

MedStar Health, Inc.

POLICY AND PROCEDURE MANUAL

Policy Number: MP.044.MH
Last Review Date: 05/27/2021
Effective Date: 08/01/2021

MP.044.MH – Computed Tomographic Angiography of the Chest

This policy applies to the following lines of business:

- ✓ MedStar Employee (Select)
- ✓ MedStar CareFirst PPO

MedStar Health considers **Computed Tomographic Angiography (CTA) of the Chest** medically necessary for cardiac assessment for ANY of the following indications:

1. Emergency evaluation of acute chest pain
2. Cardiac evaluation of a patient with chest pain syndrome (angina) as an alternative to cardiac catheterization when applicable and reason is specifically documented
3. Management of a symptomatic patient with known coronary artery disease (e.g., post-stent, post coronary artery bypass graft)
4. Detection of coronary artery disease in patients with new onset or newly diagnosed symptomatic clinical heart failure and no prior coronary artery disease
5. Assessment of coronary or pulmonary venous anatomy
6. Assessment of suspected congenital anomalies of the coronary circulation
7. Evaluation of patient with new or worsening coronary artery disease symptoms and documented past normal stress imaging study
8. Diagnostic evaluation of a patient with current uninterpretable or equivocal stress imaging test results
9. In lieu of routine invasive coronary angiography prior to non-coronary cardiac or aortic surgery in patients at low risk of concomitant coronary disease.

NOTE: Prescribers of CTA's of the chest, non-coronary, will be required to complete the Medicalis process and obtain a Medicalis reference number.

Limitations

1. All studies must be ordered by a physician or qualified non-physician practitioner and who will use the results of the test in the management of the patient.
2. The test must be performed under the direct supervision of a physician or qualified non-physician practitioner.
3. The test is never covered for screening, i.e., in the absence of signs, symptoms or disease
4. The selection of CTA should be made within the context of other testing modalities so that the resulting information facilitates the management decision, not merely adds a new layer of testing.

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5. Coverage of CTA for coronary artery assessment is limited to devices that process thin, high resolution slices (1 mm or less). The multislice computed tomography coronary angiography (MSCTA) scanner must have at least 16 slices per second capability, although 64 slices are preferable. For non-cardiac assessment, the MSCTA scanner may have a capability of less than 16 slices.
6. The administration of beta-blockers and the monitoring of the patient by a physician experienced in the use of cardiovascular drugs is included as part of the test and is not separately payable services.
7. The electron beam computer tomography (EBCT)/Ultrafast CT technology is not addressed in this policy since they are considered experimental/investigational and therefore not covered.
8. The test may be denied, on post-pay review, as not medically necessary when used for cardiac evaluation if there were pre-test knowledge of sufficiently extensive calcification of the suspect coronary segment that would diminish the interpretive value.

Background

According to the American Heart Association, approximately 13 million Americans have coronary artery disease (CAD). Computed tomographic angiography (CTA) is a non-invasive method using intravenous contrast to visualize the coronary arteries using high resolution, high speed computed tomography (CT).

The application of CTA for the coronary and pulmonary veins is primarily for pre-surgical planning. Coronary venous anatomy can be useful for the cardiologist who needs to place a pacemaker lead in the lateral coronary vein in order to resynchronize cardiac contraction in patients with heart failure. This may be helpful to guide biventricular pacemaker placement. Pulmonary vein anatomy can vary from patient to patient. Pulmonary vein catheter ablation can isolate electrical activity from the pulmonary veins and allow for the elimination of recurrent atrial fibrillation. The presence of a pulmonary venous anatomic map may help eliminate procedural complications and allow for the successful completion of the procedure.

Codes:

Code	Description
CPT Codes for Coronary CTA's of the Chest	
75572	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3D image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)

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75573	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3D image postprocessing, assessment of LV cardiac function, RV structure and function and evaluation of venous structures, if performed)
ICD-10 Codes for Coronary CTA's of the Chest	
C38.0	Malignant neoplasm of heart, mediastinum, and pleura
C38.8	Other malignant neoplasm of contiguous or overlapping sites of thymus
C49.3	Mesothelioma of pericardium
C79.89	Secondary malignant neoplasm of unspecified site
D15.1	Benign neoplasm of heart
D21.3	Benign neoplasm of connective and other soft tissue of thorax (ie, thoracic aorta)
I11.0	Hypertensive heart disease with heart failure
I11.9	Hypertensive heart disease without heart failure
I13.0-I13.2	Hypertensive heart and chronic kidney disease
I20.0-I20.9	Angina pectoris
I24.0-I24.9	Other acute ischemic heart diseases
I25.1-I25.9	Chronic ischemic heart disease (including old myocardial infarction)
I26.01-I26.99	Pulmonary embolism
I27.0-I27.9	Other pulmonary heart diseases
I28.0-I28.9	Other diseases of pulmonary vessels
I30.0-I30.9	Acute pericarditis
I31.0-I31.9	Diseases of pericardium
I32	Pericarditis in diseases classified elsewhere
I40.0-I40.9	Acute myocarditis
I41	Myocarditis in diseases classified elsewhere
I42.0-I42.2	Dilated and obstructive hypertrophic cardiomyopathy
I42.5	Other restrictive cardiomyopathy
I42.8-I42.9	Other and unspecified cardiomyopathy
I48.0-I48.92; I49.01-I49.9	Atrial and ventricular cardiac arrhythmias

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I50.1-I50.9	Heart failure
I70	Atherosclerosis of aorta
I71.00-I71.9	Aortic aneurysm and dissection
Q20.0-Q20.9	Congenital malformations of cardiac chambers and connections
Q21.0-Q21.9	Congenital malformations of cardiac septa
Q22.0-Q22.9	Congenital malformations of pulmonary and tricuspid valves
Q23.0-Q23.9	Congenital malformations of aortic and mitral valves
Q24.0-Q249	Other congenital malformations of heart
Q25.0-Q25.9	Congenital malformations of great arteries
Q26.0-Q26.4	Congenital malformations of great veins (thoracic)
Q26.8-Q26.9	Other congenital malformations of great veins and Congenital malformations of great vein, unspecified
R07.1-R07.2	Chest pain on breathing and Precordial pain
R07.81-R07.9	Other chest pain and Chest pain, unspecified
R09.89	Other specified symptoms and signs involving the circulatory and respiratory systems
R94.30-R94.39	Abnormal results of cardiovascular function studies
T82.01XA-T82.399S	Complications of cardiac vascular prosthetic devices, implants, and grafts (chest)
T82.847A	Pain from cardiac prosthetic devices, implants and grafts, initial encounter
T82.847D	Pain from cardiac prosthetic devices, implants and grafts, subsequent encounter
T82.847S	Pain from cardiac prosthetic devices, implants and grafts, sequela
T82.857A	Stenosis of cardiac prosthetic devices, implants and grafts, initial encounter
T82.857D	Stenosis of cardiac prosthetic devices, implants and grafts, subsequent encounter
T82.857S	Stenosis of cardiac prosthetic devices, implants and grafts, sequela
T82.867A	Thrombosis of cardiac prosthetic devices, implants and grafts, initial encounter

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T82.867D	Thrombosis of cardiac prosthetic devices, implants and grafts, subsequent encounter
T82.867S	Thrombosis of cardiac prosthetic devices, implants and grafts, sequela
T82.897A	Other specified complication of cardiac prosthetic devices, implants and grafts, initial encounter
T82.897D	Other specified complication of cardiac prosthetic devices, implants and grafts, subsequent encounter
T82.897S	Other specified complication of cardiac prosthetic devices, implants and grafts, sequela
Z01.810	Encounter for preprocedural cardiovascular examination
Z95.1	Presence of aortocoronary bypass graft

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1. Hayes Health Technology Brief. 64 Slice Computed Tomography Angiography (CTA) for Coronary Artery Disease. Publication Date August 9, 2005. Archived: September 9, 2008.
2. Hayes Medical Technology Directory. Multislice Computed Tomography for Detection of Coronary Artery Disease. Annual Review July 15, 2011. Archived: August 19, 2012.

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