I. POLICY/CRITERIA

CCTA may be covered according to eviCore guidelines.

Fractional Flow Reserve CT (FFR-CT) requires prior authorization by Priority Health and must meet one the following criteria (A, B or C):

A. Suspected coronary artery disease in asymptomatic patients when Fractional Flow Reserve (FFR-CT) can be calculated in conjunction with imaging AND one of the following:

1. Patients with high-risk of CAD (SCORE) who have not had evaluation of coronary artery disease (MPI, stress echo, cardiac PET, coronary CTA or cardiac catheterization) within the preceding three (3) years.

2. Patients with moderate or high risk of CAD (SCORE) who have a high risk occupation that would endanger others in the event of a myocardial infarction, (e.g. airline pilot, law-enforcement officer, firefighter, mass transit operator, bus driver) who have not had evaluation of coronary artery disease (MPI, stress echo, cardiac PET, coronary CTA or cardiac catheterization) within the preceding three (3) years.

3. Patients with diseases/conditions with which coronary artery disease commonly coexist and who have not had evaluation of coronary artery disease (MPI, stress echo, cardiac PET, coronary CTA or cardiac catheterization) within the preceding three (3) years:
   o Abdominal aortic aneurysm

Summary of Changes

Clarifications:

Deletions:

Additions:

• Pg. 1, Section I, A, language updated to reflect CCTA may be covered according to eviCore guidelines.
4. Patients who have undergone cardiac transplantation and have had no evaluation for coronary artery disease within the preceding one (1) year.

5. Patients in whom a decision has been made to treat with interleukin 2.

B. Suspected coronary artery disease in symptomatic patients who have not had evaluation of coronary artery disease (MPI, cardiac PET, stress echo, coronary CTA or cardiac catheterization) within the preceding sixty (60) days when Fractional Flow Reserve (FFR-CT) can be calculated in conjunction with imaging AND one of the following:

1. Chest pain
   - With intermediate or high pretest probability of CAD
   - With low or very low pretest probability of CAD and high risk of CAD (SCORE)

2. Atypical symptoms: syncope, shortness of breath (dyspnea), neck, jaw, arm, epigastric or back pain, or sweating (diaphoresis)
   - With moderate or high risk of CAD (SCORE)

3. Other symptoms; palpitation, dizziness, lightheadedness, near syncope, nausea, vomiting, anxiety, weakness, fatigue etc.
   - With high risk of CAD (SCORE)

4. Patients with any cardiac symptom who have diseases/conditions with which coronary artery disease commonly coexists such as:
   - Diabetes mellitus
   - Abdominal aortic aneurysm
   - Established and symptomatic peripheral vascular disease
MEDICAL POLICY
No. 91614-R1

Computerized Tomographic Angiography
Coronary Arteries (CCTA)

o Prior history of cerebrovascular accident (CVA), transient ischemic attack (TIA) or carotid endarterectomy (CEA) or high grade carotid stenosis (>70%)

OR

o Chronic renal insufficiency or renal failure

5. Patients who have undergone cardiac transplantation.

6. Patients in whom a decision has been made to treat with interleukin 2.

C. Patients with suspected CAD and abnormal exercise treadmill test (performed without imaging) with low or moderate coronary heart disease risk (using standard methods of risk assessment such as the SCORE risk calculation) when Fractional Flow Reserve (FFR-CT) can be calculated in conjunction with imaging AND

o Abnormal finding on an exercise treadmill test include chest pain, ST segment change, abnormal BP response or complex ventricular arrhythmias.

II. MEDICAL NECESSITY REVIEW

☑ Required* ☐ Not Required ☐ Not Applicable

*Fractional Flow Reserve (FFR-CT) is not covered for Medicaid and Medicare products.

eviCore provides prior authorization medical necessity review services on behalf of Priority Health.

III. APPLICATION TO PRODUCTS

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

❖ HMO/EPO: This policy applies to insured HMO/EPO plans.
❖ POS: This policy applies to insured POS plans.
❖ PPO: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
❖ ASO: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
❖ INDIVIDUAL: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
MEDICARE: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.

MEDICAID/HEALTHY MICHIGAN PLAN: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: http://www.michigan.gov/mdch/0,1607,7-132-2945-42542-42543-42546-42551-159815--,00.html. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: http://www.michigan.gov/mdch/0,1607,7-132-2945-5100-87572--,00.html, the Michigan Medicaid Provider Manual will govern.

IV. BACKGROUND

Advantages of Coronary Artery CTA
- Rapidly acquired exams, with excellent anatomic detail afforded by most multi-detector CT scanners with 16 or more active detector rows.
- CTA has a very high negative predictive value (93 to 100%)

Disadvantages of Coronary Artery CTA include:
- Exposure to ionizing radiation
- Potential complications from use of intravascular iodinated contrast administration (see biosafety issues, below)
- Potential factors that may limit the image quality during a Cardiac CT/Coronary Artery CTA exam, such as:
  - Uncontrolled atrial or ventricular arrhythmias.
  - Extensive coronary artery calcification which may produce artifact.
  - Coronary stent evaluation for possible restenosis, as the stent material itself as well as the quality of the scan and scanner may produce artifacts, limiting the exam.
  - Inability to image at a desired heart rate, which may occur despite beta blocker administration.
  - Inability of the patient to comply with the requirements of scanning (patient motion during image acquisition, inability to comply with breath hold requirements, inability to lie supine, claustrophobia)
  - Not a suitable imaging modality for morbidly obese patients (BMI > 40).
  - Because of the radiation exposure issues careful consideration should be given to other imaging modalities in pregnant women and children.
  - CCTA images the coronary arteries directly. Therefore the information provided is anatomical. For the purposes of the current policy, imaging equipment used in certain clinical scenarios must be capable of providing physiological evaluation by Fractional Flow Reserve (FFR-CT).
Biosafety Issues:

Ordering and imaging providers are responsible for considering safety issues prior to the CCTA exam. One of the most significant considerations is the requirement for intravascular iodinated contrast material, which may have an adverse effect on patients with a history of documented allergic contrast reactions or atopy, as well as on individuals with renal impairment, who are at greater risk for contrast-induced nephropathy. In addition, radiation safety issues including cumulative exposure to ionizing radiation should be considered.

Ordering Issues:

- CCTA exams are not covered as a screening study, in the absence of signs, symptoms or known disease.
- Selection of the optimal diagnostic work-up for cardiac evaluation should be made within the context of other available studies (which include treadmill stress test, stress myocardial perfusion imaging, stress echocardiography, cardiac MRI, cardiac PET imaging and invasive cardiac/coronary angiography), so that the resulting information facilitates patient management decisions and does not merely add a new layer of testing.
- In general, follow-up CCTA exams should be performed only when there is a clinical change, with new signs or symptoms, or specific finding(s) requiring imaging surveillance.
- This policy does not apply to Cardiac CT for quantitation of coronary artery calcification (CPT 75571).
- This policy does not apply to Cardiac CT for evaluation of cardiac structure (CPT 75572-75573).
- Duplicative testing or repeat imaging of the same anatomic area with same or similar technology may be subject to high-level review and may not be medically necessary unless there is a persistent diagnostic problem or there has been a change in clinical status (e.g. deterioration) or there is a medical intervention which warrants interval reassessment.
- Request for re-imaging due to technically limited exams is the responsibility of the imaging providers.

Several clinical indications listed for CCTA include standard methods of risk assessment, such as the SCORE (Systematic Coronary Risk Evaluation) or the Framingham risk score calculation*. These risk calculation systems include consideration of the following factors:

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
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<tr>
<td>Abnormal Lipid Profile</td>
<td>Hypertension</td>
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<tr>
<td>Diabetes Mellitus</td>
<td>Cigarette Smoking</td>
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**High risk:** A greater than 20% risk that you will develop a heart attack or die from coronary disease in the next 10 years.

**Intermediate risk:** A 10 to 20% risk that you will develop a heart attack or die from coronary disease in the next 10 years.

**Low risk:** Less than 10% risk that you will develop a heart attack or die from coronary disease in the next 10 years.

V. CODING INFORMATION

*Contact eviCore for prior authorization*

**ICD-10 Codes:**

*Various – see criteria*

**CPT Codes:**

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

- 93799 Unlisted cardiovascular service or procedure
  (Used for the FFR-CT Analysis as there is not yet a unique CPT code assigned)

VI. REFERENCES

AMA CPT Copyright Statement:
All Current Procedure Terminology (CPT) codes, descriptions, and other data are copyrighted by the American Medical Association.

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Priority Health’s medical policies are intended to serve as a resource to the plan. They are not intended to limit the plan’s ability to interpret plan language as deemed appropriate. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment they choose to provide.

The name “Priority Health” and the term “plan” mean Priority Health, Priority Health Managed Benefits, Inc., Priority Health Insurance Company and Priority Health Government Programs, Inc.