

Cardio Policy:

Cardiovascular Stress Test

POLICY NUMBER UM CARDIO_1114	SUBJECT Cardiovascular Stress Test		DEPT/PROGRAM UM Dept	PAGE 1 OF 5
DATES COMMITTEE REVIEWED 07/22/11, 12/12/12, 03/10/14, 05/15/15, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 02/13/19, 02/21/19, 04/23/19, 07/30/19, 12/11/19, 05/13/20, 11/11/20, 03/10/21, 05/12/21, 08/12/21, 11/10/21, 09/14/22, 12/14/22, 02/01/23, 12/20/23	APPROVAL DATE December 20, 2023	EFFECTIVE DATE December 22, 2023	COMMITTEE APPROVAL DATES 07/22/11, 12/12/12, 03/10/14, 05/15/15, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 02/13/19, 02/21/19, 04/23/19, 07/30/19, 12/11/19, 05/13/20, 11/11/20, 03/10/21, 05/12/21, 08/12/21, 11/10/21, 09/14/22, 12/14/22, 02/01/23, 12/20/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for Cardiovascular Stress Test.

II. DEFINITIONS

Cardiovascular stress test is a test used to measure cardiovascular response to external stress through treadmill/bicycle exercise in a controlled clinical environment.

Cardiovascular stress tests compare the coronary circulation while the patient is at rest with the same patient's circulation observed during maximum physical exertion, showing any abnormal blood flow to the myocardium as depicted by the continuously monitored EKG. The results can also be interpreted as a reflection on the general physical condition of the test patient (blood pressure response and exercise tolerance).

Intermediate global CAD risk is defined as 10 year CAD risk from 10-20%.

High global CAD risk is defined as 10 year CAD risk of greater than 20%. CAD equivalents (e.g., DM, PAD) can also define high risk.

10 year CAD risk (%) is defined based on the risk factors: sex, age, race, total cholesterol, HDL-cholesterol, systolic blood pressure, and treatment for high blood pressure, diabetes mellitus, and smoker.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC is to improve patient care and health outcomes in a cost-effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

Guideline directed medical therapy (GDMT) are outlined by joint American College of Cardiology (ACC)/American Heart Association (AHA) in cardiovascular clinical practice guidelines as Class I recommendation. These are maximally tolerated medications for a cardiovascular condition, when prescribed, have shown to improve healthcare outcomes such as survival along with significant reduction in major adverse cardiovascular events and hospitalization. For all recommended drug treatment regimens, the prescriber should confirm the dosage with product insert material and carefully evaluate for contraindications and interactions^{2,3,9,10,11,12,13}.

III. POLICY

Patients should be on maximally tolerated GDMT for CAD, when applicable. Indications for approving a request for medical necessity are:

- A. To evaluate prognosis and functional capacity in patients with CAD soon after MI (6-8 weeks after uncomplicated MI) with no prior stress test done after MI. **(AUC Score 7)^{1,2,3,4}**
- B. To assess patients before and after revascularization
 - 1. CABG Testing may be considered, if revascularization is incomplete in asymptomatic patient **(AUC Score 7)^{1,2,3,4}** or if the patient is asymptomatic and had CABG greater than or equal to 5 years ago. **(AUC Score 7)^{1,2,3,4}**
 - 2. PCI Testing may be done in asymptomatic patient if PCI was done greater than or equal to 2 years. **(AUC Score 7)^{1,2,3,4}**
- C. Exercise stress test is appropriate to detect CAD in patients with high global CAD risk and with interpretable ECG and able to exercise with no prior stress test done within the last 12 months. **(AUC Score 7)^{1,2,3,4}**
- D. Follow up testing with exercise stress test is appropriate when a prior test (less than 90 days) with Coronary CT Calcium is abnormal (Agatston score greater than 100) and no prior revascularization has been performed with no prior stress test done within the last 12 months. **(AUC Score 7)^{1,2,3,4}**
- E. Follow up testing with exercise stress test is appropriate in asymptomatic or with stable symptoms when prior (greater than 90 days) Coronary Calcium Agatston score greater than 400 with no prior stress test done within the last 12 months. **(AUC Score 7)^{1,2,3,4}**
- F. Testing is being performed to evaluate functional capacity, effects of therapy/interventions, prognosis and/or severity of known CAD, vascular, congenital, and/or myocardial disease with no prior stress test done within the last 12 months. **(AUC Score 7)^{1,2,3,4}**
- G. Initial evaluation of exercise capacity of selected patients with valvular heart disease with related symptomatology with no prior stress test done within the last 6 months. **(AUC Score 7)^{1,2,3,4}**
- H. Testing is being performed to assess functional capacity prior to entering cardiac rehabilitation with a qualifying diagnosis, and again at 12 weeks. **(AUC Score 8)^{1,2,3,4}**
- I. Testing is being performed to evaluate a patient with known or suspected exercise induced arrhythmias, sustained VT or frequent PVC's or syncope, and prior to initiation of antiarrhythmic

therapy in high global CAD risk patients with no prior stress test done within the last 6 months. **(AUC Score 7)**^{1,2,3,4}

- J. Annual testing is with Exercise Stress test is appropriate to assess the presence or absence of CAD for cardiac transplant patient and in patients in high risk occupation for clearance. **(AUC Score 7)**^{1,2,3,4}
- K. Exercise Stress test is indicated in patients who need cardiac clearance prior to high risk occupation i.e. Pilots or high endurance physical training. **(AUC Score 8)**^{1,2,3,4}
- L. Exercise stress test is appropriate to perform for cardiovascular risk stratification, prior to any organ transplant. No stress test done within the last 6 months. **(AUC Score 7)**^{5,6,7,8}
- M. Please refer to *UM_1175 Perioperative Cardiovascular Evaluation and Care Before Non-Cardiac Surgery* and *UM_1119 Nuclear Stress Test Pharmacological/Myocardial Perfusion Imaging (MPI)* if a request is received for pre-operative cardiac clearance prior to noncardiac and cardiovascular related surgery.

Limitations:

- A. Stress testing with imaging i.e. echo. SPECT, PET is the preferred modality for patients with significant EKG abnormalities including but not limited to but not limited to inverted T-waves, greater than or equal to 1mm ST segment depressions, greater than or equal to 1mm ST segment elevations, or a combination thereof in 2 or more contiguous leads.
- B. Apart from the specific scenarios indicated above, stress testing of asymptomatic individuals is not appropriate unless there are other signs of cardiac pathology e.g., new EKG abnormalities, new wall motion abnormalities on an echo, or a new decrease in LVEF as detected by another modality
- C. Before Cardiovascular Stress Test can be performed in a patient with CAD the following must be considered: Predicted or observed lack of adequate response to maximally tolerated GDMT.
2,3,9,10,11,12,13
- D. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

- A. To review a request for medical necessity, the following items must be submitted for review:
 - 1. Progress note that prompted request
 - 2. Recent EKG (within 10 days)
 - 3. Most recent Holter or prior stress test results (if applicable)
- B. Primary codes appropriate for this service: 93015, Supervision only (without interpretation and report) 93016, Tracing only (without interpretation and report), Tracing only (without interpretation and report) 93017, Interpretation and report only 93018.

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

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14. NCQA UM 2022 Standards and Elements.