

## PA.030.MPC Transplant: Pediatric Heart

Maryland Physicians Care considers **Pediatric Heart Transplant** medically necessary for the following indications:

Members under the age of 18 years old requesting heart transplants must meet the specific criteria for recipient characteristics and the specific criteria for the transplant. *(For members 18 years of age or older refer to InterQual criteria)*

**Recipient Characteristics** - The member's caregiver or established social support network which may include the mother and/or father, other family members, foster care parents, professional health providers, or some combination must meet both of the following:

- Be capable of long-term intensive care of the child; and
- Be able to support the exceptional needs of the child.

**Specific Criteria for Pediatric Heart Transplant** - Clinical indications for heart transplantation in pediatric members include any of the following <sup>(1, 2)</sup>:

- End-stage heart failure associated with systemic ventricular dysfunction
- A history of heart failure with at least one of the following:
  - Severely limited exercise capacity, operatively defined as peak maximal oxygen consumption <50% predicted for age and sex
  - Significant growth failure that is attributable to the heart disease
  - Life-threatening arrhythmias that are untreatable with medications and/or implantable defibrillators
  - Restrictive cardiomyopathy disease that is associated with reactive pulmonary hypertension
- Heart transplant may be indicated for congenital, anatomic or physiological conditions that are likely to worsen with age and lead to future heart disease, including:
  - Severe stenoses or atresia in coronary arteries
  - Moderate-severe stenoses and/or insufficiency of the atrioventricular and/or semilunar valves. Examples include:
    - Ebstein's anomaly
  - Severe ventricular dysfunction
  - Complex heart disease associated with Asplenia Syndrome

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Last Review Date: 05/15/2025

Effective Date: 06/01/2025

Other congenital heart defects that may indicate heart transplantation include <sup>(3)</sup>:

- Hypoplastic left heart syndrome
- Ischemic or dilated cardiomyopathies, when no other malformations are present
- Neonatal marfan syndrome
- Situs inversus

### Limitations

- All other medical and surgical therapies that might be expected to yield both short- and long-term survival comparable to that of transplantation must have been tried or considered.
- Members must first undergo stringent physical and age-appropriate psychological evaluation to determine eligibility for transplant. Members should have no other serious medical problems, and they should be psychologically willing to undergo the stressful surgery and postoperative care necessary.

### Codes

N/A

### References

1. Canter CE, Shaddy RE, Bernstein D, et al. Indications for Heart Transplantation in Pediatric Heart Disease. *Circulation*. 2007;115(5):658-676.  
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2. Thrush PT, Hoffman TM. Pediatric heart transplantation-indications and outcomes in the current era. *J Thorac Dis*. 2014;6(8):1080-1096.  
doi:10.3978/j.issn.2072-1439.2014.06.16.  
<https://jtd.amegroups.org/article/view/2685/html>
3. Martens S, Tie H, Kehl HG, et al. Heart transplantation surgery in children and young adults with congenital heart disease. *J Cardiothorac Surg*. 2023;18(1):342.  
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