

Transcatheter Pulmonary Valve Implantation

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Approved By:	Highmark Health Options – Market Leadership
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Products:	Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1 of 4

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 transcatheter pulmonary valve implantation.

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.

PROCEDURES

1. Prior authorization is required.
2. Transcatheter pulmonary valve implantation (TVPI) using United States (U.S.) Food and Drug Administration (FDA) approved devices is a minimally invasive alternative to surgical pulmonary valve replacement in children and adult individuals with significant right ventricular outflow tract (RVOT) conduit regurgitation or stenosis.

3. TVPI using an U.S. FDA approved device or system may be considered medically necessary for adult or pediatric individuals with congenital heart disease and current RVOT, regurgitation or stenosis meeting the following criteria:
 - Individual has existence of a full (circumferential) RVOT conduit that was equal to or greater than 16 mm in diameter when originally implanted and ANY ONE of the following:
 - Individuals with right ventricle-to-pulmonary artery conduit with or without bioprosthetic valve with at least moderate pulmonic regurgitation; or
 - Individuals with native or patched RVOT with at least moderate pulmonic regurgitation; or
 - Individuals with right ventricle-to-pulmonary artery conduit with or without bioprosthetic valve with pulmonic stenosis (mean RVOT gradient at least 35 mm Hg); or
 - Individuals with native or patched RVOT with pulmonic stenosis (mean RVOT gradient at least 35 mm Hg); or
 - Individuals with progressive right ventricular dilation (greater than 150ml/M2) with or without reduced RV ejection fraction and abnormal exercise stress testing; or
 - Individuals with objective exercise intolerance and abnormal RV stress echocardiogram with or without the above noted findings.
4. TVPI not meeting the criteria as indicated in this policy is considered not medically necessary.
5. 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.

6. Place of Service: Inpatient

CODING REQUIREMENTS

CPT code	Description
33477	Transcatheter pulmonary valve implantation, percutaneous approach, including pre-stenting of the valve delivery site, when performed.

Diagnosis codes

I37.0	I37.1	I37.2	I37.8	I37.9	I97.0	I97.110
I97.130	I97.190	Q20.5	Q21.3	Q22.0	Q22.1	Q22.2
Q22.3	T82.01XA	T82.01XD	T82.01XS	T82.02XA	T82.02XD	T82.02XS
T82.03XA	T82.03XD	T82.03XS	T82.09XA	T82.09XD	T82.09XS	T82.221A
T82.221D	T82.221S	T82.222A	T82.222D	T82.222S	T82.223A	T82.223D
T82.223S	T82.228A	T82.228D	T82.228S	T82.857A	T82.857D	T82.857S
T82.897A	T82.897D	T82.897S	T82.9XXA	T82.9XXD	T82.9XXS	Z87.74
Z95.2	Z95.3	Z95.4				

REIMBURSEMENT

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

SUMMARY OF LITERATURE

Society for Cardiovascular Angiography and Interventions et al – 2015

The Society for Cardiovascular Angiography and Interventions, American Association for Thoracic Surgery, American College of Cardiology (ACC), and the Society of Thoracic Surgeons (2015) published a consensus-based report on operator and institutional requirements for transcatheter pulmonary valve implantation (TPVI). Recommendations to qualify for a TPVI program included 150 catheterizations per year, association with a surgical program, submission of all cases to a national registry, and, for patients, 80% freedom from reintervention at 1 year.

References

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POLICY UPDATE HISTORY

09/20/2021	Approved in Medical Policy Committee
02/02/2022	Annual review
02/23/2022	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