

Kidney Transplant

Policy ID:	HHO-DE-MP-1017
Approved By:	Highmark Health Options – Market Leadership
Provider Notice Date:	12/15/2021; 05/01/2023
Original Effective Date:	01/15/2022; 06/01/2023
Annual Approval Date:	08/19/2021; 02/23/2022; 02/22/2023
Last Revision Date:	08/19/2021; 02/23/2022; 02/22/2023
Products:	Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1 of 5

Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under medical surgical benefits of the Company's Medicaid products for medically necessary kidney transplant.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently services Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan Plus members.

Kidney Transplant – A treatment for end-stage renal disease (ESRD), involves the surgical removal of a kidney from a cadaver, living-related, or living unrelated donor and transplantation into the recipient.

End-stage renal disease (ESRD) – The inability of kidney functions to be performed, such as filtering wastes and excess fluids from the blood. ESRD, also known as stage 5 chronic renal failure, is life-threatening, and is defined as a glomerular filtration rate (GFR) less than 15mL/min/1.73m². Dialysis is an artificial replacement for some kidney functions. Dialysis is used as a supportive measure in patients who do not want kidney transplants or are not transplant candidates and can also be used as a temporary measure in patients awaiting kidney transplant.

PROCEDURES

Prior authorization is required.

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

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

Kidney transplant not meeting the criteria as indicated in this policy is considered **not medically necessary**.

In addition to the above criteria and subject to the discretion of the transplant center, a Hepatitis C Virus (HCV) positive donor organ may be considered an acceptable organ option for an HCV negative adult recipient 18 years of age or older.

Renal-Specific Criteria

Indications for renal transplant to include **ANY** of the following:

- The individual requires chronic dialysis; **or**
- Glomerular filtration rate (GFR) less than or equal to 20 ml/min; **or**
- Creatinine level greater than six (6) mg/dL in symptomatic diabetic individuals.

Note: 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.

Contraindications

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

- Known current malignancy, including metastatic cancer; **or**
- Recent malignancy with high risk of recurrence; **or**
- History of cancer with a moderate risk of recurrence; **or**
- Systemic disease that could be exacerbated by immunosuppression; **or**
- Untreated systemic infection making immunosuppression unsafe, including chronic infection; **or**
- Other irreversible end-stage diseases not attributed to kidney disease; **or**
- Psychosocial conditions or chemical dependency affecting ability to adhere to therapy.

Post-payment Audit Statement

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Health Options at any time pursuant to the terms of your provider agreement.

Place of Service: Inpatient

CODING REQUIREMENTS

CPT code	Description
50320	Donor Nephrectomy (including cold preservation); open, from living donor.
50340	Recipient Nephrectomy (separate procedure).
50360	Renal Allotransplantation, implantation of graft; without recipient nephrectomy.
50365	Renal Allotransplantation, implantation of graft; with recipient nephrectomy.
50370	Removal of transplanted renal allograft.
50380	Renal autotransplantation, reimplantation of kidney.
50547	Laparoscopy, surgical; donor nephrectomy (including cold preservation), from living donor.

Covered Diagnosis Codes

N18.4	N18.5	N18.6	N18.9	
-------	-------	-------	-------	--

REIMBURSEMENT

Participating facilities will be reimbursed per their Highmark Health Options contract.

Precertification/prior authorization is required.

SUMMARY OF LITERATURE
American Society of Transplant Surgeons et al-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 (2011) issued a joint position statement recommending modifications to the National Organ Transplant Act of 1984. 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 individuals already infected with HIV. In 2013, the HIV Organ Policy Equity Act permitting the use of this group of organ donors.

References

InterQual® Level of Care Criteria 2021. Acute Care Adult. McKesson Health Solutions, LLC.

Organ Procurement and Transplantation Network Policies. 2020; <https://optn.transplant.hrsa.gov>.

National Kidney Foundation. Glomerular Filtration Rate (GFR). n.d.; <https://www.kidney.org/atoz/content/gfr>.

American Society of Transplant Surgeons (ASTS), The American Society of Transplantation (AST), The Association of Organ Procurement Organizations (AOPO), et al. Statement on transplantation of organs from HIV-infected deceased donors.

Kervinen, MG, Lehto S, Helve J, et al. Type 2 diabetic patients on renal replacement therapy: Probability to receive renal transplantation and survival after transplantation. *PLoS One*. 2018 15;13(8): e0201478.

Black CK, Termanini KM, Aguirre O, Hawksworth JS, Sosin M. Solid organ transplantation in the 21st century. *Ann Transl Med*. 2018;6(20):409.

Chaudhry D, Chaudhry A, Peracha J, Sharif A. Survival for waitlisted kidney failure patients receiving transplantation versus remaining on waiting list: Systematic review and metaanalysis. *BMJ*. 2022;376: e068769.

Zheng X, Gong L, Xue W, et al. Kidney transplant outcomes in HIV-positive patients: A systematic review and meta-analysis. *AIDS Res Ther*. 2019;16(1):37.

Kainz A, Kammer M, Reindl-Schwaighofer R, et al. Waiting time for second kidney transplantation and mortality. *Clin J Am Soc Nephrol*. 2022;17(1):90-97.

Reese PP, Abt PL, Blumberg EA, et al. Twelve-month outcomes after transplant of hepatitis c-infected kidneys into uninfected recipients: A single-group trial. *Ann Intern Med*. 2018;169(5):273-281.

Durand CM, Bowring MG, Brown DM, et al. Direct-Acting antiviral prophylaxis in kidney transplantation from hepatitis c virus-infected donors to noninfected recipients: An open-label nonrandomized trial. *Ann Intern Med*. 2018;168(8):533-540.

Sise ME, Goldberg DS, Kort JJ, et al. Multicenter study to transplant hepatitis c-infected kidneys (MYTHIC): An open-label study of combined glecaprevir and pibrentasvir to treat recipients of transplanted kidneys from deceased donors with hepatitis c virus infection. *J Am Soc Nephrol*. 2020;31(11):2678-2687.

Sise ME, Goldberg DS, Schaubel DE, et al. One-year outcomes of the multi-center study to transplant hepatitis c-infected kidneys (MYTHIC) Trial. *Kidney Int Rep*. 2021;7(2):241-250.

Gupta G, Yakubu I, Bhati CS, et al. Ultra-short duration direct acting antiviral prophylaxis to prevent virus transmission from hepatitis C viremic donors to hepatitis C negative kidney transplant recipients. *Am J Transplant*. 2020;20(3):739-751.

Franco A, Moreso F, Merino E, et al. Renal transplantation from seropositive hepatitis C virus donors to seronegative recipients in Spain: A prospective study. *Transpl Int*. 2019;32(7):710-716.

Kapila N, Menon KVN, Al-Khalloufi K, et al. Hepatitis C virus NAT-positive solid organ allografts transplanted into hepatitis C virus-negative recipients: A real-world experience. *Hepatology*. 2020;72(1):32-41.

Feld JJ, Cypel M, Kumar D, et al. Short-course, direct-acting antivirals and ezetimibe to prevent HCV infection in recipients of organs from HCV-infected donors: A phase 3, single-centre, open label study [published correction appears in *Lancet Gastroenterol Hepatol*. 2020 Jul;5(7): e6]. *Lancet Gastroenterol Hepatol*. 2020;5(7):649-657.

Molnar MZ, Nair S, Cseprekal O, et al. Transplantation of kidneys from hepatitis C-infected donors to hepatitis C-negative recipients: single center experience. *Am J Transplant*. 2019;19(11):3046-3057.

Friebus-Kardash J, Gäckler A, Kribben A, et al. Successful early sofosbuvir-based antiviral treatment after transplantation of kidneys from HCV-viremic donors into HCV-negative recipients. *Transpl Infect Dis.* 2019;21(5): e13146.

Jandovitz N, Nair V, Grodstein E, et al. Hepatitis C-positive donor to negative recipient kidney transplantation: A real-world experience. *Transpl Infect Dis.* 2021;23(3): e13540.

Alghamdi W, Lotfy K, Weernink C, et al. Hepatitis C positive organ transplantation to negative recipients at a multiorgan Canadian transplant centre: Ready for prime time. *BMC Gastroenterol.* 2022;22(1):34.

POLICY UPDATE HISTORY

08/19/2021	Approved in Medical Policy Committee
02/23/2022	Annual review, approved in medical policy committee
03/2022	Approved in QI/UM
02/22/2023	Annual review; approved in Medical Policy Committee
02/28/2023	Approved in QI/UM