



General Guidelines for Plain Film Spinal Radiography and X-ray Consultation Made Elsewhere

Optum Health Solutions Musculoskeletal (MSK)
Utilization Management Policy
Policy Number: 73

Effective Date: 04/25/2024

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Policy Statement

Spinal plain film radiography may be an appropriate diagnostic testing option when red flags are identified that suggest further screening for cancer, infection and/or fracture is warranted. Plain film radiography may be sufficient for the initial evaluation of patients who present with these red flags: age >70 years, low-velocity trauma, chronic steroid use and/or risk of osteoporosis. Plain film radiographs may be appropriate but are usually not sufficient for clinical decision making without advanced imaging (MR and/or CT) in the presence of other red flags. Spinal plain film radiography may also be appropriate for the evaluation of spinal deformity correction surgery or in the postoperative evaluation of instrumentation and fusion.

The clinical appropriateness of spinal plain film radiography has not been established as a routine diagnostic and/or biomechanical analysis procedure for patients being evaluated for spine-related disorders.

Consultation on X-ray examination made elsewhere is not billable as a separate service by the treating health care provider. The relative work value of the E/M service includes the value for reviewing medical records and diagnostic studies. One of the “key components” of the elements of medical decision-making includes the amount and complexity of the data.

Purpose

This policy describes a summary of the indications and limitations for utilization of spinal plain view radiographs and review/interpretation of plain-film radiographs taken by an outside entity. The policy is intended to promote patient safety, to inform health care provider decision making, and as the criterion used by support clinicians in the evaluation of clinical appropriateness. The final determination of clinical justification depends upon correlation of the patient's presenting clinical evaluation.

Scope

This policy serves as a resource for peer-to-peer interactions in describing the position of Optum on the general guidelines for the use of spinal plain-film radiography in clinical settings and X-ray consultation performed elsewhere.

Clinical Evidence

Spine-related disorders (SRD) – low back and neck pain – are among the most common physical conditions requiring health care services and affecting an individual's ability to work and manage daily activities. (United States Bone and Joint Decade, 2008) The lifetime prevalence of LBP is approximately 85% and possibly closer to 100% of adults. (Dagenais, 2010) Neck pain causes significant impairment which is secondary only to low back pain. (Gross, 2009) Similarly, mechanical (non-specific) is the most common designation for neck pain. (Smith, 2013) The challenge for the clinician is to distinguish the small segment within this large patient population that should be evaluated further because of suspicion of a more serious problem. (Hutchins, 2021)

The standard patient management recommendations synthesized from clinical practice guidelines for SRD emphasize a focused history and physical examination, reassurance, initial pain management medications if necessary (acetaminophen or nonsteroidal anti-inflammatory drugs), and consideration of nonpharmacologic therapies (e.g., manipulation, exercise, etc.) without routine imaging in patients with nonspecific neck and/or low back pain. (Bussi eres, 2008; Dagenais, 2010; Koes, 2010; Pillastrini, 2011) Imaging is considered for those without improvement after 6 weeks and for those with clinical indicators of serious pathologies (red flags). (Bach, 2009; Bussi eres, 2008; Chou, 2011; Chou, 2007)

Despite guideline recommendations, a substantial proportion of patients with acute low back pain receive imaging. The clinician-level decision making has been shown to account for 25% of the variance in the use of imaging for older patients presenting with acute low back pain. (Tan, 2015) Clinical evidence suggests that spine imaging in low-risk situations is more likely to result in harm from irrelevant findings than to a benefit from discovering unsuspected disease. (Deyo, 2015)

Clinical practice guidelines (CPG) recommend that clinicians assess patients for potentially serious spinal pathology. *Red flags* are signs, symptoms and patient characteristics that may indicate the need for further screening to rule out the possibility of underlying health conditions. While individual red flags are usually not informative, combinations of these factors according to their clinical implication (e.g., risk of malignancy or fracture) improves their accuracy and utility. (Henschke, 2013; Rubinstein, 2008; Williams, 2013) CPG have suggested the appropriate diagnostic testing for

the different red flags. Spinal plain film radiography may be an appropriate diagnostic testing option when red flags are identified that suggest the further screening for cancer, infection and/or fracture is warranted. Plain film radiography may be sufficient for the initial evaluation of patients presenting with the following red flags (Hutchins, 2021):

- Age >70 years
- Low-velocity trauma
- Osteoporosis
- Chronic steroid use

Plain film radiographs may be appropriate but are usually not sufficient for clinical decision making without advanced imaging (MR and/or CT) in the presence of other red flags including (Hutchins, 2021; Dagenais, 2010):

1. Age <20 years or >50 years
2. Failure to improve under treatment without prior radiographs
3. Fever
4. History of malignancy
5. Immune suppression
6. Night pain
7. Night pain (unrelated to movement)
8. Pain at multiple sites
9. Pain at rest
10. Personal history of intravenous drug abuse
11. Structural deformity
12. Systemic unwellness
13. Unexplained weight loss

Spinal radiographs have a role in spinal deformity correction surgery and postoperative evaluation of instrumentation and fusion. (Hutchins, 2021) For the evaluation of scoliosis in children, radiographic decision-making and examinations should be performed in accordance with guidance published by the American College of Radiology (ACR) and the Society for Pediatric Radiology (SPR). (Faerber, 2009, 2012) Radiographic examination is indicated for pediatric patients at high risk for cervical spine instability, especially those with Down syndrome. (Faerber, 2012)

In the absence of red flags, routine spinal radiography has not been shown to have any effect on clinical outcomes (intensity and disability) in patients with low back pain presenting for chiropractic care. In addition to circumstances where plain film radiographs may be insufficient for clinical decision making without advanced imaging, there are limitations in the utility of radiography in clinical settings. These include contraindications and applications, where the clinical justification (i.e., the results are likely to influence the management and outcomes) have not been established. (Jenkins, 2018)

Pregnancy and the weight of patient, when body type and/or size preclude good radiographic resolution or exceed the limits of the x-ray table, are contraindications to receiving spinal plain film radiography. (O'Sullivan, 2017)

The clinical appropriateness of spinal plain film radiography has not been established as a routine diagnostic procedure for patients being evaluated for SRD. Strong evidence shows that routine back imaging does not improve patient outcomes, exposes patients to unnecessary harms, and increases costs. (Chou, 2011) Available evidence indicates that immediate, routine lumbar spine imaging in patients with LBP and without features indicating a serious underlying condition did not improve outcomes compared with usual clinical care without immediate imaging. Clinical care without immediate imaging seems to result in no increased odds of failure in identifying serious underlying conditions in patients without risk factors for these conditions. In addition to lacking clinical benefit, routine lumbar imaging is associated with radiation exposure (radiography and CT) and increased direct expenses for patients and may lead to unnecessary procedures. This evidence confirms that clinicians should refrain from routine, immediate lumbar imaging in primary care patients with nonspecific, acute or subacute LBP and no indications of underlying serious conditions. (Andersen, 2011) In the absence of red flags, routine spinal radiography has not been shown to have any effect on clinical outcomes (intensity and disability) in patients with low back pain presenting for chiropractic care. These results support that current guideline recommendations against routine imaging apply equally to chiropractic practice. (Jenkins, 2018)

The routine use of spinal radiographs for structural and biomechanical analysis has not been substantiated to improve patient outcomes. The utility of plain film radiography for the detection of spinal 'subluxations' or to guide the specifics of spinal manipulative therapy, is controversial. The validity of the various systems of roentgenometric analysis has not been proven and their underlying premise of bilateral symmetry within the body does not take into account natural structural anomalies. Nonspecific spinal abnormalities are common in asymptomatic patients (Jenkins, 2018; Hutchins, 2021).

Coding Information

CPT Code 76140 is a service code that is typically utilized by a radiologist or other consultant to reflect an outside second opinion (consultation) on a radiographic study with a written report.

When a patient presents with diagnostic studies from an outside facility, the treating health care provider may review them and write a report of the findings. However, this would not be billed as 76140. Further, this code is not intended to be used by providers within the same facility to reread radiographs.

This code is reported when one provider asks a second provider in a different facility to provide advice and/or opinion on an imaging study. The second provider interprets the studies and provides a written report. The consulting provider does not actually see the patient.

Note: The Current Procedural Terminology (CPT) codes listed in this policy may not be all inclusive and are for reference purposes only. The listing of a service code in this policy does not imply that the service described by the code is a covered or non-covered health service. Coverage is determined by the member's benefit document.

CPT Code	Description
76140	Consultation on X-ray examination made elsewhere, written report

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Review and Approval History

Date	Description
1/1997	Original effective date
3/24/1998	Annual review completed
1/28/1999	Annual review completed
2/23/2000	Annual review completed
3/07/2001	Annual review completed
9/04/2001	Updated approval - policy references updated
9/20/2002	Annual review completed
11/11/2003	Annual review completed
3/30/2004	Updated approval - policy references updated
11/18/2004	Annual review completed
2/14/2006	Annual review completed
12/04/2006	Annual review completed
4/10/2008	Annual review completed
11/11/2008	Policy header rebranded, "OptumHealth Care Solutions – Physical Health
1/15/2009	Policy placed into new format
4/30/2009	Annual review completed
4/08/2010	Annual review and approval completed
10/26/2010	Policy rebranded to "OptumHealth Care Solutions, Inc. (OptumHealth)"
4/07/2011	Annual review completed
4/19/2012	Annual review completed
4/18/2013	Policy revised using more recent sources. Annual review completed
4/17/2014	Annual review completed; Policy rebranded "Optum* by OptumHealth Care Solutions, Inc."
4/16/2015	Annual review completed
4/21/2016	Updated Background section; Annual review completed
4/20/2017	Annual review and approval completed; Legal entity name changed from "OptumHealth Care Solutions, Inc." to "OptumHealth Care Solutions, LLC."
4/26/2018	Annual review completed
4/25/2019	Annual review completed

4/23/2020	Annual review completed; No new information that would change the policy statement
4/22/2021	Annual review completed; No new information that would change the policy statement
5/3/2022	Annual review completed; Updated the “Limitations of Spinal Radiography and References sections
6/29/2022	Updated legal entity name “OptumHealth Care Solutions, LLC.” to *Optum™ Physical Health (“Optum”) includes OptumHealth Care Solutions, LLC; ACN Group IPA of New York, Inc.; ACN Group IPA of California, Inc. d/b/a OptumHealth Physical Health of California; Managed Physical Network, Inc.; and OrthoNet Holdings, Inc. which includes OrthoNet New York IPA, Inc., OrthoNet West, Inc., OrthoNet, LLC, OrthoNet of the South, Inc.
4/27/2023	Annual review and approval completed; no significant changes made to the document. Updated contact email from policy.inquiry@optumhealth.com to phpolicy_inquiry@optum.com.
2/14/2024	Annual review completed. Document content transitioned to new policy template. Content from policy 447-Consultaion on X-Ray Examination Made Elsewhere incorporated into this policy. Approved by Optum Clinical Guideline Advisory Committee.
4/25/2024	Annual review and approval completed. Document content transitioned to new policy template. Content from policy 447-Consultation on X-Ray Examination Made Elsewhere incorporated into this policy.
