


MEDICAL POLICY	Cardiac: Transcatheter Aortic Valve Replacement (TAVR) (Medicare Only)
Effective Date: 1/1/2022	Medical Policy Number: 221
 1/1/2022	Medical Policy Committee Approved Date: 10/18; 11/19; 05/2020; 07/2021; 11/2021
Medical Officer	Date

See Policy CPT CODE section below for any prior authorization requirements.

SCOPE:

Providence Health Plan, Providence Health Assurance, Providence Plan Partners, and Ayin Health Solutions as applicable (referred to individually as “Company” and collectively as “Companies”).

APPLIES TO:

Medicare only

MEDICARE POLICY CRITERIA

The following Centers for Medicare & Medicaid Service (CMS) guidelines should be utilized for medical necessity coverage determinations. Click the link provided in the table below to access applicable medical necessity criteria. All listed guidelines apply.

Service	Medicare Guidelines
<i>Transcatheter Aortic Valve Replacement (TAVR)</i>	<ul style="list-style-type: none"> National Coverage Determination for Transcatheter Aortic Valve Replacement (TAVR) (20.32) version 2, effective 06/21/2019.¹ Medicare Claims Processing Manual, Chapter 32 – Billing Requirements for Special Services, Section 290 (<i>scroll to Section 290 in Table of Contents and click on 290 – Transcatheter Aortic Valve Replacement (TAVR) Furnished on or After May 1, 2012.</i>)²

Per the [Medicare Policy Manual](#) commercial medical policies may be applied to Medicare coverage determinations in the absence of an appropriate NCD, LCD, LCA, or CMS Coverage Manual. Therefore, the commercial medical policy, Cardiac: Transcatheter Aortic Valve Replacement (TAVR) (All Lines of Business Except Medicare), applies to the following services:

- Replacement of Degenerated Bioprosthetic Valve (Valve-in-Valve Procedure)

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POLICY GUIDELINES

Society of Thoracic Surgeons (STS) Risk Calculator ^{3,4}

The Society of Thoracic Surgeons (STS) cardiac surgery risk model for isolated valve surgery is a risk assessment tool that adjusts cardiac surgery outcomes for preoperative patient characteristics and disease severity. This tool is an online tool that can be used to assess the risk of open surgical valve replacement and is included as part of the FDA indications for FDA-approved aortic valve replacement systems. The online risk calculator is publicly available from [The Society of Thoracic Surgeons website](#).⁵

CPT CODES

Medicare Only	
No Prior Authorization Required	
33361	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; percutaneous femoral artery approach
33362	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open femoral artery approach
33363	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open axillary artery approach
33364	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open iliac artery approach
33365	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transaortic approach (eg, median sternotomy, mediastinotomy)
33366	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transapical exposure (eg, left thoracotomy)
33367	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with percutaneous peripheral arterial and venous cannulation (eg, femoral vessels) (List separately in addition to code for primary procedure)
33368	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with open peripheral arterial and venous cannulation (eg, femoral, iliac, axillary vessels) (List separately in addition to code for primary procedure)
33369	Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with central arterial and venous cannulation (eg, aorta, right atrium, pulmonary artery) (List separately in addition to code for primary procedure)
33370	Transcatheter placement and subsequent removal of cerebral embolic protection device(s), including arterial access, catheterization, imaging, and radiological supervision

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	and interpretation, percutaneous (List separately in addition to code for primary procedure)
Unlisted Codes All unlisted codes will be reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is billed related to services addressed in this policy then prior-authorization is required.	
33999	Unlisted procedure, cardiac surgery
93799	Unlisted cardiovascular service or procedure

DESCRIPTION

Transcatheter aortic valve replacement (TAVR - also known as TAVI or transcatheter aortic valve implantation) is used in the treatment of aortic stenosis. A bioprosthetic valve is inserted percutaneously using a catheter and implanted in the orifice of the aortic valve.

INSTRUCTIONS FOR USE

Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. The Companies reserve the right to determine the application of Medical Policies and make revisions to Medical Policies at any time. Providers will be given at least 60-days notice of policy changes that are restrictive in nature.

The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and Company Medical Policy will be resolved in favor of the coverage agreement.

REGULATORY STATUS

Mental Health Parity Statement

Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

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MEDICAL POLICY CROSS REFERENCES

- Clinical Trials and IDE Studies (Medicare Only)
- Cardiac: Transcatheter Aortic Valve Replacement (TAVR) (All Lines of Business Except Medicare)

REFERENCES

1. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for Transcatheter Aortic Valve Replacement (TAVR) (20.32). Version 2. Effective: 06/21/2019. <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=355>. Accessed 5/25/2021.
2. Centers for Medicare & Medicaid Services. Medicare Claims Processing Manual. Chapter 32, section 290 (Rev. 4222, 02-01-19) (Rev. 4237, 02-08-19). <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c32.pdf>. Accessed 5/25/2021.
3. O'Brien SM, Shahian DM, Filardo G, et al. The Society of Thoracic Surgeons 2008 cardiac surgery risk models: part 2--isolated valve surgery. *Ann Thorac Surg*. 2009;88(1 Suppl):S23-42. <https://www.ncbi.nlm.nih.gov/pubmed/19559823>.
4. Shahian DM, Edwards FH. The Society of Thoracic Surgeons 2008 cardiac surgery risk models: introduction. *Ann Thorac Surg*. 2009;88(1 Suppl):S1. <https://www.ncbi.nlm.nih.gov/pubmed/19559821>.
5. The Society for Thoracic Surgeons. Risk Model and Variables. Online STS Adult Cardiac Surgery Risk Calculator. Database Version 2.81. <http://riskcalc.sts.org/stswebriskcalc/#/calculate>. Accessed 5/25/2021.