Coronary Revascularization

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Page Number(s):	1 of 6

Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under medical surgical benefits of the Company's Medicaid products for medically necessary coronary revascularization.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently services Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan Plus members.

Coronary revascularization – The process of restoring the flow of blood to the heart. This is done by removing or bypassing (going around) blockages in coronary arteries caused by atherosclerosis.

PROCEDURES

Percutaneous coronary intervention (PCI), may be considered medically necessary for the treatment of obstructions in the coronary arteries, when ANY of the following criteria are met:

- As an alternative to coronary artery bypass grafting (CABG), in stable individuals with significant (greater than or equal to 50% diameter) coronary artery stenoses in unprotected left main coronary artery disease (CAD) with BOTH of the following:

- Clinical characteristics that predict a significantly increased risk of adverse surgical outcomes from CABG; and
- Anatomic conditions associated with a low risk of procedural complications and a high likelihood of good long-term outcome.

OR

- Symptomatic individuals with one (1) or more significant (greater than or equal to 70% diameter) coronary artery stenoses when amenable to revascularization and with NYHA class II, III or IV angina refractory to maximal medical therapy; or
- Symptomatic individuals with one (1) or more significant (greater than or equal to 70% diameter) coronary artery stenoses (either a native coronary artery or bypassed graft vessel)* with history of previous CABG, and with NYHA class II, III or IV angina refractory to maximal medical therapy; or
- Symptomatic individuals with one (1) or more intermediate (50% to 69% diameter) coronary artery stenoses with an abnormal coronary flow assessment or appropriate imaging of less than or equal to 0.80, and with NYHA class II, III or IV angina refractory to maximal medical therapy.

Cardiac catheterization and pre/post-injections for angiographic studies are eligible for separate payment in accordance with multiple surgery guidelines.

Open transmyocardial laser revascularization may be considered medically necessary for individuals with NYHA class III or IV angina, who are not candidates for CABG surgery or PCI surgery who meet ALL of the following criteria:

- Documentation of reversible ischemia; and
- Left ventricular ejection fraction greater than 30%; and
- No evidence of recent myocardial infarction or unstable angina within the last 21 days; and
- No severe comorbid illness such as chronic obstructive pulmonary disease (COPD); and
- Presence of NYHA class III or IV angina refractory to medical management.

Open transmyocardial laser revascularization may be considered medically necessary as an adjunct to CABG in those individuals with documented areas of ischemic myocardium that are not amenable to surgical revascularization.

Open transmyocardial laser revascularization procedures not meeting the criteria as indicated in this policy is considered not medically necessary.

Ergonovine testing is reported in conjunction with a cardiac catheterization only the cardiac catheterization may be considered medically necessary. Ergonovine testing is considered an integral part of the cardiac catheterization. It is not eligible as a distinct and separate service.

If ergonovine testing is reported on the same day as cardiac catheterization, and the charges are itemized, combine the charges and pay only the cardiac catheterization. Payment for the cardiac catheterization performed on the same date of service includes the allowance for the ergonovine testing.

The following procedures are considered experimental/investigational and, therefore, noncovered. Scientific evidence does not support the use of these procedures; there is insufficient evidence to conclude that these techniques provide comparable outcomes to conventional treatments.

- Percutaneous transmyocardial laser revascularization
- MIDCAB surgery, that includes the use of robotics not performed under direct visualization

Post-payment Audit Statement

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Health Options at any time pursuant to the terms of your provider agreement.

Place of Service

Coronary revascularization not meeting the criteria as indicated in this policy is considered experimental/investigational and therefore, noncovered. because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

The cardiac procedures outlined in the above policy is typically an outpatient procedure which is only eligible for coverage as an inpatient procedure in special circumstances, including, but not limited to, the presence of a comorbid condition that would require monitoring in a more controlled environment such as the inpatient setting. is typically an outpatient procedure which is only eligible for coverage as an inpatient procedure in special circumstances, including, but not limited to, the presence of a comorbid condition that would require monitoring in a more controlled environment such as the inpatient setting.

CODING REQUIREMENTS

CPT code	Description
92920	Percutaneous transluminal coronary angioplasty; single major coronary artery or branch.
92921	Percutaneous transluminal coronary angioplasty; each additional branch of major coronary artery (list separately in addition to code for primary procedure.
92924	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch.
92925	Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure).
92928	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch.
92929	Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure).
92933	Percutaneous transluminal coronary atherectomy; with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch.
92934	Percutaneous transluminal coronary atherectomy; with intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure).
92937	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed, single vessel.
92938	Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each additional branch subtended by the bypass graft (list separately in addition to code for primary procedure).
92941	Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any

	combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel.
92943	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel.
92944	Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; each additional coronary artery, coronary artery branch, or bypass graft (list separately in addition to code for primary procedure).
33140	Transmyocardial laser revascularization, by thoracotomy (separate procedure).
33141	Transmyocardial laser revascularization, by thoracotomy; performed at the time of other open cardiac procedure(s) (list separately in addition to code for primary procedure).
33210	Insertion or replacement of temporary transvenous single chamber cardiac electrode or pacemaker catheter (separate procedure).
33211	Insertion or replacement of temporary transvenous dual chamber pacing electrodes (separate procedure).
93024	Ergonovine provocation test.
93451	Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed.
93452	Left heart catherization including intraprocedural injections(s) for left ventriculography, imaging supervision and interpretation, when performed.
93453	Combined right and left heart catheterization including intraprocedural injections(s) for left ventriculography, imaging supervision and interpretation, when performed.
93456	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right heart catheterization.
93457	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography and right heart catheterization.
93458	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed.
93459	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography.
93460	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed.
93461	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography.

93462	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (list separately in addition to code for primary procedure).
93530	Right heart catheterization, for congenital cardiac anomalies.
93531	Combined right heart catheterization and retrograde left heart catheterization, for congenital cardiac anomalies.
93532	Combined right heart catheterization and transseptal left heart catheterization through intact septum with or without retrograde left heart catheterization for congenital cardiac anomalies.
93533	Combined right heart catheterization and transseptal left heart catheterization through existing septal opening, with or without retrograde left heart catheterization, for congenital cardiac anomalies.
33999	Unlisted procedure, cardiac surgery.

Covered Diagnosis Codes for Procedure Codes: 33140, 33141

I20.1	I20.8	I20.9	I25.9	

REIMBURSEMENT

Participating facilities will be reimbursed per their Highmark Health Options contract.

POLICY SOURCES

New York Heart Association (NYHA) Classification of Heart Failure

Class I	No limitation of physical activity. Ordinary physical activity does not cause undue breathlessness, fatigue, or palpitations.
Class II	Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in undue breathlessness, fatigue, or palpitations.
Class III	Marked limitation of physical activity. Comfortable at rest, but less than ordinary physical activity results in undue breathlessness, fatigue, or palpitations.
Class IV	Unable to carry on any physical activity without discomfort. Symptoms at rest can be present. If any physical activity is undertaken, discomfort is increased.

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