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Kidney Transplant

Table of Contents
Coverage
Policy Guidelines
Description
Rationale
Coding
References
Policy History

Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility of consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Legislative Mandates

EXCEPTION: For Texas ONLY: For policies (IFM, student, small group, mid-market, large group, fully-insured municipalities/counties/schools, state employee plans, PPO, HMO, POS) delivered, issued for delivery, or renewed on or after Jan. 1, 2024, TIC Chapter 1380 (§§ 1380.001 – 1380.003 [SB 1040 Human Organ Transplant]) prohibits coverage of a human organ transplant or post-transplant care if the transplant operation is performed in China or another country known to have participated in forced organ harvesting; or the human organ to be transplanted was procured by a sale or donation originating in China or another country known to have participated in forced organ harvesting. The commissioner of state health services may designate countries who are known to have participated in forced organ harvesting. Forced organ harvesting is defined as the removal of one or more

organs from a living person by means of coercion, abduction, deception, fraud, or abuse of power or a position of vulnerability.

Coverage

Kidney transplants with either a living or deceased (cadaveric) donor **may be considered medically necessary** for carefully selected individuals with end-stage renal disease.

Kidney retransplant after a failed primary kidney transplant **may be considered medically necessary** in individuals who meet criteria for kidney transplantation.

Kidney transplant **is considered experimental, investigational and/or unproven** in all other situations.

Policy Guidelines

Contraindications
Potential contraindications to solid organ transplant (subject to the judgment of the transplant center):

- Known current malignancy, including metastatic cancer;
- Recent malignancy with high risk of recurrence;
- 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 diseases not attributed to kidney disease;
- Psychosocial conditions or chemical dependency affecting ability to adhere to therapy.

Renal-Specific Criteria
There are no medical criteria that must be met for an individual to be listed for a kidney transplant. Certain medical factors are utilized for calculating an individual's waiting time after being listed for a kidney transplant, which is used as a component of the kidney allocation system. These include the earliest date on which the registered candidate's glomerular filtration rate or measured or estimated creatinine clearance was less than or equal to 20 mL/min or regularly-administered dialysis was initiated for end-stage renal disease; however, consideration for listing for renal transplant may start well before the creatinine level reaches this point, based on the anticipated time that an individual may spend on the waiting list.

When a live donor is available or where pre-emptive deceased donor transplantation is possible, cases should proceed when the eGFR is <10ml/min/1.73 m^2 (10 to 15 ml/min/1.73

m^2 in pediatrics). Optimal timing, however, depends on factors other than GFR such as the pace of renal decline, presence of symptoms and living donor preferences. (1)

Per a joint statement by the National Kidney Foundation and the American Society of Nephrology, race modifiers should not be included in equations to estimate kidney function. (2)

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. (3) 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 and United Network of Organ Sharing.

Kidney Transplant
In 2024, 48,149 transplants were performed in the United States procured from 41,119 deceased donors and 7,030 living donors. (4) Kidney transplants were the most common procedure with 27,759 transplants performed from both deceased and living donors in 2024. Since 1988, the cumulative number of kidney transplants is 609,382. Of the cumulative total, 69% of the kidneys came from deceased donors and 31% from living donors.

Kidney transplant, using kidneys from deceased or living donors, is an accepted treatment of end-stage renal disease. ESRD refers to the inability of the kidneys to perform their functions (i.e., 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 less than 15 mL/min/1.73 m^2. (5) Patients with advanced chronic kidney disease, mainly stage 4 (GFR 15 to 29 mL/min/1.73 m^2) and stage 5 (GFR <15 mL/min/1.73 m^2), should be evaluated for transplant. (6) 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. (7)

Pre-emptive Kidney Transplant

Pre-emptive kidney transplantation is elective transplantation prior to the initiation of chronic dialysis. Clinical studies have indicated that longer waiting time on pre-transplant dialysis is a strong risk factor for death. PEKT is considered the ideal and optimal treatment for most patients with end-stage kidney disease because of no exposure to long-term dialysis therapy. Although PEKT is generally recommended when the glomerular filtration rate falls below 15 mL/min, the optimal timing for PEKT is still unclear. (8)

Regulatory Status

Solid organ transplants are a surgical procedure and, as such, are not subject to regulation by the U.S. Food and Drug Administration.

The FDA regulates human cells and tissues intended for implantation, transplantation, or infusion through the Center for Biologics Evaluation and Research, under Code of Federal Regulation Title 21, parts 1270 and 1271. Solid organs used for transplantation are subject to these regulations.

Rationale

This policy is based on review of relevant professional association recommendations.

American Society of Transplant Surgeons et al.

In 2011, the American Society of Transplant Surgeons, the American Society of Transplantation, the Association of Organ Procurement Organizations, and the United Network for Organ Sharing issued a joint position statement recommending modifications to the National Organ Transplant Act of 1984. (9) The joint recommendation stated that the potential pool of organs from HIV-infected donors should be explored. With modern antiretroviral therapy, the use of these previously banned organs would open an additional pool of donors to HIV-infected recipients. The increased pool of donors has the potential to shorten waiting times for organs and decrease the number of waiting list deaths. The organs from HIV-infected deceased donors would be used for transplant only with patients already infected with HIV. In 2013, the HIV Organ Policy Equity Act permitted the use of this group of organ donors.

Medicare National Coverage

The Medicare Benefit Policy Manual includes a chapter on end-stage renal disease. (10) A section on identifying candidates for transplantation (140.1) states: “After a patient is diagnosed as having ESRD, the physician should determine if the patient is suitable for transplantation. If the patient is a suitable transplant candidate, a live donor transplant is considered first because of the high success rate in comparison to a cadaveric transplant. Whether one or multiple potential donors are available, the following sections provide a general description of the usual course of events in preparation for a live-donor

transplant."

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	50300, 50320, 50323, 50325, 50327, 50328, 50329, 50340, 50360, 50365, 50370, 50547
HCPCS Codes	S2152

*Current Procedural Terminology (CPT®) ©2025 American Medical Association: Chicago, IL.

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9. American Society of Transplant Surgeons, The American Society of Transplantation, The Association of Organ Procurement Organizations, et al. Statement on Transplantation of Organs from HIV-infected deceased donors. 2011. Available at: asts.org (accessed June 17, 2025).
10. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual: Chapter 11—End Stage Renal Disease (ESRD). 2019. Available at: cms.gov (accessed June 17, 2025).

Centers for Medicare and Medicaid Services

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at cms.hhs.gov.

Policy History/Revision

Date	Description of Change
5/7/2026	New medical document. Kidney transplants with either a living or deceased (cadaveric) donor may be considered medically necessary for carefully selected individuals with end-stage renal disease. Kidney retransplant after a failed primary kidney transplant may be considered medically necessary in individuals who meet criteria for kidney transplantation. Kidney transplant is considered experimental, investigational and/or unproven in all other situations.