

# 2026 Magnetic Resonance Imaging (MRI) Bone Marrow

---

## *Diagnostic Imaging*

MRI-BoneMarrow-HH  
Copyright © 2026 WNS (Holdings) Ltd.

**Last Review Date: 09/30/2025**  
Previous Review Date: 09/09/2025  
Guideline Initiated: 06/30/2019





A WNS COMPANY

## Table of Contents

Magnetic Resonance Imaging (MRI) Bone Marrow .....	3
MRI Bone Marrow Related National Coverage Determination (NCD)/Local Coverage Determination (LCD) .....	3
Clinical Judgment .....	3
MRI General Contraindications .....	3
Preamble: Pediatric Diagnostic Imaging .....	3
MRI Bone Marrow Guideline .....	3
MRI Bone Marrow Procedure Codes .....	4
MRI Bone Marrow Summary of Changes .....	4
MRI Bone Marrow Definitions .....	5
MRI Bone Marrow References .....	6
Disclaimer section .....	7
Purpose .....	7
Clinician Review .....	7
Payment .....	7
Registered Trademarks (®/™) and Copyright (©) .....	7
National and Local Coverage Determination (NCD and LCD) .....	8
Background .....	8
Medical Necessity Codes .....	8



A WNS COMPANY

## Magnetic Resonance Imaging (MRI) Bone Marrow

### MRI Bone Marrow Related National Coverage Determination (NCD)/Local Coverage Determination (LCD)

Please refer to <https://www.cms.gov/medicare-coverage-database/search.aspx> if applicable to the individual's health plan membership.

No related NCDs/LCDs

### Clinical Judgment

These medical policies are designed to provide clinical guidance and do not supplant a provider's independent professional judgment. Physicians retain full and independent authority to determine appropriate care based on each patient's individual clinical circumstances. Although services may be subject to documentation requirements, medical necessity review, or coverage limitations, nothing in this policy is intended to restrict or interfere with a physician's independent medical judgment.

### MRI General Contraindications

MRI is contraindicated for **ANY** of the following

- Safety, related to clinical status (body mass index exceeds MRI capability, intravascular stents within recent 6 weeks)  
**References:** [7] [3] [4]
- Safety, related to implanted devices (aneurysm clips, cochlear implant, implantable cardio-defibrillators, insulin pump, permanent pacemaker, spinal cord stimulator)<sup>1</sup>  
**References:** [7] [3] [4]

### Preamble: Pediatric Diagnostic Imaging

HealthHelp's clinical guidelines for the Diagnostic Imaging program, are intended to apply to both adults and pediatrics (21 years of age or younger), unless otherwise specified within the criteria.

### MRI Bone Marrow Guideline

Magnetic resonance imaging (MRI) of the bone marrow is considered medically appropriate when the documentation demonstrates **ANY** of the following: (**\*NOTE: Entire body is imaged.**)

<sup>1</sup>Some implanted devices that were once absolute contraindications to a MRI may now be accepted, including if the specific MRI is able to accommodate the device or the device itself is deemed safe for MRI.

1. Marrow disorders, diffuse or multifocal (eg, chronic recurrent multifocal osteomyelitis, Gaucher’s disease, Waldenström macroglobulinaemia) are suspected or known and **ALL** of the following:
  - a. **ANY** of the following:
    - i. Abnormal physical exam findings are new and progressive.
    - ii. Laboratory exam (eg, complete blood count, protein levels) is abnormal.
    - iii. Symptoms (eg, anemia, fatigue, infections) are new or progressing.
  - b. Ordered by hematologist/oncologist

**References:** [5] [2]

2. Multiple myeloma (MM) or hematological malignancies (eg, leukemia, plasmacytoma) are suspected or known.

**References:** [5] [9] [8] [6]

3. Smoldering multiple myeloma (SMM) is known, based on laboratory testing or prior imaging (within the last 6 months) (eg, computed tomography [CT] or positron emission tomography [PET]/CT), when progression to MM or high risk SMM is suspected.

**References:** [5] [1]

## MRI Bone Marrow Procedure Codes

**Table 1. MRI Bone Marrow Associated Procedure Codes**

CODE	DESCRIPTION
77084	Magnetic resonance (eg, proton) imaging, bone marrow blood supply

## MRI Bone Marrow Summary of Changes

MRI bone marrow guideline had the following version changes from 2025 to 2026:

**Table 1. 2025-2026 MRI Bone Marrow Summary of Changes**

Date	Type of Change	Summary
09/30/2025	Annual	<ul style="list-style-type: none"> <li>• Added examples throughout for clarity</li> <li>• Added parameters (underlined) for "Smoldering multiple myeloma, <u>based on laboratory testing or prior imaging</u>"</li> <li>• Added definition "Plasmacytoma"</li> <li>• Removed NCD 220.2 due to no clinical information</li> <li>• Citations updated per the evidence</li> </ul>

## MRI Bone Marrow Definitions

**Acute** refers to initial diagnosis, up to 4 weeks.

**Chronic** refers to 3 months or more.

**Chronic multifocal osteomyelitis** is a disorder that causes bone pain due to inflammation in one or more bones not caused by infection.

**Computed tomography (CT)** is an imaging test that uses X-rays to computer analysis to generate cross sectional images of the internal structures of the body that can be displayed in multiple planes.

**Gaucher's disease** is a rare hereditary disorder of lipid metabolism caused by an enzyme deficiency and characterized by enlargement of the spleen and liver, bone lesions and sometimes neurological impairment.

**Leukemia** is a type of cancer that affects the blood and bone marrow. It's caused by the rapid production of abnormal white blood cells. These abnormal white blood cells can't fight infection and make it harder for the bone marrow to produce red blood cells and platelets.

**Magnetic resonance imaging (MRI)** is a non-invasive diagnostic technique that produces computerized images of internal body tissues and is based on nuclear magnetic resonance of atoms within the body induced by the application of radio waves.

**Multiple myeloma** is a blood cancer that develops in plasma cells in the bone marrow. Plasma cells are white blood cells that produce antibodies to protect the body from infection. In multiple myeloma, the plasma cells grow too much, crowding out normal bone marrow cells.

**Osteomyelitis** is an infectious, inflammatory disease of bone. It is often painful, bacterial in origin and may result in the death of bone tissue.

**Pediatric approximate ages** are defined by the US Department of Health (USDH), the Food and Drug Administration (FDA), and the American Academy of Pediatrics (AAP) as the following:

1. Infancy, between birth and 2 years of age
2. Childhood, from 2 to 12 years of age
3. Adolescence, from 12 to 21 years of age, further defined by the AAP into:
  - a. Early (ages 11–14 years)
  - b. Middle (ages 15–17 years),
  - c. Late (ages 18–21 years)
  - d. Older ages may be appropriate for children with special healthcare needs.

**Plasmacytoma** is a rare blood cancer that occurs when healthy plasma cells become abnormal. It's a tumor of plasma cells that can occur in soft tissue or bone. Plasmacytomas can occur anywhere in the body, but they're most common in the spine.

**Positron emission tomography (PET) scan** is a procedure in which a small amount of radioactive glucose (sugar) is injected into a vein, and a scanner is used to make detailed, computerized pictures of areas inside the body where the glucose is taken up. It is a medical imaging test that shows the metabolic or biochemical function of organs and tissues.

**Recurrence** is a new occurrence of something that happened or appeared before.

**Smoldering multiple myeloma** is a precancerous condition that alters certain proteins in blood and/or increases plasma cells in bone marrow, but it does not cause symptoms of disease. About half of those diagnosed with the condition, however, will develop multiple myeloma within 5 years.

**Waldenstrom macroglobulinemia** is a rare, slow-growing type of non-Hodgkin lymphoma. It's a blood cell cancer that starts in malignant B-cells.

## MRI Bone Marrow References

- [1] (2024). Clinical Overview Multiple myeloma. *Clinical Key*. Retrieved: August 2025. [https://www.clinicalkey.com/#!/content/clinical\\_overview/67-s2.0-ee606121-7959-403b-a55c-99476e59a20e#differential-diagnosis-heading-32](https://www.clinicalkey.com/#!/content/clinical_overview/67-s2.0-ee606121-7959-403b-a55c-99476e59a20e#differential-diagnosis-heading-32)
- [2] Beck, N.A., Roudnitsky, E., . . . Dedeoglu, F. (2023). How Have the Diagnosis and Treatment of Chronic Recurrent Multifocal Osteomyelitis Changed Over Time? *Journal of Oral and Maxillofacial Surgery*, 81(2), 238-247.
- [3] Carpenter, J.P., Litt, H. & Gowda, M. (2023). Magnetic Resonance Imaging and Arteriography. A.N. Sidawy (Eds.). *Rutherford's Vascular Surgery and Endovascular Therapy* (30). (pp. 336-394.e4). Philadelphia, PA: Elsevier.
- [4] Gupta, S.K., Ya'qoub, L., . . . Saeed, I.M. (2020). Safety and Clinical Impact of MRI in Patients with Non-MRI-conditional Cardiac Devices. *Radiology: Cardiothoracic Imaging*, 2(5), e200086.
- [5] Kumar, S.K., Callander, N.S., . . . Vogl, D. (2025). Multiple Myeloma Version 2.2026. *National Comprehensive Cancer Network*. Retrieved: August 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/myeloma.pdf](https://www.nccn.org/professionals/physician_gls/pdf/myeloma.pdf)
- [6] Lecouvet, F.E., Vekemans, M.C., . . . Vande Berg, B.C. (2022). Imaging of treatment response and minimal residual disease in multiple myeloma: state of the art WB-MRI and PET/CT. *Skeletal Radiology*, 51(1), 2537.
- [7] Maralani, P.J., Schieda, N., . . . Weinreb, J. (2020). MRI safety and devices: An update and expert consensus. *Journal of Magnetic Resonance Imaging*, 51(3), 657-674.
- [8] Mena, E. Turkbey, E.B. & Lindenberg, L. (2022). Modern Radiographic Imaging in Multiple Myeloma, What Is the Minimum Requirement? *Seminars in Oncology*, 49(1), 86-93.
- [9] Torkian, P., Azadbakht, J., . . . Chalian, M. (2022). Advanced Imaging in Multiple Myeloma: New Frontiers for MRI. *Diagnostics*, 12(9), 2182.



A WNS COMPANY

## Disclaimer section

### Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

### Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

### Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

### Registered Trademarks (®/™) and Copyright (©)

All trademarks, product names, logos, and brand names are the property of their respective owners and are used for purposes of information and/or illustration only. Current Procedural Terminology (CPT)®™ is a registered trademark of the American Medical Association (AMA). No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from HealthHelp.



A WNS COMPANY

## National and Local Coverage Determination (NCD and LCD)



### NOTICE

To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to <https://www.cms.gov/medicare-coverage-database/search.aspx>.

## Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions.

CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.

In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.

## Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.

## For Internal Use Only:

11248 11249 11253 11282 11325 11328 11333 11349 11350 11351 11352 11354 11355 11356  
11358 11359 11360 11361 11362 11365 11366 11367 11368 11369 11370 11374 11375 11394  
11395 11396 11565