



Policy Number: PA.030.MPC  
Last Review Date: 11/17/2022  
Effective Date: 12/01/2022

## 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 PA-029-Transplant: Adult Heart)*

**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:

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

**Specific Criteria for Pediatric Heart Transplant** - Clinical indications for heart transplantation include the following:

1. Low cardiac output, and
2. Estimated life expectancy of less than one year without a transplant, and
3. Symptoms refractory or intolerable despite maximal medical therapy with digitalis, diuretics, and vasodilators at maximally-tolerated doses, and
4. Any one of the following underlying conditions:
  - a. Hypoplastic left heart syndrome with right ventricular dysfunction
  - b. Multiple obstructive cardiac neoplasms
  - c. Severe cardiomyopathy
  - d. Severe Ebstein's anomaly in early infancy
  - e. Complex single ventricle with systemic outflow obstruction
  - f. Single ventricle of right ventricular type with arterio-venous (AV) valve regurgitation
  - g. Pulmonary atresia with significant obstructive anomalies of the coronary arteries and intact ventricular septum and sinusoids
  - h. Severe intra-uterine AV valve insufficiency and ventricular dysfunction
  - i. Severe endocardial fibroelastosis
  - j. Complex heart disease associated with the Asplenia Syndrome

### Limitations



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- A. 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.
- B. 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.

### See Also:

PA.029 - Transplant: Adult Heart

### Background

The International Society for Heart and Lung Transplantation estimates about 350-500 pediatric heart transplantation procedures are conducted each year. The majority of transplant recipients have a five year survival rate of more than 70%. The leading cause for infants and children are congenital malformations and cardiomyopathy, respectively.

According to the OPTN & SRTR Annual Data Report of 2012, the number of heart transplants performed annually continues to increase gradually. From 1998 to 2004, the number of heart transplants decreased by 14.2%. Since then, the number of heart transplants performed annually has increased by 17.1%

### Codes

N/A

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