New Century Health

Cardio Policy:

Radionuclide Angiography/MUGA

POLICY NUMBER UM CARDIO_1120	SUBJECT Radionuclide Angiography/MUGA		DEPT/PROGRAM UM Dept	PAGE 1 OF 3
DATES COMMITTEE REVIEWED 07/22/11, 12/12/12, 08/22/13, 06/28/14, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 03/13/19, 12/11/19, 06/10/20, 05/12/21, 07/14/21, 08/11/21, 07/13/22	APPROVAL DATE July 13, 2022	EFFECTIVE DATE July 29, 2022	COMMITTEE APPROVAL DATES 07/22/11, 12/12/12, 08/22/13, 06/28/14, 08/12/15, 11/28/16, 12/21/16, 10/31/17, 03/13/19, 12/11/19, 06/10/20, 05/12/21, 07/14/21, 08/11/21, 07/13/22	
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 Radionuclide Angiography/MUGA.

II. DEFINITIONS

The two types of radionuclide studies commonly used for cardiac evaluation are myocardial perfusion imaging and ventriculography. Myocardial perfusion imaging is used primarily for the evaluation of coronary artery disease. Ventriculography is sometimes referred to as multiple gated acquisition scanning (MUGA) and is primarily used to evaluate valvular disease and cardiomyopathies. Either type of study may be obtained at rest or stress.

Radionuclide Ventriculography is a medical imaging test used to determine a patient's cardiac function in the right, or more typically, left ventricle. Cardiac ventriculography involves injecting a radioisotope into the heart's ventricle(s) through a peripheral vein to measure the volume of blood pumped. Both regional and global left ventricular function (ejection fraction) as well as left ventricular size is measured.

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

III. POLICY

Indications for approving a request for medical necessity are:

A. Radionuclide ventriculography being performed to access impact of a myocardial infarction or ventricular function when other modalities of imaging are inconclusive with no prior MUGA done within the last 3 months. **(AUC Score 8)**[1,2,3]

B. Radionuclide ventriculography is being performed for assessment of RV function with no prior MUGA done within the last 3 months. **(AUC Score 8)**[1,2,3]

C. Baseline and serial LV EF evaluation before (with no prior MUGA done within the last 3 months) and after use of potential cardiotoxic therapy (with no prior MUGA done after the last chemotherapy). **(AUC Score 8)**[1,2]

D. Evaluation of LVEF in absence of a recent reliable diagnostic information regarding ventricular function obtained with another imaging modality with no prior MUGA done within the last 6 months. **(AUC Score 8)**[1,2,3]

Limitations

A. 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. In order to review a request for medical necessity, the following items must be submitted for review:
   1. Progress note that prompted request
   2. Most recent Echocardiogram or MUGA (if applicable)
   3. Most recent Stress Imaging report

B. Primary codes appropriate for this service: 78472 (single study), 78473 (multiple studies, i.e. stress-rest), A9560/A9512 ^{99}Tc-labled red blood cells), 78494, 78496 (with right ventricular ejection fraction)

V. APPROVAL AUTHORITY

A. Review – Utilization Management Department

B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

A. None

VII. REFERENCES

1. Hendel RC, et al. ACCF/ASNC/ACR/AHA/ASE/SCCT/SCMR/SNM 2009 Appropriate Use Criteria for Cardiac Radionuclide Imaging: A Report of the American College of Cardiology Foundation

Appropriate Use Criteria Task Force, the American Society of Nuclear Cardiology, the American College of Radiology, the American Heart Association, the American Society of Echocardiography, the Society of Cardiovascular Computed Tomography, the Society for Cardiovascular Magnetic Resonance, and the Society of Nuclear Medicine. Journal of the American College of Cardiology. June 2009. Volume 53, Issue 23, Pages 2201-2229.

2. Brindis, RG, et al. ACCF/ASNC appropriateness criteria for single-photon emission computed tomography myocardial perfusion imaging (SPECT MPI): a report of the American College of Cardiology Foundation Quality Strategic Directions Committee Appropriateness Criteria Working Group and the American Society of Nuclear Cardiology endorsed by the American Heart Association. Journal of the American College of Cardiology. Oct 2005. Volume 46, Issue 8, Pages 1587-605.
3. Robert C. Hendel MD, FACC, FAHA, et al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. Journal of the American College of Cardiology. March 2013, Volume 61, Issue 12, Pages 1305-1317.
4. NCQA UM 2022 Standards and Elements.