

<b>Policy Name:</b> <b>Magnetic Resonance Spectroscopy (MRS) – Mayo Medical Plan Only</b>
<b>Effective Date:</b> <b>6/16/2021</b>

## Important Information – Please Read Before Using This Policy

These services may or may not be covered by all Medica plans. Coverage is subject to requirements in applicable federal or state laws. Please refer to the member’s plan document for other specific coverage information. If there is a difference between this general information and the member’s plan document, the member’s plan document will be used to determine coverage. With respect to Medicare, Medicaid, and other government programs, this policy will apply unless these programs require different coverage. Members may contact Medica Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions may call the Medica Provider Service Center toll-free at 1-800-458-5512.

Medica coverage policies are not medical advice. Members should consult with appropriate health care providers to obtain needed medical advice, care, and treatment.

NOTE: THIS POLICY APPLIES TO MAYO MEDICAL PLAN (MMP) MEMBERS.

NOTE: For all other medica members, Medica is using clinical criteria for Magnetic Resonance Spectroscopy developed by Carelon, a utilization management (UM) program third-party vendor, to assist in administering medical necessity criteria.

## Coverage Policy

Magnetic resonance spectroscopy is **COVERED** for the following indications:

1. Distinguishing low grade from high grade gliomas
2. Distinguishing recurrent or residual brain tumor from post-therapy changes (e.g., radiation-necrosis).
3. Distinguishing brain neoplasm from non-neoplastic lesions

Magnetic resonance spectroscopy for all other indications is unproven and investigative and therefore **NOT COVERED**. There is insufficient reliable evidence in the form of high-quality peer-reviewed medical literature to establish the effects on health care outcomes.

## Description

Magnetic Resonance Spectroscopy (MRS), also known as nuclear or proton magnetic resonance spectroscopy, is a non-invasive imaging technique that can detect and measure concentrations of low molecular weight chemicals within living body tissues. MRS can be done as part of a routine magnetic resonance imaging (MRI) on commercially available MRI instruments. The primary difference between MRI and MRS is that MRS provides direct in vivo biochemical information from the tissue of choice and is, therefore, a reflection of the underlying molecular processes, while MRI provides an image of the anatomy. Combining MRS data with MRI data, especially in areas that may be difficult to biopsy, has the potential to yield significant clinical information about the biochemical and pathophysiologic composition of specific lesions. MRS has been investigated as an analytical tool to study metabolic changes in brain tumors, stroke, Alzheimer’s disease, epilepsy, depression and other diseases affecting the brain. It has also been used to study the metabolism of other organs. However, the role of MRS in diagnosis and therapeutic planning has not been established by adequate clinical studies. Specifically, there have been no clinical trials demonstrating improved outcomes in patients evaluated with MRS compared to patients evaluated with conventional imaging modalities.

## Medica Coverage Policy



### FDA Approval

Magnetic resonance spectroscopy (MRS) devices are regulated by the FDA as Class II devices. Several devices have been approved via the FDA 510(k) process.

### Prior Authorization

Prior authorization is not applicable. Claims for this service are subject to retrospective review and denial of coverage, as investigative services are not eligible for reimbursement.

### Coding Considerations

Use the current applicable CPT/HCPCS code(s). The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.

#### CPT Codes

- **76390** – Magnetic resonance spectroscopy
- **0609T** – Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); acquisition of single voxel data, per disc, on biomarkers (i.e., lactic acid, carbohydrate, alanine, laal, propionic acid, proteoglycan, and collagen) in at least 3 discs
- **0610T** – Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); transmission of biomarker data for software analysis
- **0611T** – Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); post processing for algorithmic analysis of biomarker data for determination of relative chemical differences between discs
- **0612T** – Magnetic resonance spectroscopy, determination and localization of discogenic pain (cervical, thoracic, or lumbar); interpretation and report

Original Effective Date:	8/1/2009
Re-Review Date(s):	5/22/2012 6/17/2015 6/20/2018 2/19/2020 – administrative update; format 7/1/2020 – administrative update: codes added 6/16/2021 5/01/2024 - administrative update; policy applies to Mayo Medical Plan members only.