Medical Coverage Policy

Policy Number – MP23-035E Original review date – 02/09/2023 Effective date – 09/18/2024

Cardiac CT angiography

Background

Cardiac Computed Tomography (CT) angiography is a noninvasive scanning of the heart and coronary vessels after intravenous injection of iodinated contrast material to characterize vascular anatomy and pathology. Diagnosis of coronary artery disease with CT angiography enables management of coronary artery disease without the use of catheter-based angiography. Allergic reactions to the contrast material, as well as exposure to high levels of ionizing radiation can limit the use of this technology.

Policy statement

Disclaimer: This policy is applicable to TRICARE Prime and Select beneficiaries and may not apply to Active Duty Service Members (ADSM) under Supplemental Health Care Program (SHCP) or TRICARE Prime Remote (TPR) in accordance with TRICARE Operations Manual (TOM) Chapter 17, Section 3. Please review TOM Chapter 17, Section 3, Paragraph 2.0 onwards, regarding SHCP coverage and any TRICARE-specific exclusions included in this coverage policy to accurately determine the benefit for ADSMs.

Cardiac CT Angiography may be considered medically necessary for the following conditions:

- I. Evaluation of heart failure of unknown origin and invasive coronary angiography with or without percutaneous coronary intervention is not planned, unable to be performed, or is equivocal
- II. Acute chest pain but no evidence of cardiac disease, and results will be used to determine management
- III. Unstable angina when invasive coronary angiography or percutaneous coronary intervention is equivocal or cannot be performed
- IV. Chronic stable angina and chest pain of uncertain etiology and ALL of the following are met:
 - a. Invasive coronary angiography or percutaneous coronary intervention is equivocal or cannot be performed
 - b. Exercise stress test is equivocal or unable to be performed
 - c. Exercise stress echocardiography is equivocal or unable to be performed
 - d. Exercise stress echo with dobutamine is equivocal or unable to be performed
 - e. Exercise myocardial perfusion is equivocal or unable to be performed
 - f. Pharmacological myocardial perfusion is equivocal or unable to be performed
- V. Evaluation of anomalous native coronary arteries in symptomatic patients when conventional angiography is equivocal or unable to be performed, and the results will be used to determine management
- VI. Evaluation of complex congenital anomaly of coronary circulation or of the great vessels
- VII. Presurgical evaluation prior to biventricular pacemaker placement





- VIII. Presurgical evaluation of coronary anatomy prior to non-coronary surgery (valve placement or repair; repair of aortic aneurysm or dissection)
- IX. Presurgical cardiovascular evaluation for patients with equivocal stress study prior to kidney or liver transplantation
- X. Presurgical evaluation prior to electrophysiologic procedure to isolate pulmonary veins for radiofrequency ablation of arrhythmia focus

Limitations of coverage

Add exclusion of calcium scoring

Cardiac CT Angiography is excluded for the following conditions per TRICARE policy:

- I. Typical angina chest pain with high suspicion of coronary artery disease
- II. Acute myocardial infarction
- III. Screening asymptomatic patients for coronary artery disease

TRICARE Policy

TRICARE Policy Manual Chapter 5, Section 1.1

- **4.14** Multislice or multidetector row CT angiography (CT, heart) (CPT procedure codes 75572 75574) is covered for the following indications:
- **4.14.1** Evaluation of heart failure of unknown origin when invasive coronary angiography +/- Percutaneous Coronary Intervention (PCI) is not planned, unable to be performed or is equivocal.
- **4.14.2** In an Emergency Department (ED) for patients with acute chest pain, but no other evidence of cardiac disease (low-pretest probability), when results would be used to determine the need for further testing or observation.
- **4.14.3** Acute chest pain or unstable angina when invasive coronary angiography or a PCI cannot be performed or is equivocal.
- **4.14.4** Chronic stable angina and chest pain of uncertain etiology or other cardiac findings prompting evaluation for CAD (for example: new or unexplained heart failure or new bundle branch block).
- **4.14.4.1** When invasive coronary angiography or PCI is not planned, unable to be performed, or is equivocal; AND
- 4.14.4.2 Exercise stress test is unable to be performed or is equivocal; AND
- **4.14.4.3** At least one of the following non-invasive tests were attempted and results could not be interpreted or where equivocal or none of the following tests could be performed:
- **4.14.4.3.1** Exercise stress echocardiography.
- **4.14.4.3.2** Exercise stress echo with dobutamine.
- 4.14.4.3.3 Exercise myocardial perfusion (SPECT).





- **4.14.4.3.4** Pharmacologic myocardial perfusion (SPECT).
- **4.14.5** Evaluation of anomalous native coronary arteries in symptomatic patients when conventional angiography is unsuccessful or equivocal and when results would impact treatment.
- **4.14.6** Evaluation of complex congenital anomaly of coronary circulation or of the great vessels.
- **4.14.7** Presurgical evaluation prior to biventricular pacemaker placement.
- **4.14.8** Presurgical evaluation of coronary anatomy prior to non-coronary surgery (valve placement or repair; repair of aortic aneurysm or dissection).
- **4.14.9** Presurgical cardiovascular evaluation for patients with equivocal stress study prior to kidney or liver transplantation.
- **4.14.10** Presurgical evaluation prior to electrophysiologic procedure to isolate pulmonary veins for radiofrequency ablation of arrhythmia focus.

5.0 EXCLUSIONS

- **5.11** CT angiography heart, coronary arteries and bypass (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed) (CPT procedure code 75574) is excluded for patients with typical anginal chest pain with high suspicion for CAD; patients with acute MI; and for screening asymptomatic patients for CAD.
- **5.12** Multislice or multidetector row CT angiography of less than 16 slices per sec and 1mm or less resolution is excluded.

Coding information

75574	Computed tomographic angiography, heart, coronary arteries and bypass grafts
	(when present), with contrast material, including 3D image postprocessing
	(including evaluation of cardiac structure and morphology, assessment of
	cardiac function, and evaluation of venous structures, if performed)

References

- 1. TRICARE Policy Manual Chapter 5, Section 1.1 <u>TRICARE Manuals Display Chap 5 Sect 1.1</u> (Change 107, Jan 6, 2023) (health.mil)
- MCG Health. Cardiac CT Angiography (CTA). Ambulatory Care 27th edition. ACG: A-0483 (AC). Last updated 9/21/2023





Review History

September 2024: Updated references

Approved by:

Joseph F. McKeon, MD, MPH

Chief Medical Officer

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