MEDICAL POLICY – 6.01.46
Dynamic Spinal Visualization

BCBSA Ref. Policy: 6.01.46 Dynamic Spinal Visualization
Effective Date: June 1, 2017
Last Revised: May 2, 2017
Replaces: 6.01.508

RELATED MEDICAL POLICIES:
8.03.501 Chiropractic Services

Select a hyperlink below to be directed to that section.
POLICY CRITERIA | CODING | RELATED INFORMATION
EVIDENCE REVIEW | REFERENCES | HISTORY

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Introduction

Dynamic spinal visualization is a way to see how the spine moves as a person bends or twists. It’s thought that looking at moving images could help a healthcare professional diagnose the cause of neck or back pain or other problems with the spine. There are several different ways to create moving images as the spine twists or turns. Most techniques use x-ray to create images on film, a video monitor, or computer screen. Several x-rays are taken, assembled in order, and then played to create a moving image. Other technologies use fluoroscopy and MRI. Because there are not enough medical studies to show how well dynamic spinal visualization works, it’s considered unproven.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria
Dynamic spinal visualization is a general term addressing different imaging technologies that simultaneously visualize spine (vertebrae) movements and external body movement. These technologies have been proposed for the evaluation of spinal disorders including neck and back pain.
Background

Most spinal visualization methods use x-rays to create images either on film, video monitor, or computer screen. Digital motion x-ray involves the use of either film x-ray or computer-based x-ray “snapshots” taken in sequence as a patient moves. Film x-rays are digitized into a computer for manipulation, while computer-based x-rays are automatically created in a digital format. Using a computer program, the digitized snapshots are then put in order and played on a video monitor, creating a moving image of the inside of the body. This moving image can then be reviewed by a physician, either alone or by using a computer, to evaluate several aspects of the body’s structure in order to determine the presence or absence of abnormalities. One use of this technology may be to examine intervertebral flexion and extension.

Videofluoroscopy and cineradiography are different names for the same procedure, which uses fluoroscopy to create real-time video images of internal structures of the body. Unlike standard x-rays, which take a single picture at one point in time, fluoroscopy provides motion pictures of the body. The results of these techniques can be displayed on a video monitor as the procedure is being conducted, as well as recorded, to allow computer analysis or evaluation at a later time. Like digital motion x-ray, the results can be evaluated by a physician alone or with the assistance of computer analysis software.

Dynamic magnetic resonance imaging (MRI) is also being developed for imaging of the cervical spine. This technique uses an MRI-compatible stepless motorized positioning device (NeuroSwing, Fresenius/Siemens) and a real-time true fast imaging with steady-state precession sequence to provide passive kinematic imaging of the cervical spine. The quality of the images is lower than a typical MRI sequence, but is proposed to be adequate to observe changes in the alignment of vertebral bodies, the width of the spinal canal, and the spinal cord. Higher resolution imaging can be performed at the end positions of flexion and extension.

Summary of Evidence

For individuals who have back or neck pain who receive dynamic spinal visualization, the evidence includes comparative trials. Relevant outcomes are test accuracy, symptoms, and functional outcomes. Techniques include digital motion x-rays, cineradiography/videofluoroscopy, or dynamic magnetic resonance imaging of the spine and neck. The available studies compare spine kinetics in patients with neck or back pain to that in healthy controls. No literature was identified on the diagnostic accuracy of dynamic visualization in a relevant patient context.
population. No evidence was identified on the effect of this technology on symptoms or functional outcomes. The evidence is insufficient to determine the effects of the technology on health outcomes.

Practice Guidelines and Position Statements

No guidelines or statements were identified.

Medicare National Coverage

There is no national coverage determination (NCD). In the absence of an NCD, coverage decisions are left to the discretion of local Medicare carriers.

Regulatory Status

In 2012, The KineGraph VMA™ (Vertebral Motion Analyzer, Ortho Kinematics) was cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. The system includes a Motion Normalizer™ for patient positioning, standard fluoroscopic imaging, and automated image recognition software. Processing of scans by Ortho Kinematics is charged separately.

FDA product code: LLZ.

References


### History

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<td>02/13/07</td>
<td>Add to Radiology Section - New Policy</td>
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<td>04/08/08</td>
<td>Replace policy - Policy updated with literature search; no change to the policy statement. References added.</td>
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<td>11/10/09</td>
<td>Replace policy - Policy updated with literature search; no change to the policy statement.</td>
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<td>Replace policy - Policy updated with literature review; references 7 and 8 have been added, others removed and reordered. The policy statement remains unchanged.</td>
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<td>Replace policy – Policy updated with literature review through July 2011; no new references added; policy statement unchanged. ICD-10 codes added.</td>
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<td>06/26/12</td>
<td>Related policies updated with the addition of 6.01.513.</td>
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<td>Update Related Policies, add 8.03.501.</td>
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<td>Annual Review. Policy updated with literature review through July 24, 2014; policy statement unchanged.</td>
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<td>08/31/16</td>
<td>Coding Update. Add CPT code 76496.</td>
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<tr>
<td>06/01/17</td>
<td>Annual Review, approved May 2, 2017. Policy moved into new format. Policy updated with literature review through January 25, 2017; no references added. Policy statement</td>
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**Scope:** Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.
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Premera:
- Provides free aids and services to people with disabilities to communicate effectively with us, such as:
  - Qualified sign language interpreters
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If you need these services, contact the Civil Rights Coordinator.

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Toll free 855-332-4535, Fax 425-918-5592, TTY 800-842-5357
Email AppealsDepartmentInquiries@Premera.com

You can file a grievance in person or by mail, fax, or email. If you need help filing a grievance, the Civil Rights Coordinator is available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at:

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Getting Help in Other Languages

This Notice has Important Information. This notice may have important information about your application or coverage through Premera Blue Cross. There may be key dates in this notice. You may need to take action by certain deadlines to keep your health coverage or help with costs. You have the right to get this information and help in your language at no cost. Call 800-722-1471 (TTY: 800-842-5357).

Arabic (Arabic):
يحتوي هذا الإشعار على سياسة هامة يخص بيمو斯顿 تليك او Premera Blue Cross في هذا الإشعار معلومات هامة بخصوص طبيك او
العطلة التي تزيد الحصول عليها من خلال مراكز Premera Blue Cross. يوجد هناك توضيح مفصل.

中文 (Chinese):
本通知有重要的訊息。本通知可能有關於您透過 Premera Blue Cross 提交的申請或保險的重要訊息。本通知可能有重要日期。您可能需要在截止日期之前採取行動，以保留您的健康保險或費用補貼。您有權利免費以您的母語得到本訊息和幫助。請撥電話 800-722-1471 (TTY: 800-842-5357).

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Français (French):

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Avi a loul gen enfòmasyon enpòtan ladan. Avi a loul gen enfòmasyon enpòtan konpsesyon aplikasyon w lan osa konspesyon kouvèti asirans lan atravè Premera Blue Cross. Kapab genyen dat ki enpòtan nan avi a loul. Ou ka gen pou pran kòk aksyon avan seten dwa w ki sèt pou sa, w la osa pou yo ka ede w avèk depans yo. Se dwa w pou resewwa enfòmasyon sa a ak asistans nan lang ou pale a ou sa, san ou pa gen pou peye pou sa. Rate nan 800-722-1471 (TTY: 800-842-5357).

Deutsche (German):

Hmoob (Hmong):

Ilokano (Ilocano):
Daytoy a Pakdaar ket naglaon iti Napateg nga Impormasion. Daytoy a pakdaar mabalini nga adda ket naglaon iti napateg nga impormasion maijangpeeg iti aplikasyonono wayno coverage babaen iti Premera Blue Cross. Daytoy ket mabalini dagit importante a pelta iti daytoy a pakdaar. Mabalini nga adda rumbeg nga aramideny nga addag sakyab dagitik partikular a nalitinding nga aldwai tapno mapagtalinadayo ti coverage ti salun-ayno wenyong tulong kadagit gastos. Adda karbangeno a mangala iti daytoy nga impormasion ken tulong ti bukodyo a pagasasa nga awan ti bayadangy. Tumawag ti numero nga 800-722-1471 (TTY: 800-842-5357).

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Premera Blue Cross: Este aviso contiene información importante. Este aviso puede contener información importante privada cerera sobre su información y su privacidad de Premia Blue Cross. Por esta razón, debe leerlo con cuidado y tomar la acción correcta.

800-722-1471 (TTY: 800-842-5357)