pancreas Transplants (260.3). (Accessed April 3, 2025).
19. Hering BJ, Ballou CM, Bellin MD, Payne EH, Kandeel F, Witkowski P, Alejandro R, Rickels MR, Barton FB. Factors associated with favourable 5 year outcomes in islet transplant alone recipients with type 1 diabetes complicated by severe hypoglycaemia in the Collaborative Islet Transplant Registry. Diabetologia. 2023 Jan;66(1):163-173. doi: 10.1007/s00125-022-05804-4. Epub 2022 Oct 6. PMID: 36201044; PMCID: PMC10355148.
20. Markmann JF, Rickels MR, Eggerman TL, Bridges ND, Lafontant DE, Qidwai J, Foster E, Clarke WR, Kamoun M, Alejandro R, Bellin MD, Chaloner K, Czarniecki CW, Goldstein JS, Hering BJ, Hunsicker LG, Kaufman DB, Korsgren O, Larsen CP, Luo X, Naji A, Oberholzer J, Posselt AM, Ricordi C, Senior PA, Shapiro AMJ, Stock PG, Turgeon NA. Phase 3 trial of human islet-after-kidney transplantation in type 1 diabetes. Am J Transplant. 2021 Apr;21(4):1477-1492. doi: 10.1111/ajt.16174. Epub 2020 Aug 9. PMID: 32627352; PMCID: PMC9074710.
21. Gariani, K., Peloso, A., Haidar, F., Kumar, R., Wassmer, C. H., Morabito, M., Krause, N., Compagnon, P., Berishvili, E., & Berney, T. (2025). Impact of Islet Transplantation on Type 1 Diabetes-Related Complication: A Systematic Review. *Transplant international : official journal of the European Society for Organ Transplantation*, *38*, 15091. https://doi.org/10.3389/ti.2025.15091
22. Rickels MR, Ballou CM, Foster NC, Alejandro R, Baidal DA, Bellin MD, Eggerman TL, Hering BJ, Kandeel F, Brand A, Miller KM, Barton FB, Payne EH. Islet Transplantation Versus Standard of Care for Type 1 Diabetes Complicated by Severe Hypoglycemia From the Collaborative Islet Transplant Registry and the T1D Exchange Registry. Diabetes Care. 2025 Feb 14:dc241915. doi: 10.2337/dc24-1915. Epub ahead of print. PMID: 39951130.
23. Giorgakis E, Mathur AK, Chakkera HA, Reddy KS, Moss AA, Singer AL. Solid pancreas transplant: Pushing forward. World J Transplant. 2018 Nov 30;8(7):237-251. doi: 10.5500/wjt.v8.i7.237. PMID: 30596031; PMCID: PMC6304337.

Intestinal Transplants

24. Centers for Medicare & Medicaid Services. NCD for Intestinal and Multi-visceral Transplantation (260.5). (Accessed April 3, 2025).
25. Ceulemans LJ, Dubois A, Clarysse M, Canovai E, Venick R, Mazariegos G, Vanuytsel T, Hibi T, Avitzur Y, Hind J, Horslen S, Gondolesi G, Benedetti E, Gruessner R, Pirenne J. Outcome After Intestinal Transplantation From Living Versus Deceased Donors: A Propensity-matched Cohort Analysis of the International Intestinal Transplant Registry. Ann Surg. 2023 Nov 1;278(5):807-814. doi: 10.1097/SLA.0000000000006045. Epub 2023 Jul 27. PMID: 37497671; PMCID: PMC10549910.
26. DiBaise JK. Short bowel syndrome and small bowel transplantation. Curr Opin Gastroenterol. 2014;30(2):128-133.

27. Devine K, Ranganathan S, Mazariegos G, Bond G, Soltys K, Ganoza A, Sun Q, Sindhi R. Induction regimens and post-transplantation lymphoproliferative disorder after pediatric intestinal transplantation: Single-center experience. Pediatr Transplant. 2020 Aug;24(5):e13723. doi: 10.1111/petr.13723. Epub 2020 May 19. PMID: 32424963.
28. Di Cocco P, Martinino A, Lian A, Johnson J, Spaggiari M, Tzvetanov I, Benedetti E. Indications for Multivisceral Transplantation: A Systematic Review. Gastroenterol Clin North Am. 2024 Jun;53(2):245-264. doi: 10.1016/j.gtc.2024.01.007. Epub 2024 Feb 8. PMID: 38719376.
29. Kaufman SS, Atkinson JB, Bianchi A, et al.; American Society of Transplantation. Indications for pediatric intestinal transplantation: a position paper of the American Society of Transplantation. Pediatr Transplant. 2001;5(2):80-87.
30. Kahn, A. B., Tulla, K. A., & Tzvetanov, I. G. (2019). Indications of Intestinal Transplantation. *Gastroenterology clinics of North America*, *48*(4), 575–583. https://doi.org/10.1016/j.gtc.2019.08.010

Other/General

31. United Network for Organ Sharing (UNOS). 2016 Annual Report. Available at https://unos.org/about/annual-report/2016-annual-report/
32. U.S. Department of Health and Human Services. Organ Procurement and Transplantation Network (OPTN). Policies. (Accessed April 10, 2025)

SUMMARY OF CHANGES:

Deletions:

- 1.A.5 Removed length of time (3 month) requirement for patients with a history of substance abuse prior to transplant approval

Clarifications:

- Updated background and references

Past committee review dates: 1/93, 12/99, 12/01, 12/02, 11/03, 11/04, 10/05, 10/06, 7/07, 6/08, 6/09, 6/10, 6/11, 6/12, 6/13, 8/14, 8/15, 8/16, 8/17, 8/18, 8/19, 8/20, 11/20, 11/21,11/22, 11/23, 5/24, 5/25, 5/26