



MASSACHUSETTS

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## Medical Policy Kidney Transplant

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### Policy Number: 196

BCBSA Reference Number: 7.03.01 (For Plan internal use only)  
NCD/LCD: N/A

### Related Policies

- Allogeneic Pancreas Transplant, #[328](#)
- Intravenous Immunoglobulin, #[310](#)
- Plasma Exchange, #[466](#)

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

Renal (kidney) transplantation may be **MEDICALLY NECESSARY** for patients with end-stage renal disease **and** for those individuals with **no** contraindications who are diagnosed with **any** of the following conditions, including but not limited to:

- Diabetes mellitus
- Hypertensive nephrosclerosis
- Acute tubular necrosis Glomerulonephritis
- Lupus (SLE) Goodpasture's (Anti-glomerular base-membrane disease) Polyarteritis Wegener's granulomatosis Henoch-Schönlein purpura Hemolytic uremic syndrome
- IGA nephropathy
- Nephritis
- Focal glomerulosclerosis
- Cortical necrosis Analgesic nephropathy with medullary necrosis
- Heavy metal poisoning
- Medullary cystic disease
- Nephrocalcinosis
- Gout nephritis
- Amyloid disease
- Fabry's disease
- Cystinosis or Oxalosis

- Renal artery or vein occlusion
- Chronic pyelonephritis
- Obstructive uropathy Tuberos sclerotic
- Polycystic kidney disease
- Horseshoe kidney or Renal aplasia or hypoplasia
- Myeloma (no remission or in remission)
- Wilms' tumor or Renal-cell carcinoma, or
- Trauma requiring nephrectomy injury to kidney.

Kidney retransplant after a failed primary kidney transplant may be **MEDICALLY NECESSARY**.

In addition to the above information, we do not cover kidney transplantation when any of the following conditions are present:

- Known current malignancy, including metastatic cancer
- Recent malignancy with high risk of recurrence
  - Note: the assessment of risk of recurrence for a previously treated malignancy is made by the transplant team; providers must submit a statement with an explanation of why the patient with a recently treated malignancy is an appropriate candidate for a transplant.
- History of cancer with a moderate risk of recurrence
- Systemic disease that could be exacerbated by immunosuppression
- Untreated systemic infection making immunosuppression unsafe, including chronic infection
- Other irreversible end-stage disease not attributed to kidney disease
- Psychosocial conditions or chemical dependency affecting ability to adhere to therapy.

HIV (human immunodeficiency virus) -positive patients, who meet the following criteria, as stated in the 2001 guidelines of the American Society of Transplantation, could be considered candidates for kidney transplantation:

- CD4 count >200 cells per cubic millimeter for >6 months
- HIV-1 RNA undetectable
- On stable antiretroviral therapy >3 months
- No other complications from AIDS (acquired immune deficiency syndrome) (e.g., opportunistic infection, including aspergillus, tuberculosis, coccidioidomycosis, resistant fungal infections, Kaposi's sarcoma, or other neoplasm), **and**
- Meeting all other criteria for transplantation.

Indications for renal transplant include a creatinine level of greater than 8 mg/dL, or greater than 6 mg/dL in symptomatic diabetic patients. However, consideration for listing for renal transplant may start well before the creatinine level reaches this point, based on the anticipated time that a patient may spend on the waiting list.

Kidney transplant is **INVESTIGATIONAL** in all other situations.

### Prior Authorization Information

#### Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

#### Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
<b>Commercial Managed Care (HMO and POS)</b>	This procedure is performed in the inpatient setting.
<b>Commercial PPO and Indemnity</b>	This procedure is performed in the inpatient setting.

<b>Medicare HMO Blue<sup>SM</sup></b>	This procedure is performed in the inpatient setting.
<b>Medicare PPO Blue<sup>SM</sup></b>	This procedure is performed in the inpatient setting.

## CPT Codes / HCPCS Codes / ICD Codes

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

*Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.*

*The following codes are included below for informational purposes only; this is not an all-inclusive list.*

**The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

<b>CPT codes:</b>	<b>Code Description</b>
50360	Renal allotransplantation, implantation of graft; without recipient nephrectomy
50365	Renal allotransplantation, implantation of graft; with recipient nephrectomy

### ICD-10 Procedure Codes

<b>ICD-10-PCS procedure codes:</b>	<b>Code Description</b>
0TT00ZZ	Resection of Right Kidney, Open Approach
0TT04ZZ	Resection of Right Kidney, Percutaneous Endoscopic Approach
0TT10ZZ	Resection of Left Kidney, Open Approach
0TT14ZZ	Resection of Left Kidney, Percutaneous Endoscopic Approach
0TT20ZZ	Resection of Bilateral Kidneys, Open Approach
0TT24ZZ	Resection of Bilateral Kidneys, Percutaneous Endoscopic Approach
0TT60ZZ	Resection of Right Ureter, Open Approach
0TT64ZZ	Resection of Right Ureter, Percutaneous Endoscopic Approach
0TT67ZZ	Resection of Right Ureter, Via Natural or Artificial Opening
0TT68ZZ	Resection of Right Ureter, Via Natural or Artificial Opening Endoscopic
0TT70ZZ	Resection of Left Ureter, Open Approach
0TT74ZZ	Resection of Left Ureter, Percutaneous Endoscopic Approach
0TT77ZZ	Resection of Left Ureter, Via Natural or Artificial Opening
0TT78ZZ	Resection of Left Ureter, Via Natural or Artificial Opening Endoscopic
0TY00Z0	Transplantation of Right Kidney, Allogeneic, Open Approach
0TY00Z1	Transplantation of Right Kidney, Syngeneic, Open Approach
0TY00Z2	Transplantation of Right Kidney, Zooplastic, Open Approach
0TY10Z0	Transplantation of Left Kidney, Allogeneic, Open Approach
0TY10Z1	Transplantation of Left Kidney, Syngeneic, Open Approach
0TY10Z2	Transplantation of Left Kidney, Zooplastic, Open Approach

### Description

Solid organ transplantation offers a treatment option for patients with different types of end-stage organ failure that can be lifesaving or provide significant improvements to a patient's quality of life.<sup>1</sup> Many advances have been made in the last several decades to reduce perioperative complications. Available data support improvement in long-term survival as well as improved quality of life, particularly for liver,

kidney, pancreas, heart, and lung transplants. Allograft rejection remains a key early and late complication risk for any organ transplantation. Transplant recipients require life-long immunosuppression to prevent rejection. Patients are prioritized for transplant by mortality risk and severity of illness criteria developed by Organ Procurement and Transplantation Network (OPTN) and United Network of Organ Sharing (UNOS).

### **Kidney Transplant**

In 2022, 42,889 transplants were performed in the United States procured from 36,421 deceased donors and 6,468 living donors.<sup>2</sup> Kidney transplants were the most common procedure with 25,500 transplants performed from both deceased and living donors in 2022. Since 1988, the cumulative number of kidney transplants is 553,905.<sup>3</sup> Of the cumulative total, approximately 67% of the kidneys came from deceased donors and 33% from living donors.

Kidney transplant, using kidneys from deceased or living donors, is an accepted treatment of end-stage renal disease (ESRD). ESRD refers to the inability of the kidneys to perform their functions (ie, filtering wastes and excess fluids from the blood). ESRD, which is life-threatening, is also known as chronic kidney disease stage 5 and is defined as a glomerular filtration rate (GFR) less than 15 mL/min/1.73 m<sup>2</sup>.<sup>4</sup> Patients with advanced chronic kidney disease, mainly stage 4 (GFR 15 to 29 mL/min/1.73 m<sup>2</sup>) and stage 5 (GFR <15 mL/min/1.73 m<sup>2</sup>), should be evaluated for transplant.<sup>5</sup> Being on dialysis is not a requirement to be considered for kidney transplant. Severe non-compliance and substance abuse serve as contraindications to kidney transplantation but even those could be overcome with clinician support and patient motivation. All kidney transplant candidates receive organ allocation points based on waiting time, age, donor-recipient immune system compatibility, prior living donor status, distance from donor hospital, and survival benefit.<sup>6,7</sup>

Combined kidney and pancreas transplants and management of acute rejection of kidney transplant using either intravenous immunoglobulin or plasmapheresis are discussed in separate evidence reviews.

## **Summary**

### **Description**

Kidney transplant, a treatment option for end-stage renal disease, involves the surgical removal of a kidney from a cadaver, living-related donor, or living-unrelated donor and transplantation into the recipient.

### **Summary of Evidence**

For individuals who have end-stage renal disease without contraindications to kidney transplant who receive a kidney transplant from a living donor or deceased (cadaveric) donor, the evidence includes registry data and case series. Relevant outcomes are overall survival (OS), morbid events, and treatment-related mortality and morbidity. Data from large registries have demonstrated reasonably high survival rates after kidney transplant for appropriately selected patients and significantly higher survival rates for patients undergoing kidney transplant compared with those who remained on a waiting list. Kidney transplantation is contraindicated for patients in whom the procedure is expected to be futile due to comorbid disease or in whom posttransplantation care is expected to significantly worsen comorbid conditions. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have a failed kidney transplant without contraindications to kidney transplant who receive a kidney retransplant from a living donor or deceased (cadaveric) donor, the evidence includes registry data and case series. Relevant outcomes are OS, morbid events, and treatment-related mortality and morbidity. Data have demonstrated reasonably high survival rates after kidney retransplant (eg, 5-year survival rates ranging from 87% to 96%) for appropriately selected patients. Kidney retransplantation is contraindicated for patients for whom the procedure is expected to be futile due to comorbid disease or for whom posttransplantation care is expected to significantly worsen comorbid conditions. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

## Policy History

Date	Action
10/2023	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
10/2022	Annual policy review. References added. Minor editorial refinements to policy statements; intent unchanged.
9/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
10/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
10/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
10/2018	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
10/2017	Annual policy review. New references added.
1/2017	Annual policy review. New references added.
11/2015	Added coding language.
8/2015	Annual policy review. New references added.
10/2014	Medical policy remediation: New indications for non-coverage. Coding information clarified. Effective 10/1/2014.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
12/2013	Removed ICD-9 diagnosis codes as the policy requires prior authorization.
11/2013	Annual policy review. New medically necessary indications described. Effective 11/1/2013.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
10/2011	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplants. No changes to policy statements.
11/2010	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplants. No changes to policy statements.
6/2010	Reviewed following local input. Revised policy statement.
11/2009	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplants. No changes to policy statements.
11/2008	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplants. No changes to policy statements.
11/2007	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplants. No changes to policy statements.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

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