

Corporate Medical Policy

Positional Magnetic Resonance Imaging (MRI)

File Name: positional_magnetic_resonance_imaging_(mri)
Origination: 08/2007
Last CAP Review: 5/2008
Next CAP Review: Not applicable
Last Review: 8/2010

Active policy, no longer scheduled for routine literature review.

Description of Procedure or Service

Positional magnetic resonance imaging (MRI) allows imaging of the patient in various positions, including sitting and standing. This technology is being evaluated for the diagnosis of patients with position dependent back pain.

Determining the cause of back pain is a complex task. In some patients, extensive evaluation with various imaging modalities does not lead to a definitive diagnosis. Some recent studies have suggested that imaging the body in various positions with loading of the spine may lead to more accurate diagnosis. This loading can be accomplished by having the patient stand upright or sit. Also, imaging can be completed with the patient in the position that causes the symptom(s). This is being evaluated in suspected nerve root compression and in some cases of spondylolisthesis.

A new open MRI system has been developed that allows imaging of the patient in various positions. The imaging can be conducted with partial or full weight-bearing. Dynamic-kinetic imaging (images obtained during movement) can also be obtained with this system. Conventional MR imaging of the spine is typically completed with the patient in a recumbent position. Weight-bearing can be simulated by imaging in the supine position with a special axial loading device.

FONAR Corporation has 510(k) marketing clearance from the U. S. Food and Drug Administration (FDA) for a MRI system that performs positional MRI scans (i.e., FONAR.s Upright® MRI).

*****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

Policy

Active policy, no longer scheduled for routine literature review.

BCBSNC will not provide coverage for positional (non-recumbent or upright) magnetic resonance imaging (MRI). It is considered investigational. BCBSNC does not cover investigational services.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

Positional Magnetic Resonance Imaging (MRI)

When positional MRI is covered

Not applicable.

When positional MRI is not covered

Positional (non-recumbent or upright) magnetic resonance imaging (MRI) is considered investigational, including its use in the evaluation of patients with cervical, thoracic, or lumbosacral back pain.

Policy Guidelines

While this imaging approach is interesting, published results are in an early phase. Additional study is needed to first determine the characteristics of patients who might benefit from positional MRI studies. In addition, the clinical benefit of basing treatment decision, including surgery, on these additional findings need to be established. Another concern that needs further study is that positional scans, which use lower strength magnets, may be of lesser quality than those from traditional supine MRI. Studies are also needed to determine if this technique might replace current diagnostic tests, such as myelography. Given this novel approach, randomized trials may be needed to adequately evaluate this technique. At the present time, its impact on outcomes is not known.

An updated review of the literature indicates that this technology has potential benefit for some patients, but the specific procedures and indications have yet to be established. The scientific evidence at this time does not permit conclusions concerning the effect of this technology on health outcomes. Therefore, the use of positional MRI is considered investigational.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: there is no specific code for this service

The service would be coded using the CPT code for the MRI scan.

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

Washington State Department of Labor and Industries. Health Technology Assessment: Standing, Weight-Bearing, Positional, or Upright Magnetic Resonance Imaging. May 31, 2006. Retrieved July 2, 2007 from <http://www.Ini.wa.gov/ClaimsIns/Files/OMD/StandMriTAMay2006.pdf>

Hailey D. *Open magnetic resonance imaging (MRI) scanners* [Issues in emerging health technologies issue 92]. Ottawa: Canadian Agency for Drugs and Technologies in Health; 2006.

Weishaupt D, Schmid MR, Zanetti M, Boos N, Romanowski B, Kissling RO, et al. Positional MR imaging of the lumbar spine: does it demonstrate nerve root compromise not visible at conventional MR imaging? *Radiology* 2000; 215(1):247-53.

Positional Magnetic Resonance Imaging (MRI)

Jinkins JR, Dworkin JS, Green CA, Greenhalgh JF, Gianni M, Gelbien M, et al. Upright, Weight-bearing, Dynamic-kinetic Magnetic Resonance Imaging of the Spine--Review of the First Clinical Results. *J HK Coll Radiol* 2003;6:55-74

BCBSA Medical Policy Reference Manual [Electronic Version]. 6.01.48, 2/15/07

BCBSA Medical Policy Reference Manual [Electronic Version]. 6.01.48, 4/9/08

BCBSA Medical Policy Reference Manual [Electronic Version]. 6.01.48, 4/08/2010

Policy Implementation/Update Information

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| 8/27/07 | New policy issued. Positional (non-recumbent or upright) magnetic resonance imaging (MRI) is considered investigational, including its use in the evaluation of patients with cervical, thoracic, or lumbosacral back pain. (adn) |
| 6/16/08 | Specialty Matched Consultant Advisory Panel review 5/15/08. No change to policy statement. (adn) |
| 6/22/10 | Policy Number(s) removed (amw) |
| 9/14/10 | Description section revised. Policy Guidelines updated. Policy status changed to "Active policy, no longer scheduled for routine literature review." (adn) |

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.