

## Evidence Based Guideline

# Dynamic Spinal Visualization

**File Name:** dynamic\_spinal\_visualization  
**Guideline Number:** EBG.RAD5041  
**Origination:** 3/2009  
**Last Review:** 3/2009  
**Next Review:** 3/2011

### Description of Procedure or Service

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Dynamic spinal visualization is a term used to describe several different imaging technologies, including [digital motion x-ray](#) and videofluoroscopy of the spine (also known as [cineradiography](#)). These technologies allow the simultaneous visualization of movement of internal body structures, such as the spine (vertebrae), with corresponding external body movement. All of these methods use x-rays to create images either on film, video monitor, or computer screen. These technologies have been proposed for the evaluation of spinal disorders including low back pain.

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. The digitized snapshots are then put in order using a computer program and played on a video monitor, creating a moving image of the inside of the body. This moving image can then be evaluated by a physician alone or by using a computer that evaluates several aspects of the body's structure such as intervertebral flexion and extension to determine the presence or absence of abnormalities.

### Evidence Based Guideline for Dynamic Spinal Visualization

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Published data are not sufficient to support the use of digital motion x-rays or cineradiography/videofluoroscopy of the spine, therefore, this technology is considered investigational for all indications.

### Medical Evidence regarding Dynamic Spinal Visualization indicates it is not recommended in the following situations:

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Dynamic spinal visualization, including, but not limited to, digital motion x-ray of the spine, with or without digitization of spinal x-rays and computerized analysis of the back or spine, is not recommended for any indication. Also, videofluoroscopy (cineradiography), when used to visualize movement of the back or spine, is not recommended.

Current literature evaluating the clinical utility of dynamic spinal visualization techniques, including digital motion x-ray and cineradiography (video fluoroscopy) for the evaluation and assessment of the spine, is limited to a few studies involving very small numbers of participants.

The clinical utility of this technique has not been demonstrated. While reports have studied the correlation of this technique to disc degeneration, no studies have evaluated the incremental value of this information compared to the standard evaluation. In addition, no studies have shown how the use of this information has an impact on or improves health outcomes.

## Policy: Dynamic Spinal Visualization

Studies have shown that abnormalities in spinal motion are found in individuals with low back pain, particularly those with spondylolisthesis. However, the test does not always separate those with disease from those without disease. In addition, this technique continues to evolve.

### Benefits Application

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Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

### Billing/Coding/Physician Documentation Information

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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](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable codes: 76120, 76125*

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.

### Medical Term Definitions

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#### **cineradiography**

a radiological procedure that uses fluoroscopy, an x-ray procedure, to make it possible to see structures in the body in real-time. This procedure has been proposed as a tool to diagnose or evaluate disease or injuries of the spine.

#### **digital motion x-ray**

a technology in which successive x-rays are digitized and sequenced to create a video representation of movement of internal body structures

#### **digitization**

the process by which information is transformed from analog formats into digital computer-based formats

### Scientific Background and Reference Sources

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BCBSA Medical Policy Reference Manual [Electronic Version]. 6.01.46, 3/13/08

## Policy: Dynamic Spinal Visualization

### Policy Implementation/Update Information

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3/30/09 New Evidence Based Guideline issued. Dynamic spinal visualization, including, but not limited to, digital motion x-ray of the spine, with or without digitization of spinal x-rays and computerized analysis of the back or spine, is not recommended for any indication. Also, videofluoroscopy (cin-radiography), when used to visualize movement of the back or spine, is not recommended.

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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.