Cardiovascular Services

Invasive Coronary Angiography and Percutaneous Coronary Intervention

Louisiana Medicaid covers elective invasive coronary angiography (ICA) and percutaneous coronary intervention (PCI) as treatment for cardiovascular conditions under specific circumstances.

The policy only applies to beneficiaries age 18 and older and does not apply to the following beneficiaries:

- Beneficiaries under the age of 18;
- Pregnant beneficiaries;
- Cardiac transplant beneficiaries;
- Solid organ transplant candidates; and
- Survivors of sudden cardiac arrest.

Eligibility Criteria

Elective ICA

Elective ICA is covered and considered medically necessary in beneficiaries with one or more of the following:

- Congenital heart disease that cannot be characterized by non-invasive modalities such as cardiac ultrasound, CT, or MRI;
- Heart failure with reduced ejection fraction for the purposes of diagnosing ischemic cardiomyopathy;
- Hypertrophic cardiomyopathy prior to septal ablation or myomectomy;
- Severe valvular disease or valvular disease with plans for surgery or percutaneous valve replacement;

- Type 1 myocardial infarction within the past three months defined by detection of a rise and/or fall of cardiac troponin values with at least 1 value above the 99th percentile upper reference limit and with at least 1 of the following:
    - Symptoms of acute myocardial ischemia;
    - New ischemic electrocardiogram (ECG) changes;
    - Development of pathological Q waves;
    - Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality in a pattern consistent with an ischemic etiology; and
    - Identification of a coronary thrombus.

- History of ventricular tachycardia requiring therapy for termination or sustained ventricular tachycardia not due to a transient reversible cause, within the past year;
- History of ventricular fibrillation;
- Return of angina within 9 months of prior PCI;
- Patients without chronic kidney disease who have Canadian Cardiovascular Society class I-IV classification of angina with intolerance of or failure to respond to at least two target dose anti-anginal medications (beta blocker, dihydropyridine or non-dihydropyridine calcium channel blocker, nitrates, and/or ranolazine); or
- High risk imaging findings, defined one or more of the below:
    - Severe resting left ventricular dysfunction (LVEF ≤35%) not readily explained by noncoronary causes;
    - Resting perfusion abnormalities ≥10% of the myocardium in patients without prior history or evidence of myocardial infarction;
    - Stress electrocardiogram findings including ≥2 mm of ST-segment depression at low workload or persisting into recovery, exercise-induced ST-segment elevation, or exercise-induced ventricular tachycardia/ventricular fibrillation;

- Severe stress-induced left ventricular dysfunction (peak exercise LVEF <45% or drop in LVEF with stress ≥10%);
- Stress-induced perfusion abnormalities affecting ≥10% myocardium or stress segmental scores indicating multiple vascular territories with abnormalities;
- Stress-induced left ventricular dilation;
- Inducible wall motion abnormality (involving >2 segments or 2 coronary beds);
- Wall motion abnormality developing at low dose of dobutamine (≥10 mg/kg/min) or at a low heart rate (<120 beats/min); or
- Left main stenosis (≥50% stenosis) on coronary computed tomography angiography.

ICA for non-acute, stable coronary artery disease is not considered medically necessary, including for patients with stable angina who are not interested in revascularization or who are not candidates for PCI or coronary artery bypass graft surgery.

Elective PCI

Elective PCI for angina with stable coronary artery disease is considered medically necessary in:

- Beneficiaries without chronic kidney disease who have Canadian Cardiovascular Society class I-IV classification of angina with intolerance of or failure to respond to at least two target dose anti-anginal medications (beta blocker, dihydropyridine or non-dihydropyridine calcium channel blocker, nitrates, and/or ranolazine).

Elective PCI for other cardiac conditions is considered medically necessary in beneficiaries with one or more of the following:

- Heart failure with reduced ejection fraction for the purposes of treating ischemic cardiomyopathy;
- Left main stenosis ≥ 50% as determined on prior cardiac catheterization or coronary computed tomography angiography, if the patient has documentation indicating they were declined for a coronary artery bypass graft surgery; or

- Type 1 myocardial infarction within the past three months as defined by detection of a rise and/or fall of cardiac troponin values with at least 1 value above the 99th percentile upper reference limit and with at least 1 of the following:
    - Symptoms of acute myocardial ischemia;
    - New ischemic electrocardiogram changes;
    - Development of pathological Q waves;
    - Imaging evidence of new loss of viable myocardium, or new regional wall motion abnormality in a pattern consistent with an ischemic etiology; and
    - Identification of a coronary thrombus.

Elective PCI for non-acute, stable coronary artery disease is not considered medically necessary in all other patient populations, including if the patient is unwilling to adhere with recommended medical therapy, or if the patient is unlikely to benefit from the proposed procedure (e.g. life expectancy less than 6 months due to a terminal illness).

Endovascular Revascularization for Peripheral Artery Disease

Endovascular revascularization procedures (stents, angioplasty, and atherectomy) for the lower extremity are covered and considered medically necessary for the following conditions:

- Acute limb ischemia;
- Chronic limb-threatening ischemia, defined as the presence of any of the following:
    - Ischemic pain at rest;
    - Gangrene; or
    - Lower limb ulceration greater than 2 weeks duration.

Endovascular revascularization procedures are also covered and considered medically necessary in beneficiaries with peripheral artery disease who have symptoms of intermittent claudication and meet all of the following criteria:

- Significant peripheral artery disease of the lower extremity as indicated by at least one of the following:

- Moderate to severe ischemic peripheral artery disease with ankle-brachial index (ABI) ≤ 0.69; or
- Stenosis in the aortoiliac artery, femoropopliteal artery, or both arteries, with a severity of stenosis greater than or equal to 70% by imaging studies.

- Claudication symptoms that impair the ability to work or perform activities of daily living; and no improvement of symptoms despite all of the following treatments:
- Documented participation in a medically supervised or directed exercise program for at least 12 weeks. Individuals fully unable to perform exercise therapy may qualify for revascularization only if the procedure is expected to provide long-term functional benefits despite the limitations that precluded exercise therapy.
- At least 6 months of optimal pharmacologic therapy including all of the below agents, unless contraindicated or discontinued due to adverse effects:
  - Antiplatelet therapy with aspirin, clopidogrel, or both;
  - Statin therapy;
  - Cilostazol; and
  - Antihypertensives to a goal systolic blood pressure ≤ 140 mmHg and diastolic blood pressure ≤ 90 mmHg.
- At least one documented attempt at smoking cessation, if applicable, consisting of pharmacotherapy, unless contraindicated, and behavioral counseling, or referral to a smoking cessation program that offers both pharmacotherapy and counseling.

Endovascular revascularization procedures for the lower extremity are not covered and considered not medically necessary in the following circumstances:

- Claudication due to isolated infrapopliteal artery disease (anterior tibial, posterior tibial or peroneal) including patients with coronary artery disease, diabetes mellitus, or both;
- To prevent the progression of claudication to chronic limb-threatening ischemia in a beneficiary who does not otherwise meet medical necessity criteria;

- Beneficiary is asymptomatic; and/or
- Treatment of a nonviable limb.

Peripheral Arterial Disease Rehabilitation for Symptomatic Peripheral Arterial Disease

Peripheral arterial disease rehabilitation, also known as supervised exercise therapy, involves the use of intermittent exercise training for the purpose of reducing intermittent claudication symptoms.

Louisiana Medicaid covers and considers medically necessary up to 36 sessions of peripheral arterial disease rehabilitation annually. Delivery of these sessions 3 times per week over a 12-week period is recommended, but not required. Providers must adhere to CPT guidance on the time per session, exercise activities permitted, and the qualifications of the supervising provider.