Effective for dates of service on or after April 1, 2013, refer to: https://www.bcbsal.org/providers/policies/careCore.cfm

Name of Policy:  
Magnetic Resonance Imaging (MRI) of the Cervical, Thoracic, and Lumbar Spine

Policy #: 278  
Category: Radiology  
Latest Review Date: February 2013  
Policy Grade: A

Background/Definitions:  
As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

1. The technology must have final approval from the appropriate government regulatory bodies;
2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;
3. The technology must improve the net health outcome;
4. The technology must be as beneficial as any established alternatives;
5. The improvement must be attainable outside the investigational setting.

Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:

1. In accordance with generally accepted standards of medical practice; and
2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient’s illness, injury or disease; and
3. Not primarily for the convenience of the patient, physician or other health care provider; and
4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient’s illness, injury or disease.
**Description of Procedure or Service:**
Magnetic resonance imaging (MRI) uses a magnetic field, radio waves and a computer to create detailed image slices (cross sections) of the neck. MRI technology produces better soft-tissue images than X-rays, which allow the physician to accurately evaluate different types of body tissue including the spinal cord, vertebral disks and surrounding tissues, as well as distinguish normal, healthy tissue from diseased tissue. In some cases, the radiologist requests a contrast agent (dye) to improve the quality of the images.

The patient is positioned on the scanning table headfirst with arms at the side. Coils (special devices to improve image quality) may be placed on or around the cervical spine area. The scanning table slides into the magnet, covering the whole body. During the scan patients do not feel anything, but they hear intermittent humming, thumping, clicking and knocking sounds.

**Policy:**
*Effective for dates of service on or after April 1, 2013, refer to:*
www.bcbsal.com/providers/policies/index.cfm

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**Effective for dates of service on or after October 1, 2006 through March 31, 2013:**
MRI of the cervical, thoracic, and lumbar spine meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the following conditions when medically necessary and supported by clinical and laboratory findings:
- Primary spinal bone tumors or suspected vertebral, paraspinal, or intraspinal metastases
- Known or suspected primary spinal cord tumors (malignant or non-malignant)
- Suspected infectious process
- Suspected spinal fracture and/or dislocation secondary to trauma
- Suspected spinal cord injury secondary to trauma.
- Spondylolisthesis and degenerative disease of the spine
- Persistent neck or back pain with radiculopathy
- Severe neck or back pain after trial of conservative treatment for four weeks or greater or pain so severe as to require opiates with no relief after two days
- Clinical evidence of spinal stenosis
- Presence of “red flags” in the patient’s history when associated with neck or back pain,
  - Fever 38°C or 100.4°F for more than 48 hours,
  - Chills,
  - Unexplained weight loss,
  - Unrelenting night pain,
  - Unrelenting pain at rest,
  - Pain with distal (below the knee),
  - Numbness or weakness of leg(s),
  - Previous cancer, suspicion of cancer,
  - Progressive neurological deficit,
  - Osteoporosis,
  - Immunosuppression,
- Loss of bowel or bladder control, or
- Intravenous drug use.
- Known or suspected myelopathy (e.g., multiple sclerosis)
- Congenital anomalies or deformities of the spine
- Rapidly progressing neurological deficit, or major motor weakness
- Evaluation of recurrent symptoms after spinal surgery
- Evaluation prior to epidural injection to rule out tumor or infection and to delineate the optimal anatomical location for performing the injection
- Spinal cord pathology (e.g., intraspinal tumors, spinal cord cystic lesion, intramedullary lesions, syringomyelia)
- Suspected meningocele or myelomingingocele

**Effective for dates of service on or after September 1, 2007 through March 31, 2013:**

- Suspected medulloblastoma
- Suspected ependymoma

**In addition to the above indications, effective for dates of service on or after September 1, 2007 through March 31, 2013:**

MRI of the **cervical spine** meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the following condition when medically necessary and supported by clinical and laboratory findings:
- Suspected brachial plexus injury
- Suspected schwannoma or neurofibroma

**In addition to the above indications, effective for dates of service on or after September 1, 2007 through March 31, 2013:**

MRI of the **lumbar spine** meets Blue Cross and Blue Shield of Alabama’s medical criteria for coverage for the following condition when medically necessary and supported by clinical and laboratory findings:
- Suspected tethered cord

Individual case consideration will be given to patients with conditions not described above. Clinical notes will be required for review.

**Repeat MRI of the lumbar spine meets** Blue Cross and Blue Shield of Alabama’s medical criteria for coverage when there is a significant change in clinical findings (i.e., new or progressive neurological deficit).

*Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the members’ contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.*
Key Points:
According to the American College of Radiology (ACR), MRI of the spine is one of the most sensitive diagnostic tests for detecting anatomic abnormalities of the spine and adjacent structure. However, findings may be misleading if not closely correlated with the clinical history, clinical examination, or physiologic tests. MRI allows direct visualization of the spinal cord, nerve roots, and discs, while their location and morphology can only be inferred on plain radiography and less completely evaluated on myelography. MRI is also the only imaging modality to evaluate the internal structure of the spinal cord.

Approved by Governing Bodies:
FDA approved
In 2006, the Food and Drug Administration (FDA) issued a Public Health Advisory to healthcare professionals regarding Nephrogenic Systemic Fibrosis or Nephrogenic Fibrosing Dermopathy (NSF/NFD) which may occur in patients with moderate to end-stage kidney disease after they have a MRI or Magnetic resonance angiography (MRA) with a gadolinium-based contrast agent.

First identified in 1997, NSF/NFD is almost exclusively found in patients with renal failure and acidosis. Patients with this condition develop fibrosis of the skin and connective tissues throughout the body. The skin thickening may inhibit flexion and extension of joints, resulting in contractures. In addition, patients may develop widespread fibrosis in other organs. A skin biopsy is necessary to make a definitive diagnosis. The disease is progressive and may be fatal. Its cause is unknown.

Patients who receive gadolinium-containing contrast agents should be aware of the following possible signs and symptoms of NSF/NFD and advised to seek medical attention if these occur: swelling and tightening of the skin; difficulty extending the joints of arms, hands, legs, and feet; weakness, reddened or darkened areas on the skin; burning or itching of the skin; and deep bone pain in the hips and ribs.

Physicians should be cautious regarding the use of gadolinium-containing contrast imaging agents, especially at high doses, in patients with moderate to end-stage renal failure.

Benefit Application:
Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply
BellSouth/AT&T contracts: No special consideration
FEP contracts: Special benefit consideration may apply. Refer to member’s benefit plan.
Wal-Mart: Special benefit consideration may apply. Refer to member’s benefit plan.

Pre-certification requirements: Effective for dates of service on or after November 1, 2007, required when ordered by a provider in a Blue Cross and Blue Shield of Alabama’s Preferred or Participating Network for a patient covered by Blue Cross and Blue Shield of Alabama who will
receive outpatient imaging services(s) from a Preferred Medical Doctor (PMD) or Preferred Radiology Participating (PRP) provider.

**Exceptions to the Alabama PMD and PRP pre-certification requirement:** NASCO, Wal-Mart, Blue Advantage, Flowers Foods, Inc., FEP.

In addition to the above Blue Cross and Blue Shield of Alabama PMD/PRP Network requirement, some self-insured national account groups may require pre-certification for all MRIs effective for dates of service on or after January 1, 2009. Please confirm during your benefit verification process if a pre-certification is required.

Reviews to verify accuracy of pre-certification information will be conducted.

**Coding:**
CPT Codes: 72141 Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; without contrast material
72142 ;with contrast material(s)
72146 Magnetic resonance (e.g. proton) imaging, spinal canal and contents, thoracic; without contract material
72147 ;with contrast material(s)
72148 Magnetic resonance (e.g. proton) imaging, spinal canal and contents, lumbar; without contrast material(s)
72149 ;with contrast materials(s)
72156 Magnetic resonance (e.g. proton) imaging, spinal canal and contents, without contract material, followed by contrast materials(s) and further sequences, cervical
72157 ;thoracic
72158 ;lumbar

**References:**
**Policy History:**
Medical Policy Group, March 2006 (2)
Medical Policy Group, July 2006 (2)
Medical Policy Administration Committee, August 2006
Available for comment August 15-September 28, 2006
Medical Policy Group, January 2007 (2)
Medical Policy Group, September 2007 (2)
Medical Policy Administration Committee, October 2007
Available for comment October 23-December 6, 2007
Medical Policy Group, November 2008 (2)
Medical Policy Administration Committee, January 2008
Available for comment December 12, 2008-January 26, 2009
Medical Policy Group, February 2013 (2): Updated policy with link to CareCore National©
medical policies effective April 1, 2013
Medical Policy Administration Committee, March 2013
Available for comment February 15 through March 31, 2013
Medical Policy Group, November 2013 (2): Updated link to CareCore National©

*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member’s plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield’s administration of plan contracts.*