# Cardiovascular Services

## Invasive Coronary Angiography and Percutaneous Coronary Intervention

The MCO shall cover elective invasive coronary angiography (ICA) and percutaneous coronary intervention (PCI) as treatment for cardiovascular conditions under specific circumstances.

This policy only applies to enrollees age 18 and older and does not apply to the following enrollees:

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

## Eligibility Criteria

### Elective Invasive Coronary Angiography (ICA)

The MCO shall cover elective ICA and consider it medically necessary in enrollees 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 one value above the 99th percentile upper reference limit and with at least one 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 nine months of prior PCI;
- Enrollees 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 as one or more of the below:
  - o Severe resting left ventricular dysfunction (LVEF ≤35%) not readily explained by noncoronary causes;
  - o Resting perfusion abnormalities ≥10% of the myocardium in enrollees without prior history or evidence of myocardial infarction;
  - o 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;
  - o Severe stress-induced left ventricular dysfunction (peak exercise LVEF <45% or drop in LVEF with stress ≥10%);
  - o Stress-induced perfusion abnormalities affecting ≥10% myocardium or stress segmental scores indicating multiple vascular territories with abnormalities;
  - o Stress-induced left ventricular dilation;
  - o Inducible wall motion abnormality (involving >2 segments or 2 coronary beds);
  - o Wall motion abnormality developing at low dose of dobutamine (≥10 mg/kg/min) or at a low heart rate (<120 beats/min); or
  - o Left main stenosis (≥50% stenosis) on coronary computed tomography angiography.

## Elective Percutaneous Coronary Intervention (PCI)

The MCO shall cover elective PCI for angina with stable coronary artery disease and consider it medically necessary in:

- ❖ Enrollees 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 enrollees 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 enrollee has documentation indicating they were declined for a coronary artery bypass graft surgery; and
- ❖ 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 one value above the 99th percentile upper reference limit and with at least one of the following:
  - o Symptoms of acute myocardial ischemia;
  - o New ischemic electrocardiogram changes;
  - o Development of pathological Q waves;
  - o Imaging evidence of new loss of viable myocardium, or new regional wall motion abnormality in a pattern consistent with an ischemic etiology; and
  - o Identification of a coronary thrombus.

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

## Endovascular Revascularization for Peripheral Artery Disease

The MCO shall cover endovascular revascularization procedures (stents, angioplasty, and atherectomy) for the lower extremity and consider them 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 two weeks duration.

The MCO shall also cover endovascular revascularization procedures and consider them medically necessary in enrollees 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 ≥70% by imaging studies; and
- 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; and
  - At least six 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
    - Antihypertensives to a goal systolic blood pressure ≤140 mmHg and diastolic blood pressure ≤90 mmHg; and
  - 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.

## Exclusions

The MCO shall not consider endovascular revascularization procedures for the lower extremity not medically necessary in the following circumstances:

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

The MCO shall cover and consider medically necessary up to 36 sessions of peripheral arterial disease rehabilitation annually. Delivery of these sessions three times per week over a 12-week period is recommended, but not required. The MCO shall direct providers to adhere to CPT guidance on the time per session, exercise activities permitted, and the qualifications of the supervising provider.