Magnetic Resonance (MRI)

POLICY NUMBER UM IMG_1320	SUBJECT Magnetic Resonance (MRI)		DEPT/PROGRAM UM Dept	PAGE 1 OF 8
DATES COMMITTEE REVIEWED 04/10/19, 12/11/19, 03/11/20, 07/08/20, 10/14/20, 11/10/21, 11/09/22, 12/13/23	APPROVAL DATE December 13, 2023	EFFECTIVE DATE December 22, 2023	COMMITTEE APPROVAL DATES 04/10/19, 12/11/19, 03/11/20, 07/08/20, 10/14/20, 11/10/21, 11/09/22, 12/13/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT		
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

The purpose of this policy is to provide general information applicable to the review and appropriateness of Magnetic Resonance (MRI scan) diagnostic imaging services. Although a service, supply or procedure may be medically necessary, it may be subject to limitations and/or exclusions under a member's benefit plan. If a service, supply, or procedure is not covered and the member proceeds to obtain the service, supply or procedure, the member may be responsible for the cost. Decisions regarding diagnostic imaging are the responsibility of the physician. This policy is not intended to direct the course of clinical care a physician provides to a member, and it does not replace a physician's independent professional clinical judgment or duty to exercise special knowledge and skill in the treatment of members. NCH is not responsible for, does not provide, and does not hold itself out as a provider of medical care. The physician remains responsible for the quality and type of health care services provided to a member.

II. BACKGROUND

Magnetic Resonance Imaging (MRI scan) is a specialized radiological imaging non-invasive imaging technology that produces three dimensional detailed anatomical images without the use of damaging radiation. It is often used for disease detection, diagnosis, and treatment monitoring. It is based on sophisticated technology that excites and detects the change in the direction of the rotational axis of protons found in the water that makes up living tissues.

III. DEFINITIONS

Magnetic Resonance Imaging (MRI scan) utilize powerful magnets which produce a strong magnetic field that forces protons in the body to align with that field. When a radiofrequency current is then pulsed through the patient, the protons are stimulated, and spin out of equilibrium, straining against the pull of the magnetic field. When the radiofrequency field is turned off, the MRI sensors can detect the energy released as the protons realign with the magnetic field. The time it takes for the protons to realign with the magnetic field, as well as the amount of energy released, changes depending on the environment and the chemical nature of the molecules. Physicians can tell the difference between various types of tissues based on these magnetic properties.

IV. POLICY

A. Medicare – for Medicare and Medicare Advantage enrollees, the coverage policies of CMS (Centers for Medicare and Medicaid Services) may take precedence over Company's guidelines.

B. Magnetic Resonance Imaging (MRI Scan) meets the definition of medical necessity for the following indications:

1. Breast Cancer
   a. Magnetic Resonance Imaging (MRI scan) is considered medically necessary in individuals for initial staging of breast cancer when:
      i. Surgical planning for breast conserving therapy OR
      ii. After preoperative systemic therapy to define extent of disease, response to treatment, and potential for breast conserving therapy.
   b. Magnetic Resonance Imaging (MRI scan) is considered medically necessary in individuals for (Annual) surveillance of breast cancer when:
      i. Women with prior breast cancer, asymptomatic, and who have a lifetime risk greater than or equal to 20% as defined by models that are largely dependent on family history OR
      ii. HX of breast cancer with known dense breast documented on prior imaging
2. Gynecological
   a. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for initial staging cervical cancer with:
      i. Stage IB2 cervical cancer only, prior to fertility-sparing surgery to assess local disease extent AND
      ii. proximity of tumor to the internal cervical os
   b. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for initial staging endometrial/uterine cancer with:
      i. Prior to fertility-sparing treatment
   c. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for initial staging vaginal/vulvar cancer with:
      i. Any presentation
   d. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for re-staging or response to treatment endometrial/uterine cancer with:
      i. Suspected recurrence with intact uterus OR
      ii. Prior fertility-sparing treatment after 6 months of failed medical therapy
   e. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for re-staging or response to treatment vaginal/vulvar cancer with:
      i. Any presentation
   f. MRI pelvis immediately preceding brachytherapy
3. Head and Neck Cancer
   a. Magnetic Resonance Imaging (MRI scan) of the neck soft tissue and/or MRI head/brain is considered medically necessary in individuals for initial staging head and neck cancer with:
      i. Imaging of the primary site of disease is nasopharyngeal carcinoma

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b. Magnetic Resonance Imaging (MRI scan) of the neck soft tissue and/or MRI head/brain is considered medically necessary in individuals for re-staging or response to treatment head and neck cancer with:
    i. MRI primary site and neck to assess response to neoadjuvant treatment OR
    ii. After concurrent chemoradiotherapy

4. Metastatic Disease
    a. Magnetic Resonance Imaging (MRI scan) of the brain is considered medically necessary in individuals for suspected/known metastatic disease with:
        i. Suspected CNS involvement (imaging to evaluate emergent signs/symptoms is appropriate at any time) OR
        ii. Post-treatment for known metastatic brain disease every 2-3 months for 1 year, then every 4-6 months indefinitely
        iii. For Treatment Planning, for treatment of brain lesions with SRS/SBRT
    b. Magnetic Resonance Imaging (MRI scan) of the cervical, thoracic, and/or lumbar spine is considered medically necessary in individuals for suspected/known metastatic disease with:
        i. Suspected spine involvement
    c. Magnetic Resonance Imaging (MRI scan) of the abdomen Liver imaging
        i. Diagnostic for Indeterminate liver lesion
5. Non-Small Cell Lung Cancer (NSCLC)
    a. Magnetic Resonance Imaging (MRI scan) of the brain is considered medically necessary in individuals for initial staging non-small cell lung cancer (NSCLC) with:
        i. Pretreatment MRI brain for stages IB-IV OR
        ii. Locoregional recurrence OR
        iii. Symptomatic local disease OR
        iv. Post therapy
    b. Magnetic Resonance Imaging (MRI scan) of the chest is considered medically necessary in individuals for re-staging/treatment response non-small cell lung cancer (NSCLC) with:
        i. Stage IIB (T3 invasion N0) and Stage IIIA (T4 extension N0-1, T3 N1, T4 N0-1) with superior sulcus lesions abutting the spine or subclavian vessels
6. Small Cell Lung Cancer (SCLC)
    a. Magnetic Resonance Imaging (MRI scan) of the brain is considered medically necessary in individuals for initial staging with small cell lung cancer (SCLC) with:
        i. Newly diagnosed small cell lung cancer OR
        ii. Prior to prophylactic cranial irradiation
    b. Magnetic Resonance Imaging (MRI scan) of the brain is considered medically necessary in individuals for re-staging/treatment response small cell lung cancer (SCLC) with:
        i. Treatment response after every 2 cycles of systemic therapy
    c. Magnetic Resonance Imaging (MRI scan) of the brain is considered medically necessary in surveillance of small cell lung cancer (SCLC) with:
        i. Every 3 months post treatment imaging through 3rd year followed by every 6 months post treatment through 4th and 5th year followed by annual imaging (once a year)
7. Multiple Myeloma

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a. Magnetic Resonance Imaging (MRI scan) of the whole body or skeletal MRI (bone marrow blood supply) is considered medically necessary in individuals for initial staging with multiple myeloma with:
    i. No lytic bone lesions are identified on whole-body radiography
b. Magnetic Resonance Imaging (MRI scan) of the whole body or skeletal MRI (bone marrow blood supply) is considered medically necessary in individuals for re-staging/treatment response multiple myeloma with:
    i. Indicated for evaluation of focal bone lesions
c. Magnetic Resonance Imaging (MRI scan) of the whole body or skeletal MRI (bone marrow blood supply) is considered medically necessary in individuals for surveillance multiple myeloma with:
    i. Indicated for focused bone evaluation

8. Pancreatic Cancer
    a. Magnetic Resonance Imaging (MRI scan) of the abdomen in considered medically necessary in individuals for initial staging of pancreatic cancer with:
        i. CT contraindicated or expected to be suboptimal OR
        ii. Characterization of CT-indeterminate liver lesions OR
        iii. Need to further establish resectability in borderline resectable patients when CT imaging provides insufficient information
    b. Magnetic Resonance Imaging (MRI scan) of the abdomen is considered medically necessary in individuals for response pancreatic cancer
        i. No metastases; Post neoadjuvant therapy
9. Prostate Cancer
    a. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for initial staging of prostate cancer with:
        i. Low risk OR
        ii. Multiparametric MRI pelvis for suspected prostate cancer in patients with a rising prostate specific antigen (PSA) and negative transrectal ultrasound biopsy
    b. Magnetic Resonance Imaging (MRI scan) of the abdomen and pelvis is considered medically necessary in individuals for initial staging of prostate cancer with:
        i. Intermediate and high risk
    c. Magnetic Resonance Imaging (MRI scan) of the pelvis is considered medically necessary in individuals for staging/response of prostate cancer with:
        i. PSA level rising on 2 consecutive measurements OR
        ii. Clinical suspicion of recurrence or progression
10. Rectal Cancer
    a. Magnetic Resonance Imaging (MRI scan) of the chest, abdomen, and pelvis (or see MRI policy MRI pelvis) is considered medically necessary in individuals for initial staging rectal cancer with:
        i. Disease appropriate for resection
    b. Magnetic Resonance Imaging (MRI scan) of the chest, abdomen and pelvis is considered medically necessary in individuals for re-staging/response rectal cancer with:
        i. Same imaging requested as previously performed AND

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ii. Post completion of RT 8-12 weeks therapy OR

iii. Status post neoadjuvant therapy and prior to adjuvant resection OR

iv. Status post trans anal excision (TAE) OR

v. Status post neoadjuvant chemotherapy and/or primary chemotherapy radiation therapy

c. Magnetic Resonance Imaging (MRI scan) of the chest, abdomen and pelvis is considered medically necessary in surveillance of rectal cancer with:

i. Stage II, III, IV disease AND

ii. Imaging every 3-6 months AND

iii. Therapy completed less than or equal to 2 years prior *followed by*

iv. Imaging every 6-12 months AND

v. For years 3-5 post treatment

11. Renal Cell (Kidney) Cancer

a. Magnetic Resonance Imaging (MRI scan) of the chest, abdomen and pelvis is considered medically necessary in individuals for initial staging renal cell cancer with:

i. Any presentation

C. With above criteria met in any indication if any allergies/or history of a reaction to contract or unable to receive contrast due to kidney dysfunction (if allergy or contraindication can undergo CT without contrast).

D. All other indications not listed above may be considered experimental or investigational, as there may be insufficient evidence to support conclusions regarding the effect of health outcomes. Indications not listed will be evaluated on a case by case basis at the clinical reviewer level.

V. PROCEDURE

A. The following documentation is needed for reviewing a CT Request:

1. Physician history and physical including prior radiographic reports IE: X-Ray, MRI, CT, and prior PET scan if applicable.
2. Attending Physician's consult or progress note
3. Pathology and pertinent lab values

B. CODING: BILLING/CODING INFORMATION: The following codes may be used to describe

CPT:

- 72160 - CT Chest with contrast
- 71250 - CT Chest without contrast
- 74160 - CT Abdomen with contrast
- 74050 - CT Abdomen without contrast
- 72193 - CT Pelvis with contrast
- 72192 - CT Pelvis without contrast
- 74176 - Abdomen and Pelvis without contrast
- 74177 - Abdomen & Pelvis with contrast

VI. APPROVAL AUTHORITY

A. Review – Utilization Management Department

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B. Final Approval – Utilization Management Committee

VII. ATTACHMENTS

A. None

VIII. REFERENCES

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