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## Whole Body MRI Corporate Medical Policy

File Name: Whole Body MRI  
File Code: 6.01.VT201  
Origination: 11/15/2018  
Last Review: 03/2026  
Next Review: 01/2027  
Effective Date: 06/01/2026

### Description/Summary

Whole-Body Magnetic Resonance Imaging (WBMRI) is a means of advanced imaging technology used to scan the bones, tissues, organs and muscles. This advanced imaging modality has a role in specific circumstances in the diagnosis, follow-up and surveillance of select cancer and genetic predisposition syndromes.

### Policy

#### Coding Information

Click the links below for attachments, coding tables & instructions.

[Attachment I](#)

#### When a service may be considered medically necessary

The Plan considers Whole-Body MRI **medically necessary** for the following indications:

- In the Diagnostic Workup and Follow-up/Surveillance of Multiple Myeloma including:
  - In initial diagnostic workup of Multiple Myeloma, to discern smoldering myeloma from multiple myeloma when whole-body low-dose CT or FDG PET/CT is negative
  - In initial diagnostic workup of Solitary Osseous Plasmacytoma
  - In follow-up/surveillance of Smoldering Myeloma
  - In follow-up/surveillance of Multiple Myeloma
- Chronic Nonbacterial Osteomyelitis (CNO)
- Chronic Recurrent Multifocal Osteomyelitis (CRMO)
- Constitutional Mismatch Repair Deficiency (CMMRD or Turcot Syndrome)
- Hereditary Paraganglioma-Pheochromocytoma (HPP) Syndromes (PGL/PCC/SDHx) mutations)
- Li-Fraumeni Syndrome (LFS)
- Rhabdoid Tumor Predisposition Syndrome (RTPS)

#### When a service is considered investigational

- Whole-body MRI is considered **investigational** when used to screen asymptomatic individuals.
- Whole-body MRI is considered **investigational** for all other indications not meeting medical necessity criteria listed above.

## Reference Resources

1. National Comprehensive Cancer Network (NCCN) - Clinical Practice Guidelines in Oncology: Multiple Myeloma. Version 5.2026 - January 9, 2026. Last accessed 02/2026.
2. National Comprehensive Cancer Network (NCCN) - Clinical Practice Guidelines in Oncology: Genetic/Familial High- Risk Assessment: Breast, Ovarian, Pancreatic, and Prostate. Version 2.2026 - October 10, 2026. Last accessed 02/2026.
3. Messiou C, Hillengass J, Delorme S, et al. Guidelines for acquisition, interpretation, and reporting of whole-body MRI in myeloma: myeloma response assessment and diagnosis system (MY-RADS) Radiology. 2019;291:5-13. doi: 10.1148/radiol.2019181949.
4. Chantry A, Kazmi M, Barrington S, et al. Guidelines for the use of imaging in the management of patients with myeloma. Br J Haematol. 2017;178(3):380-393. doi: 10.1111/bjh.14827. 2017.
5. Carelon- Clinical Appropriateness Guidelines: Advanced Imaging- Appropriate Use Criteria: Oncologic Imaging. Last reviewed 07/17/2025. Last accessed 02/2026.
6. ACR Statement on Screening Total Body MRI - American College of Radiology. 04/17/2023. Last accessed 02/2026.
7. Jens Hillengass et al. Prognostic Significance of Focal Lesions in Whole-Body Magnetic Resonance Imaging in Patients With Asymptomatic Multiple Myeloma. J Clin Oncol 28, 1606-1610(2010). DOI:10.1200/JCO.2009.25.5356.
8. National Comprehensive Cancer Network (NCCN) - Imaging AUC Compendium. Last Accessed 02/2026.
9. UpToDate: Chronic nonbacterial osteomyelitis (CNO)/chronic recurrent multifocal osteomyelitis (CRMO) in children. Literature review current through: 01/2026. Last accessed 02/2026.
10. Greer MC. Whole-body magnetic resonance imaging: techniques and non-oncologic indications. Pediatr Radiol. 2018 Aug;48(9):1348-1363. doi: 10.1007/s00247-018-4141-9. Epub 2018 Aug 4. PMID: 30078041.
11. Schooler GR, Davis JT, Daldrup-Link HE, Frush DP. Current utilization and procedural practices in pediatric whole-body MRI. Pediatr Radiol. 2018 Aug;48(8):1101-1107. doi: 10.1007/s00247-018-4145-5. Epub 2018 May 2. PMID: 29721598.
12. Vilanova JC, García-Figueiras R, Luna A, Baleato-González S, Tomás X, Narváez JA. Update on Whole-body MRI in Musculoskeletal Applications. Semin Musculoskelet Radiol. 2019 Jun;23(3):312-323. doi: 10.1055/s-0039-1685540. Epub 2019 Jun 4. PMID: 31163505.
13. Zugni F, Padhani AR, Koh DM, Summers PE, Bellomi M, Petralia G. Whole-body magnetic resonance imaging (WB-MRI) for cancer screening in asymptomatic subjects of the general population: review and recommendations. Cancer Imaging. 2020 May 11;20(1):34. doi: 10.1186/s40644-020-00315-0. PMID: 32393345; PMCID: PMC7216394.
14. Guérin-Pfyffer S, Guillaume-Czitrom S, Tammam S, Koné-Paut I. Evaluation of chronic recurrent multifocal osteitis in children by whole-body magnetic resonance imaging. Joint Bone Spine. 2012 Dec;79(6):616-20. doi: 10.1016/j.jbspin.2011.12.001. Epub 2012 Jan 27. PMID: 22284608.

15. Carol Durno et al. Survival Benefit for Individuals With Constitutional Mismatch Repair Deficiency Undergoing Surveillance. *J Clin Oncol* 39, 2779-2790(2021). DOI:10.1200/JCO.20.02636
16. Greenberg SE, Jacobs MF, Wachtel H, Anson A, Buchmann L, Cohen DL, Bonanni M, Bennett B, Naumer A, Schaefer AM, Kohlmann W, Nathanson KL, Else T, Fishbein L. Tumor detection rates in screening of individuals with SDHx-related hereditary paraganglioma-pheochromocytoma syndrome. *Genet Med*. 2020 Dec;22(12):2101-2107. doi: 10.1038/s41436-020-0921-3. Epub 2020 Aug 3. PMID: 32741965; PMCID: PMC7710583.
17. Amar, L., Pacak, K., Steichen, O. et al. International consensus on initial screening and follow-up of asymptomatic SDHx mutation carriers. *Nat Rev Endocrinol* 17, 435-444 (2021). <https://doi.org/10.1038/s41574-021-00492-3>
18. Nemes K, Bens S, Bourdeaut F, Johann P, Kordes U, Siebert R, Frühwald MC. Rhabdoid Tumor Predisposition Syndrome. 2017 Dec 7 [updated 2022 May 12]. In: Adam MP, Bick S, Mirzaa GM, Pagon RA, Wallace SE, Amemiya A, editors. *GeneReviews*® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2026. PMID: 29215836.
19. Andres S, Huang K, Shatara M, Abdelbaki MS, Ranalli M, Finlay J, Gupta A. Rhabdoid tumor predisposition syndrome: A historical review of treatments and outcomes for associated pediatric malignancies. *Pediatr Blood Cancer*. 2024 Jun;71(6):e30979. doi: 10.1002/pbc.30979. Epub 2024 Mar 30. PMID: 38553892; PMCID: PMC11039352.
20. Grasparyl AD 2nd, Gottumukkala RV, Greer MC, Gee MS. Whole-Body MRI Surveillance of Cancer Predisposition Syndromes: Current Best Practice Guidelines for Use, Performance, and Interpretation. *AJR Am J Roentgenol*. 2020 Oct;215(4):1002-1011. doi: 10.2214/AJR.19.22399. Epub 2020 Aug 18. PMID: 32809862.

## Document Precedence

Blue Cross and Blue Shield of Vermont (Blue Cross VT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer's benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, Blue Cross VT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract/employer benefit plan language, the member's contract/employer benefit plan language takes precedence.

## Audit Information

Blue Cross VT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, Blue Cross VT reserves the right to recoup all non-compliant payments.

## Administrative and Contractual Guidance

### Benefit Determination Guidance

Prior approval is required and benefits are subject to all terms, limitations and conditions of the subscriber contract.

NEHP/ABNE members may have different benefits for services listed in this policy. To confirm

benefits, please contact the customer service department at the member's health plan

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

### Policy Implementation/Update information

11/2018	New Policy- Code 76498 considered Investigational in all instances.
01/2020	Policy Reviewed. References Reviewed. Updated policy language and the unlisted code will suspend for medical review. Policy updated to allow for Multiple Myeloma indications.
02/2021	Policy Reviewed. References reviewed. No change to policy statement.
01/2022	Policy Reviewed. No change to policy statement.
01/2023	Policy reviewed; references updated no changes to policy statement.
01/2024	Policy reviewed; references updated no changes to policy statement.
01/2025	Coding table revised; code 76498 will no longer suspend for medical review and will require prior approval.
03/2026	Policy reviewed. Additional indications for medically necessary use of whole body MRI added. References updated. Formatting changes made for clarity and consistency.

### Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

### Approved by Blue Cross VT Medical Directors

Tom Weigel, MD, MBA  
Vice President and Chief Medical Officer

Tammaji P. Kulkarni, MD  
Senior Medical Director

Attachment I

The following code Requires Prior Approval			
CPT®	76498	Unlisted magnetic resonance procedure (e.g. diagnostic, interventional)	Requires Prior Approval