REIMBURSEMENT POLICY STATEMENT
OHIO MEDICAID

Original Issue Date	Next Annual Review	Effective Date
07/01/2017	07/01/2017	07/01/2017
Policy Name		**Policy Number**
Cardiovascular Nuclear Medicine		PY-0235
Policy Type		
Medical	Administrative	Pharmacy	**REIMBURSEMENT**

Reimbursement Policies prepared by CSMG Co. and its affiliates (including CareSource) are intended to provide a general reference regarding billing, coding and documentation guidelines. Coding methodology, regulatory requirements, industry-standard claims editing logic, benefits design and other factors are considered in developing Reimbursement Policies.

In addition to this Policy, Reimbursement of services is subject to member benefits and eligibility on the date of service, medical necessity, adherence to plan policies and procedures, claims editing logic, provider contractual agreement, and applicable referral, authorization, notification and utilization management guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any federal or state coverage mandate, Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

This Policy does not ensure an authorization or Reimbursement of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced herein. If there is a conflict between this Policy and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination.

CSMG Co. and its affiliates may use reasonable discretion in interpreting and applying this Policy to services provided in a particular case and may modify this Policy at any time.

Contents of Policy

A. SUBJECT

Cardiovascular Nuclear Medicine

B. BACKGROUND

Cardiovascular nuclear imaging applies a range of radionuclide agents non-invasively through specific protocols in the evaluation of various functions including coronary artery flow, myocardial perfusion, and ventricular function. Radionuclide agents and imaging techniques are chosen for specific circumstances. The status of coronary blood flow may be evaluated through a myocardial perfusion scan. The agents selected generate images showing segmental and global myocardial blood flow through radioisotope uptake. Imaging abnormalities occur can indicate myocardial scar and ischemia in the individual, most commonly caused by coronary atherosclerosis.

Ventricular function studies employ radioisotope imaging with simultaneous electrocardiography to outline the borders of the ventricular endocardium, or to identify the ventricular blood pool independent of the surrounding myocardium. The motion of the left ventricle, synchronized with the electrocardiogram, is used to calculate wall motion and ejection fraction measurements. This information is of diagnostic and prognostic value in patients with a wide range of clinical conditions.

Cardiovascular nuclear imaging tests are performed at rest, during exercise, or with pharmacologic intervention to mimic exercise in less active patients. Images acquired and evaluated may be spatially oriented in planar (single plane) or multiple planes utilizing computer integration such as single-photon emission computer tomography (SPECT).

Peripartum cardiomyopathy, although not as common as other varieties, may be associated with considerable morbidity. Onset is usually shortly after delivery but may occur during the final weeks of pregnancy or be delayed until several months after delivery. The degree of impact on ventricular function does not consistently correlate with prognosis or the rate of recovery. For example, patients with a very low ejection fraction can eventually completely recover from peripartum cardiomyopathy.
The U.S. Preventive Services Task Force reports no preventive care indications for cardiovascular nuclear imaging tests as screening methods for adults or children.

C. DEFINITIONS

- **Diagnostic imaging** means the production of images used for medical diagnosis using magnetic resonance imaging (MRI), positron emission tomography (PET), computed tomography (CT), nuclear medicine.
- **First-pass study** means a form of radionuclide angiography in which a rapid sequence of images is taken immediately after administration of a bolus of radionuclide, recording only the initial transit of the isotope through the central circulation.
- **Metabolic Equivalent (MET)** is a physiologic measurement of the functional capacity or exercise tolerance of an individual as determined from progressive exercise testing (compared stage by stage) often used to define the physical activities and intensity levels in which a person may participate safely.

D. POLICY

I. CareSource does not require prior authorizations for the cardiovascular nuclear medicine services covered by this policy.

NOTE: Although the cardiovascular nuclear medicine covered by this policy already does not require a prior authorization, CareSource may request documentation to support medical

necessity. Appropriate and complete documentation must be presented at the time of review to validate medical necessity.

II. All cardiovascular nuclear tests and stress tests must be ordered by a physician or a qualified non-physician provider.

III. Selection of tests should be made within the context of other tests, scheduled and previously performed, so that the anticipated information obtained is unique and not redundant. Decision-making for testing should be made based upon the presence of multiple clinical risk factors, the level of functional capacity, the risk of the surgery (if applicable) and the likelihood that the results of the cardiac testing would change the management.

IV. Cardiovascular nuclear imaging is indicated and covered when performed for:
- A. Assessment of the functional and prognostic importance of angina;
- B. Diagnostic evaluation of patients with chest pain and uninterpretable or equivocal ECG changes caused by drugs, bundle branch block, or left ventricular hypertrophy;
- C. Assessment of congenital anomalies of coronary arteries;
- D. Risk assessment or re-evaluation of disease in patients who are asymptomatic or have stable symptoms, with known atherosclerotic heart disease on catheterization or SPECT perfusion imaging, who have not had a revascularization procedure within the past two years;
- E. Detection of coronary artery disease in patients, without chest pain syndrome, with new-onset of diagnosed heart failure or left ventricular systolic dysfunction;
- F. Evaluation of ischemic versus non-ischemic cardiomyopathy when cardiac catheterization / coronary angiography are not planned;
- G. Evaluation of myocardial perfusion and/or function before and after coronary artery bypass surgery or other re-perfusion procedures;
- H. Quantification and surveillance of myocardial infarction and prognostication in patients with infarction;
- I. Assessment of congenital anomalies of coronary arteries;
- J. Preoperative assessment for non-cardiac surgery, when used to determine risk for surgery and/or perioperative management in:
  1. patients with poor functional capacity (less than 4 METS) and minor or intermediate clinical risk predictors, as follows:
     - 1.1 History of ischemic heart disease;
     - 1.2 History of compensated or prior heart failure;
     - 1.3 History of cerebrovascular disease;
     - 1.4 Diabetes mellitus;
     - 1.5 Renal insufficiency.
  2. patients with intermediate or high likelihood of coronary heart disease, or patients with poor functional capacity (less than 4 METS) undergoing high risk non-cardiac surgery, where:
     - 2.1 High risk surgery: aortic and peripheral vascular surgery;
     - 2.2 Intermediate risk surgery: intraperitoneal and intrathoracic surgery, carotid endarterectomy, head & neck surgery, orthopedic surgery, prostate surgery;
     - 2.3 Low risk surgery: endoscopic procedures, superficial surgery, cataract surgery, breast surgery, ambulatory surgery.
- K. Evaluation of ventricular function in patients with non-ischemic myocardial disease;
- L. Evaluation of patients in whom an accurate measure of the ejection fraction is needed to make a determination of whether to implant a defibrillator or biventricular pacemaker;
- M. Evaluation of a patient receiving chemotherapeutic drugs which are potentially cardiotoxic (e.g., adriamycin).

V. First pass studies will be covered only when the information sought is immediately relevant to the management of the patient's clinical condition, and has not been previously obtained or

likely to be obtained from other planned tests such as echocardiography or equilibrium gated blood pool studies. First pass studies may be indicated for the assessment and identification of shunts.

VI. Infarct avid scintigraphy is indicated in patients in whom it is not possible to make a definitive diagnosis of myocardial infarction by ECG or enzyme testing. Patient selection should be based on clinical grounds:
   A. Patients with a high pretest probability of disease are not usually candidates for a study for diagnostic purposes, though the size and reversibility of a defect and its functional consequences may be required for clinical decision-making.
   B. Patients with a moderate probability of disease benefit the most from the study when the diagnosis is in question.

VII. Special Equipment Requirements
   A. Given the limitations of uptake, low photon energy and redistribution, the cardiac blood pool codes and perfusion imaging codes are not generally covered on the same date of service. However, in light of the predictive value of exercise-induced changes in ejection fraction, an exception will be made to allow first pass, single study with exercise along with the appropriate perfusion studies. Providers who bill this service must certify within their records that their laboratories are specially equipped to process such studies.
   B. The rapid uptake, relatively low photon energy and redistribution of thallium 201 preclude its application to studies for gated images (78478 and 78480, for dates of service prior to 01/01/2010) in most laboratories. Therefore, CPT procedure codes 78478 and 78480 (for dates of service prior to 01/01/2010) are generally not payable with HCPCS code A9505 (thallous chloride). However, an exception will be made to allow this combination for laboratories that have at least double-headed cameras and the appropriate software to facilitate the count. Such providers must certify that their laboratories are specially equipped to process such studies.
   C. Cardiac blood pool imaging studies are described by the codes 78472, 78473, 78481, 78483, 78494 (with add-on code 78496). Only one code from the series (with appropriate add-on) may be reported on a single date of service.
   D. All stress tests must be performed under the direct supervision of a physician. The nuclear test components must be performed under the general supervision of a physician.

VIII. If criteria are met for selected cardiovascular nuclear imaging to evaluate left ventricular ejection fraction, CareSource covers the evaluation of peripartum cardiomyopathy.

IX. Services Not Covered
   A. Myocardial perfusion studies performed based on the presence of risk factors in the absence of cardiac symptoms, cardiac abnormalities on physical examination, or abnormalities on cardiac testing (e.g., electrocardiographic tests, echocardiography, etc.).
   B. Tests that are anticipated to provide information duplicative of another test already performed.
   C. Tests performed when the results would not be anticipated to influence medical management decisions.
   D. Myocardial perfusion studies performed subsequent to a diagnostic myocardial PET scan.
   E. Infarct avid scintigraphy if the diagnosis of myocardial infarction has already been confirmed by enzymes and/or ECG.
   F. Tests performed unrelated to changes in a patient's signs or symptoms, or unrelated to an immediate pre-operative evaluation.
   G. Tests performed for risk assessment prior to high risk non-cardiac surgery in asymptomatic patients within one year following normal catheterization or non-invasive test.

H. Tests performed for preoperative evaluation in patients undergoing low-risk surgery.

NOTE: Compliance with the provisions in this policy may be monitored and addressed through post payment data analysis and subsequent medical review audits.

E. CONDITIONS OF COVERAGE

Reimbursement is dependent on, but not limited to, submitting Ohio Medicaid approved HCPCS and CPT codes along with appropriate modifiers. Please refer to the Ohio Medicaid fee schedule.

http://medicaid.ohio.gov/Portals/0/Providers/FeeScheduleRates/App-DD.pdf
The attached list(s) of codes is provided as a reference. This list may not be all inclusive and is subject to updates. Please refer to the above referenced source for the most current coding information.

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F. RELATED POLICIES/RULES

G. REVIEW/REVISION HISTORY

	DATE	ACTION
Date Issued	07/01/2017	
Date Revised		
Date Effective	07/01/2017	

H. REFERENCES

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The Reimbursement Policy Statement detailed above has received due consideration as defined in the Reimbursement Policy Statement Policy and is approved.