Molina Clinical Policy
CT Angiography Heart with 3D Image CCTA: Policy No. 647

Last Approval: 12/8/2021
Next Review Due By: December 2022

DISCLAIMER

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a Member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

OVERVIEW

Coronary Computed Tomographic Angiography (CCTA) is a noninvasive imaging study that uses intravenously administered contrast material and high-resolution, rapid imaging CT equipment to obtain detailed volumetric images of blood vessels. CTA can image blood vessels throughout the body. However, imaging of the coronary vasculature requires shorter image acquisition times to avoid blurring from the motion of the beating heart. The advanced spatial and temporal resolution features of these CT scanning systems offer a unique method for imaging the coronary arteries and the heart in motion, and for detecting arterial calcification that contributes to coronary artery disease.

COVERAGE POLICY

CT Angiography Heart with 3D Image CCTA **may be considered medically necessary** when the following are met:

1. **Non-Emergent Chest Pain**
   a. Low pretest probability Members who are not suitable for standard exercise stress testing or stress echocardiography.
   b. Intermediate pretest probability Members who are not suitable for stress echocardiography.

2. **Further Evaluation of Members Who Have Had Stress Testing**
   a. Low or intermediate probability of underlying coronary artery disease (CAD) in patients who have had indeterminate stress testing.
   b. Low or intermediate probability of underlying CAD in patients who have had positive stress testing and catheterization is not preferred.
   c. Members who have persistent symptoms suggestive of underlying coronary disease who have had negative stress testing.

3. **Evaluation of Suspected Coronary Disease**
   a. For evaluation of suspected underlying coronary disease in Members who have had ventricular tachycardia.
   b. For evaluation of new onset heart failure in Members with low to intermediate probability of underlying coronary disease.

4. **Other**
   a. For evaluation of Members with suspected coronary anomalies.
   b. For further evaluation when angiography was indeterminate at defining coronary anatomy.
   c. Localization of coronary bypass grafts and other retrosternal anatomy prior to chest or cardiac surgery.
   d. Prior to high risk non-cardiac surgery when catheterization is not possible or preferred.
   e. For evaluation and monitoring of vascular abnormalities (e.g., Kawasaki's disease, Takayasu's, vasculitis).
   f. Pre- and post-op evaluation of the pulmonary vein for ablation due to chronic atrial fibrillation.

Contraindications

- Body mass index (BMI) over 40.
- Inability to get Members heart rate under 65 despite use of beta blockers.
- Members with uncontrolled atrial fibrillation or other arrhythmia.
- Members with extensive coronary calcifications or a coronary calcium score (Agatston score) greater than 1000.

Additional Critical Information

The above medical necessity recommendations are used to determine the best diagnostic study based on a Member's specific clinical circumstances. The recommendations were developed using evidence-based studies and current accepted clinical practices. Medical necessity will be determined using a combination of these recommendations as well as the Member's individual clinical or social circumstances.

- Tests that will not change treatment plans should not be recommended.
- Same or similar tests recently completed need a specific reason for repeat imaging.

Pretest Probabilities of CAD

Age (Years)	Gender	Typical / Definite Angina Pectoris*	Atypical / Probable Angina Pectoris*	Nonanginal Chest Pain*	Asymptomatic*
< 39	Men	Intermediate	Intermediate	Low	Very Low
	Women	Intermediate	Very Low	Very Low	Very Low
40-49	Men	High	Intermediate	Intermediate	Low
	Women	Intermediate	Low	Very Low	Very Low
50-59	Men	High	Intermediate	Intermediate	Low
	Women	Intermediate	Intermediate	Low	Very Low
> 60	Men	High	Intermediate	Intermediate	Low
	Women	High	Intermediate	Intermediate	Low

* Very Low Less than 5% pretest probability of CAD
* Low Less than 10% pretest probability of CAD
* Intermediate Between 10% and 90% pretest probability of CAD

Duke Treadmill Score

The equation for calculating the Duke treadmill score (DTS) is:

*DTS = exercise time - (5 * ST deviation) - (4 * exercise angina),*
with 0 = none, 1 = non-limiting, and 2 = exercise-limiting

The score typically ranges from -25 to +15. These values correspond to low-risk (with a score greater than or equal to +5), intermediate risk (with scores ranging from - 10 to + 4), and high- risk (with a score less than or equal to -11) categories. The Duke Score provides an annual mortality estimate: <1% for low risk, 1-3% for intermediate risk, and >3% for high risk.

Determinants of a 4 MET Functional Capacity (examples of activities)

- Less than 4 METs: Slow ballroom dancing, golfing with a cart, playing a musical instrument, and walking at approximately 2 mph to 3 mph.
- Greater than 4 METs: Climbing a flight of stairs or walking up a hill, walking on level ground at 4 mph, and performing heavy work around the house

DOCUMENTATION REQUIREMENTS. Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

CODING & BILLING INFORMATION

CPT Codes

CPT	Description
75572	CT heart contrast eval cardiac structure and morph
75573	CT HRT contrst cardiac struct and morph cong HRT D
75574	CTA HRT cornry art/bypass grfts contrst 3D post

CODING DISCLAIMER. Codes listed in this policy are for reference purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry standard coding practices for all submissions. When improper billing and coding is not followed, Molina has the right to reject/deny the claim and recover claim payment(s). Due to changing industry practices, Molina reserves the right to revise this policy as needed.

APPROVAL HISTORY

12/8/2021	Policy reviewed, no changes to critiera, updated references.
Review Dates	12/19/2018, 12/10/2019, 12/9/2020
12/13/2017	New policy.

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APPENDIX

Reserved for State specific information. *Information includes, but is not limited to, State contract language, Medicaid criteria and other mandated criteria.*