UNITEDHEALTHCARE® COMMUNITY PLAN:
RADIOLOGY IMAGING COVERAGE DETERMINATION GUIDELINE

Pediatric and Special Populations Spine Imaging Guidelines (For Ohio Only)

V2.0.2026

Guideline Number: CSRAD025OH.F

Effective Date: September 1, 2026

Application (for Ohio Only)

This Medical Policy only applies to the state of Ohio. Any requests for services that are stated as unproven or services for which there is a coverage or quantity limit will be evaluated for medical necessity using Ohio Administrative Code 5160-1-01.

Table of Contents

Guideline

Click Anywhere in the Header to Return to the Main Table of Contents

Related Community Plan Policies

Guideline

Related Community Plan Policies

Related Community Plan Policies

Related Community Plan Policies

v2.0.2026

General Policies • General Head • General Musculoskeletal • General Spine
Pediatric Policies • Pediatric Head • Pediatric Musculoskeletal

Click Anywhere in the Header to Return to the Main Table of Contents

Application (For Ohio Only)

Guideline

Application (For Ohio Only)

Application (For Ohio Only)

Application for Ohio OH UHC

v2.0.2026

- This Medical Policy only applies to the state of Ohio. Any requests for services that are stated as unproven or services for which there is a coverage or quantity limit will be evaluated for medical necessity using Ohio Administrative Code 5160-1-01.

Click Anywhere in the Header to Return to the Main Table of Contents

Guideline Development (Preface-1)

Guideline

Guideline Development (Preface-1.1)

Click Anywhere in the Header to Return to the Main Table of Contents

Guideline Development (Preface-1.1)

PRF.GG.0001.1.UOH

v2.0.2026

- These evidence-based, proprietary clinical guidelines evaluate a range of advanced imaging and procedures, including NM, US, CT, MRI, PET, Radiation Oncology, Sleep Studies, as well as Cardiac, Musculoskeletal and Spine interventions.
- UnitedHealthcare reserves the right to change and update the guidelines. The guidelines undergo a formal review annually. These clinical guidelines are based on current evidence supported by major national and international association and society guidelines and criteria, peer-reviewed literature, and major treatises as well as input from health plans, and practicing academic and community-based physicians.
- These guidelines are not intended to supersede or replace sound medical judgment, but instead, should facilitate the identification of the most appropriate imaging or other designated procedure given the individual's clinical condition. These guidelines are written to cover medical conditions as experienced by the majority of individuals. However, these guidelines may not be applicable in certain clinical circumstances, and physician judgment can override the guidelines.
- These guidelines provide evidence-based, clinical benefits with a focus on health care quality and patient safety.
- Clinical decisions, including treatment decisions, are the responsibility of the individual and his/her provider. Clinicians are expected to use independent medical judgment, which takes into account the clinical circumstances to determine individual management decisions.

Click Anywhere in the Header to Return to the Main Table of Contents

Benefits, Coverage Policies, and Eligibility Issues (Preface-2)

Guideline

Benefits, Coverage Policies, and Eligibility Issues (Preface-2.1)
References (Preface-2)

Benefits, Coverage Policies, and Eligibility Issues (Preface-2.1)

PRF.BC.0002.1.UOH
v2.0.2026

Investigational and Experimental Studies

- Certain studies, treatments, procedures, or devices may be considered experimental, investigational, or unproven for any condition, illness, disease, injury being treated if one of the following is present:
  - if there is a paucity of supporting evidence;
  - if the evidence has not matured to exhibit improved health parameters;
  - if clinical utility has not been demonstrated in any condition; OR
  - if the study, treatment, procedure, or device lacks a collective opinion of support
- Supporting evidence includes standards that are based on credible scientific evidence published in peer-reviewed medical literature (such as well conducted randomized clinical trials or cohort studies with a sample size of sufficient statistical power) generally recognized by the relevant medical community. Collective opinion of support includes physician specialty society recommendations and the views of physicians practicing in relevant clinical areas when physician specialty society recommendations are not available.

Clinical and Research Trials

- Similar to investigational and experimental studies, clinical trial imaging requests are reviewed to determine whether they meet these evidence-based clinical guidelines.
- Imaging studies which are inconsistent with established clinical standards, or are requested for data collection and not used in direct clinical management are not medically necessary.

CPT Codes

- The inclusion of any CPT code in the clinical guidelines does not imply that the code is under management or requires prior authorization.

Click Anywhere in the Header to Return to the Main Table of Contents

References (Preface-2)

v2.0.2026

1. 2.42 USC 300gg-8: Coverage for individuals participating in approved clinical trials. House.gov. Published 2024.

Click Anywhere in the Header to Return to the Main Table of Contents

Clinical Information (Preface-3)

Guideline

Clinical Information (Preface-3.1)
References (Preface-3)

Clinical Information (Preface-3.1)

PRF.CL.0003.1.UOH
v2.0.2026

Clinical Documentation and Age Considerations

- These clinical guidelines use an evidence-based approach to determine the most appropriate procedure for each individual, at the most appropriate time in the diagnostic and treatment cycle. These clinical guidelines are framed by:
  - clinical presentation of the individual, rather than the studies requested
  - adequate clinical information that must be submitted to UnitedHealthcare in order to establish medical necessity for advanced imaging or other designated procedures including, but not limited to, the following:
    - Pertinent clinical evaluation since the onset or change in symptoms including a detailed history, physical examination, appropriate laboratory studies, and appropriate prior imaging studies.
      - Condition-specific guideline sections may describe additional clinical information which is required for a pertinent clinical evaluation.
      - The Spine and Musculoskeletal guidelines require x-ray studies from when the current episode of symptoms has started or changed.
      - Advanced imaging or other designated procedures should not be ordered prior to clinical evaluation of an individual by the physician treating the individual. This may include referral to a consultant specialist who will make further treatment decisions.
      - Other meaningful technological contact (telehealth visit, telephone or video call, electronic mail or messaging) since the onset or change in symptoms by an established individual can serve as a pertinent clinical evaluation.
        - Some conditions may require a face-to-face evaluation as discussed in the applicable condition-specific guideline sections.
    - A recent clinical evaluation may be unnecessary if the individual is undergoing a guideline-supported, scheduled follow-up imaging or other designated procedural evaluation. Exceptions due to routine surveillance indications are addressed in the applicable condition-specific guideline sections.
  - The evidence-based approach to determine the most appropriate procedure for each individual requires submission of medical records pertinent to the requested imaging or other designated procedures.
- Many conditions affecting the pediatric population are different diagnoses than those occurring in the adult population. For those diseases which occur in both pediatric and adult populations, minor differences may exist in management due to individual age, comorbidities, and differences in disease natural history between children and adults.

- Individuals who are 18 years old or younger should be imaged according to the Pediatric Imaging Guidelines if discussed in the condition-specific guideline sections. Any conditions not specifically discussed in the Pediatric Imaging Guidelines should be imaged according to the General Imaging Guidelines. Individuals who are >18 years old should be imaged according to the General Imaging Guidelines, except where directed otherwise by a specific guideline section.

General Imaging Information

- "Standard" or "conventional" imaging is most often performed in the initial and subsequent evaluations of malignancy. Standard or conventional imaging includes plain film, CT, MRI, or US.
  - Often, further advanced imaging is needed when initial imaging, such as ultrasound, CT, or MRI does not answer the clinical question. Uncertain, indeterminate, inconclusive, or equivocal may describe these situations.
- Appropriate use of contrast is a very important component of evidence-based advanced imaging use.
  - The appropriate levels of contrast for an examination (i.e., without contrast, with contrast, without and with contrast) is determined by the evidence-based guidance reflected in the condition-specific guideline sections.
  - If, during the performance of a non-contrast imaging study, there is the unexpected need to use contrast in order to evaluate a possible abnormality, then that is appropriate.

Ultrasound

- Diagnostic ultrasound uses high-frequency sound waves to evaluate soft tissue structures and vascular structures utilizing grey scale and Doppler techniques.
- Ultrasound allows for dynamic real-time imaging at the bedside.
  - Ultrasound is limited in areas where there is dense bone or other calcification.
  - Ultrasound also has a relatively limited imaging window so may be of limited value in evaluating very large abnormalities.
  - In general, ultrasound is highly operator-dependent, and proper training and experience are required to perform consistent, high-quality evaluations.
- Indications for ultrasound may include, but are not limited to, the following:
  - Obstetric and gynecologic imaging
  - Soft tissue and visceral imaging of the chest, abdomen, pelvis, and extremities
  - Brain and spine imaging when not obscured by dense bony structures
  - Vascular imaging when not obscured by dense bony structures
  - Procedural guidance when not obscured by dense bony structures
  - Initial evaluation of ill-defined soft tissue masses or fullness and differentiating adenopathy from mass or cyst. Prior to advanced imaging, ultrasound can be

very beneficial in selecting the proper modality, body area, image sequences, and contrast level that will provide the most definitive information for the individual.
- More specific guidance for ultrasound usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.

Computed Tomography (CT)

- The AMA CPT® manual does not describe nor assign any minimum or maximum number of sequences for any CT study. CT imaging protocols are often influenced by the individual's clinical situation and additional sequences are not uncommon. There are numerous CT protocols that may be performed to evaluate specific clinical questions, and this technology is constantly undergoing development.
- CT utilizes ionizing radiation to create cross-sectional and volumetric images of the body.
  - Advantages over ultrasound include a much larger field of view and faster completion time in general. Disadvantages compared to ultrasound include lack of portability and exposure to ionizing radiation.
  - Advantages over MRI include faster imaging and a more spacious scanner area limiting claustrophobia. Disadvantages compared to MRI include decreased soft tissue definition, especially with non-contrast imaging, and exposure to ionizing radiation.
- CT can be performed without, with, or without and with intravenous (IV) contrast depending on the clinical indication and body area.
  - In general, non-contrast imaging is appropriate for evaluating structures with significant tissue density differences such as lung parenchyma and bony structures, or when there is a contraindication to contrast.
  - In general, CT with contrast is the most common level of contrast and can be used when there is need for improved vascular or soft tissue resolution, including better characterization of known or suspected malignancy, as well as infectious and inflammatory conditions.
  - CT without and with contrast has a limited role as the risks of doubling the ionizing radiation exposure rarely outweigh the benefits of multiphasic imaging, though there are some exceptions which include, but are not limited to, the following:
    - Characterization of a mass
    - Characterization of arterial and venous anatomy
    - CT with contrast may be used to better characterize findings on a very recent (within two weeks) inconclusive non-contrast CT where the guidelines would support CT without and with contrast.
  - More specific guidance for CT contrast usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.
- Shellfish allergy:

  - It is commonly assumed that an allergy to shellfish indicates iodine allergy, and that this implies an allergy to iodinated contrast media used with CT. However, this is NOT true. Shellfish allergy is due to tropomyosins. Iodine plays no role in these allergic reactions. Allergies to shellfish do not increase the risk of reaction to iodinated contrast media any more than that of other allergens.
- Enteric contrast (oral or rectal) is sometimes used in abdominal imaging. There is no specific CPT® code which refers to enteric contrast.
- The appropriate contrast level and anatomic region in CT imaging is specific to the clinical indication, as listed in the condition-specific guideline sections.
- CT should not be used to replace MRI in an attempt to avoid sedation unless it is listed as a recommended study in the appropriate condition-specific guideline.
- There are significant potential adverse effects associated with the use of iodinated contrast media. These include hypersensitivity reactions, thyroid dysfunction, and contrast-induced nephropathy (CIN). Individuals with impaired renal function are at increased risk for CIN.
- Both contrast CT and MRI are considered to have the same risk profile with renal failure (GFR <30mL/min).
- The use of CT contrast should proceed with caution in pregnant and breastfeeding individuals. There is a theoretical risk of contrast toxicity to the fetal and infant thyroid. The procedure can be performed if the specific need for that contrast-enhanced procedure outweighs risk to the fetus. Breastfeeding individuals may reduce this risk by choosing to pump and discard breast milk for 12-24 hours after the contrast injection.
- CT without contrast is medically necessary if clinical criteria for CT with contrast are met AND the individual has/is:
  - elevated blood urea nitrogen (BUN) and/or creatinine
  - renal insufficiency
  - allergies to iodinated contrast
  - thyroid disease which could be treated with I-131
  - diabetes
  - very elderly
  - urgent or emergent settings due to availability
  - trauma
- CT is superior to other imaging modalities in certain conditions including, but not limited to, the following:
  - Screening following trauma
  - Imaging pulmonary disease
  - Imaging abdominal and pelvic viscera
  - Imaging of complex fractures

  - Evaluation of inconclusive findings on Ultrasound or MRI, or if there is a contraindication to MRI
- More specific guidance for CT usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.

Magnetic Resonance Imaging (MRI)

- The AMA CPT® manual does not describe nor assign any minimum or maximum number of sequences for any MRI study. MRI protocols are often influenced by the individual's clinical situation and additional sequences are not uncommon. There are numerous MRI sequences that may be performed to evaluate specific clinical questions, and this technology is constantly undergoing development.
- Magnetic Resonance Imaging (MRI) utilizes the interaction between the intrinsic radiofrequency of certain molecules in the body (hydrogen in most cases) and a strong external magnetic field.
  - MRI is often superior for advanced imaging of soft tissues and can also define physiological processes in some instances (e.g., edema, loss of circulation [AVN], and increased vascularity [tumors]).
  - MRI does not use ionizing radiation and even non-contrast images have much higher soft tissue definition than CT or Ultrasound.
  - MRI typically takes much longer than either CT or Ultrasound, and for some individuals may require sedation. It is also much more sensitive to individual motion that can degrade image quality than either CT or Ultrasound.
- MRI Breast and MRI Chest are not interchangeable, as they focus detailed sequences on different adjacent body parts.
- MRI may be utilized either as the primary advanced imaging modality, or when further definition is needed based on CT or ultrasound imaging.
- Most orthopedic and dental implants are not magnetic. These include hip and knee replacements; plates, screws, and rods used to treat fractures; and cavity fillings. Yet, all of these metal implants can distort the MRI image if near the part of the body being scanned.
  - Other implants, however, may have contraindications to MRI. These include the following:
    - pacemakers
    - ICD or heart valves
    - metal implants in the brain
    - metal implants in the eyes or ears
    - infusion catheters and bullets or shrapnel
  - CT can therefore be an alternative study to MRI in these scenarios.
- The contrast level and anatomic region in MRI imaging is specific to the clinical indication, as listed in the specific guideline sections.

- MRI utilizing Xenon Xe 129 (CPT® C9791) for contrast is considered investigational and experimental at this time. MRI with or with and without contrast in these guidelines refers to MRI utilizing gadolinium for contrast.
- MRI is commonly performed without, and without and with contrast.
  - Non-contrast imaging offers excellent tissue definition.
  - Imaging without and with contrast is commonly used when needed to better characterize tissue perfusion and vascularization.
    - Most contrast is gadolinium based and causes T2 brightening of the vascular and extracellular spaces.
    - Some specialized gadolinium and non-gadolinium contrast agents are available, and are most commonly used for characterizing liver lesions.
  - MRI with contrast only is rarely appropriate and is usually used to better characterize findings on a recent inconclusive non-contrast MRI, commonly called a completion study.
  - MRI contrast is relatively contraindicated in pregnant individuals.
  - More specific guidance for MRI contrast usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.
- MRI may be preferred in individuals with renal failure and in individuals allergic to intravenous CT contrast.
  - Both contrast CT and MRI are considered to have the same risk profile with renal failure (GFR <30mL/min).
  - Gadolinium can cause Nephrogenic Systemic Fibrosis (NSF). The greater the exposure to gadolinium in individuals with a low GFR (especially if on dialysis), the greater the chance of individuals developing NSF.
  - Multiple studies have demonstrated potential for gadolinium deposition following the use of gadolinium-based contrast agents (GBCAs) for MRI studies. The U.S. Food and Drug Administration (FDA) has noted that there is currently no evidence to suggest that gadolinium retention in the brain is harmful and restricting GBCAs use is not warranted at this time. It has been recommended that GBCA use should be limited to circumstances in which additional information provided by the contrast agent is necessary and the necessity of repetitive MRIs with GBCAs should be assessed.
- A CT is medically necessary in place of an MRI when clinical criteria are met for MRI AND there is a contraindication to having an MRI (e.g., pacemaker, ICD, insulin pump, neurostimulator, etc.).
  - When replacing MRI with CT, contrast level matching should occur as follows:
    - MRI without contrast → CT without contrast
    - MRI without and with contrast → CT with contrast or CT without and with contrast
- The following situations may impact the appropriateness for MRI and/or MR contrast:

  - Caution should be taken in the use of gadolinium in individuals with renal failure.
  - The use of gadolinium contrast agents is relatively contraindicated during pregnancy unless the specific need for that procedure outweighs risk to the fetus.
  - MRI can be performed for non-ferromagnetic body metals (i.e., titanium), although some imaging facilities will consider it contraindicated if recent surgery, regardless of the metal type.
- MRI should not be used as a replacement for CT for the sole reason of avoidance of ionizing radiation when MRI is not medically necessary in the condition-based guidelines, since it does not solve the problem of overutilization.
- MRI is superior to other imaging modalities in certain conditions including, but not limited to, the following:
  - Imaging the brain and spinal cord
  - Characterizing visceral and musculoskeletal soft tissue masses
  - Evaluating musculoskeletal soft tissues including ligaments and tendons
  - Evaluating inconclusive findings on ultrasound or CT
  - Individuals who are pregnant or have high radiation sensitivity
  - Suspicion, diagnosis, or surveillance of infections
- More specific guidance for MRI usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.

Positron Emission Tomography (PET)

- PET is a nuclear medicine study that uses a positron emitting radiotracer to create cross-sectional and volumetric images based on tissue metabolism.
- Conventional imaging (frequently CT, sometimes MRI or bone scan) of the affected area(s) drives much of initial and restaging and surveillance imaging for malignancy and other chronic conditions. PET is not medically necessary for surveillance imaging unless specifically stated in the condition-specific guideline sections.
- PET/MRI is generally not medically necessary, see **PET-MRI (Preface-5.3)**.
- PET is rarely performed as a single modality, but is typically performed as a combined PET/CT.
  - The unbundling of PET/CT into separate PET and diagnostic CT CPT® codes is not medically necessary, because PET/CT is done as a single study.
- PET/CT lacks the tissue definition of CT or MRI but is fairly specific for metabolic activity based on the radiotracer used.
- Indications for PET/CT may include the following:
  - Oncologic Imaging for evaluation of tumor metabolic activity
  - Cardiac Imaging for evaluation of myocardial metabolic activity
  - Brain Imaging for evaluation of metabolic activity for procedural planning
- More specific guidance for PET usage, including exceptions to this general guidance, can be found throughout the condition-specific guidelines.

Overutilization of Advanced Imaging

- A number of reports describe overutilization in many areas of advanced imaging and other procedures, which may include the following:
  - High-level testing without consideration of less invasive, lower cost options which may adequately address the clinical question at hand
  - Excessive radiation and costs with unnecessary testing
  - Defensive medical practice
  - CT without and with contrast (so called "double contrast studies") requests, which have few current indications
  - MRI requested in place of CT to avoid radiation without considering the primary indication for imaging
  - Adult CT settings and protocols used for smaller people and children
  - Unnecessary imaging procedures when the same or similar studies have already been conducted
- A review of the imaging or other relevant procedural histories of all individuals presenting for studies has been recognized as one of the more important processes that can be significantly improved. By recognizing that a duplicate or questionably medically necessary imaging study has been ordered for individuals, it may be possible to avoid exposing them to unnecessary risks. To avoid these unnecessary risks, the precautions below should be considered:
  - The results of initial diagnostic tests or radiologic studies to narrow the differential diagnosis should be obtained prior to performing further tests or radiologic studies.
  - The clinical history should include a potential indication such as a known or suspected abnormality involving the body part for which the imaging study is being requested. These potential indications are addressed in greater detail within the applicable guidelines.
  - The results of the requested imaging procedures should be expected to have an impact on individual management or treatment decisions.
  - Repeat imaging studies are not generally necessary unless there is evidence of disease progression, recurrence of disease, and/or the repeat imaging will affect an individual’s clinical management.
- Pre-operative imaging/pre-surgical planning imaging/pre-procedure imaging is not medically necessary if the surgery/procedure is not medically necessary. Once the procedure has been approved or if the procedure does not require prior authorization, the appropriate pre-procedural imaging may be approved.

Health Equity Considerations

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social

conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

References (Preface-3)

v2.0.2026

1. American College of Radiology Committee on Drugs and Contrast Media. ACR Manual on Contrast Media. Published 2025.
2. Andreucci M, Solomon R, Tasanarong A. Side Effects of Radiographic Contrast Media: Pathogenesis, Risk Factors, and Prevention. *BioMed Res Int*. 2014;2014:1-20. doi:10.1155/2014/741018
3. McDonald RJ, McDonald JS, Kallmes DF, et al. Gadolinium Deposition in Human Brain Tissues after Contrast-enhanced MR Imaging in Adult Patients without Intracranial Abnormalities. *Radiology*. 2017;285(2):546-554. doi:10.1148/radiol.2017161595
4. Kanda T, Ishii K, Kawaguchi H, Kitajima K, Takenaka D. High Signal Intensity in the Dentate Nucleus and Globus Pallidus on Unenhanced T1-weighted MR Images: Relationship with Increasing Cumulative Dose of a Gadolinium-based Contrast Material. *Radiology*. 2014;270(3):834-841. doi:10.1148/radiol.13131669
5. Olchowy C, Cebulski K, Łasecki M, et al. The presence of the gadolinium-based contrast agent depositions in the brain and symptoms of gadolinium neurotoxicity - A systematic review. Mohapatra S, ed. *PLOS ONE*. 2017;12(2):e0171704. doi:10.1371/journal.pone.0171704
6. Ryu YJ, Choi YH, Cheon JE, et al. Pediatric Brain: Gadolinium Deposition in Dentate Nucleus and Globus Pallidus on Unenhanced T1-Weighted Images Is Dependent on the Type of Contrast Agent. *Invest Radiol.* 2018;53(4):246-255. doi:10.1097/RLI.0000000000000436
7. Splendiani A, Perri M, Marsecano C, et al. Effects of serial macrocyclic-based contrast materials gadoterate meglumine and gadobutrol administrations on gadolinium-related dentate nuclei signal increases in unenhanced T1-weighted brain: a retrospective study in 158 multiple sclerosis (MS) patients. *Radiol Med*. 2018;123(2):125-134. doi:10.1007/s11547-017-0816-9
8. U.S. Food and Drug Administration. FDA Drug Safety Communication: FDA warns that gadolinium-based contrast agents (GBCAs) are retained in the body; requires new class warnings. Published May 16, 2018.
9. Amis ES Jr, Butler PF; American College of Radiology. ACR white paper on radiation dose in medicine: three years later. *J Am Coll Radiol*. 2010;7(11):865-870. doi:10.1016/j.jacr.2010.04.006
10. Powell AC, Long JW, Kren EM, Gupta AK, Levin DC. Evaluation of a Program for Improving Advanced Imaging Interpretation. *J Patient Saf*. 2019;15(1):69-75. doi:10.1097/PTS.0000000000000034.5
11. U.S. Food and Drug Administration. White Paper: Initiative to Reduce Unnecessary Radiation Exposure from Medical Imaging. FDA. Published June 14, 2019
12. Fotenos A. Update on FDA Approach to Safety Issue of Gadolinium Retention after Administration of Gadolinium-Based Contrast Agents. U.S. Food and Drug Administration. Published September 20, 2018
13. Blumfield E, Swenson DW, Iyer RS, Stanescu AL. Gadolinium-based contrast agents — review of recent literature on magnetic resonance imaging signal intensity changes and tissue deposits, with emphasis on pediatric patients. *Pediatr Radiol*. 2019;49(4):448-457. doi:10.1007/s00247-018-4304-8
14. American College of Radiology. ACR – SPR – SRU Practice Parameter for the Performance and Interpretation of Diagnostic Ultrasound Examinations. Revised 2023. (Resolution 32).
15. American College of Radiology. ACR – ACNM – SNMMI – SPR Practice Parameter for Performing FDG-PET/CT in Oncology. Amended 2023. (Resolution 2c, 2d).
16. American College of Radiology. ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI). Amended 2023. (Resolution 2c).
17. American College of Radiology. ACR – SPR Practice Parameter for Performing and Interpreting Diagnostic Computed Tomography (CT). Amended 2023. (Resolution 2c, 2d).
18. Lohrke J, Frenzel T, Endrikat J, et al. 25 Years of Contrast-Enhanced MRI: Developments, Current Challenges and Future Perspectives. *Adv Ther*. 2016;33(1):1-28. doi:10.1007/s12325-015-0275-4
19. Implementation Guide: Medicaid State Plan Eligibility Eligibility Groups – Mandatory Coverage Infants and Children under Age 19. Centers for Medicare and Medicaid Services.
20. History and Physicals - Understanding the Requirements: What are the key elements organizations need to understand regarding History and Physical Requirements?. The Joint Commission. Reviewed July 12, 2022.

21. Mammarappallil JG, Rankine L, Wild JM, Driehuys B. New Developments in Imaging Idiopathic Pulmonary Fibrosis With Hyperpolarized Xenon Magnetic Resonance Imaging. *J Thorac Imaging*. 2019;34(2):136-150. doi:10.1097/rti.0000000000000392
22. Wang JM, Robertson SH, Wang Z, et al. Using hyperpolarized 129Xe MRI to quantify regional gas transfer in idiopathic pulmonary fibrosis. *Thorax*. 2017;73(1):21-28. doi:10.1136/thoraxjnl-2017-210070
23. Committee Opinion No. 723: Guidelines for Diagnostic Imaging During Pregnancy and Lactation [published correction appears in Obstet Gynecol. 2018 Sep;132(3):786. doi: 10.1097/AOG.0000000000002858.]. *Obstet Gynecol*. 2017;130(4):e210-e216. doi:10.1097/AOG.0000000000002355

Click Anywhere in the Header to Return to the Main Table of Contents

Coding Issues (Preface-4)

Guideline

3D Rendering (Preface-4.1)

PRF.CD.0004.1.UOH
v2.0.2026

CPT® 76376 and CPT® 76377

- Both codes require concurrent supervision of the image post-processing 3D manipulation of the volumetric data set and image rendering.
  - Concurrent supervision is defined as active physician participation in and monitoring of the reconstruction process including design of the anatomic region that is to be reconstructed; determination of the tissue types and actual structures to be displayed (e.g., bone, organs, and vessels); determination of the images or cine loops that are to be archived; and, monitoring and adjustment of the 3D work product. The American College of Radiology (ACR) recommended that it is best to document the physician's supervision or participation in the 3D reconstruction of images.
- These two codes differ in the need for and use of an independent workstation for post-processing.
  - CPT® 76376 reports procedures not requiring image post-processing on an independent workstation.
  - CPT® 76377 reports procedures that require image post-processing on an independent workstation.
- These 3D rendering codes should not be used for 2D reformatting.
- Two-dimensional reconstruction (e.g., reformatting an axial scan into the coronal plane) is now included in all cross-sectional imaging base codes and is not separately reimbursable.
- The codes used to report 3D rendering for ultrasound and echocardiography are also used to report the 3D post processing work on CT, MRI, and other tomographic modalities.
- Providers may be required to obtain prior authorization on these 3D codes even if prior authorization is not required for the echocardiography and/or ultrasound procedure codes. It may appear that UnitedHealthcare pre-authorizes echocardiography and/or ultrasound when, in fact, it may only be the 3D code that needs the prior authorization.
- CPT® codes for 3D rendering should not be billed in conjunction with computer-aided detection (CAD), MRA, CTA, nuclear medicine SPECT studies, PET, PET/CT, stereotactic localization (CPT® 77011 or CPT® 70486 if used), Mammogram, MRI Breast, US Breast, CT Colonography (virtual colonoscopy), Cardiac MRI, Cardiac CT, or Coronary CTA studies.

- CPT® 76377 (3D rendering requiring image post-processing on an independent workstation) or CPT® 76376 (3D rendering not requiring image post-processing on an independent workstation) can be considered in the following clinical scenarios:
  - Bony conditions:
    - Evaluation of congenital skull abnormalities in newborns, infants, and toddlers (usually for pre-operative planning)
    - Complex fractures (comminuted or displaced)/dislocations of any joint (for pre-operative planning when conventional imaging is insufficient)
    - Spine fractures, pelvic/acetabulum fractures, intra-articular fractures (for pre-operative planning when conventional imaging is insufficient)
    - Pre-operative planning for other complex surgical cases
    - Complex facial fractures
  - Pre-operative planning for other complex surgical cases
  - Cerebral angiography
  - Pelvis conditions:
    - Uterine intra-cavitary lesion when initial US is equivocal: See **Abnormal Uterine Bleeding (AUB) (PV-2.1)** and **Leiomyoma/Uterine Fibroids (PV-12.1)** in the Pelvis Imaging Guidelines.
    - Hydrosalpinxes or peritoneal cysts when initial US is indeterminate: See **Complex Adnexal Masses (PV-5.3)** in the Pelvis Imaging Guidelines.
    - Lost IUD (inability to feel or see IUD string) with initial US: See **Intrauterine Device (PV-10.1)** in the Pelvis Imaging Guidelines.
    - Uterine anomalies with initial US: See **Uterine Anomalies (PV-14.1)** in the Pelvis Imaging Guidelines.
    - Infertility: See **Initial Infertility Evaluation, Female (PV-9.1)** in the Pelvis Imaging Guidelines.
  - Abdomen conditions:
    - CT Urogram: See **Hematuria and Hydronephrosis (AB-39)** in the Abdomen Imaging Guidelines.
    - MRCP: See **MR Cholangiopancreatography (MRCP) (AB-27)** in the Abdomen Imaging Guidelines.

Click Anywhere in the Header to Return to the Main Table of Contents

CT-, MR-, or Ultrasound-Guided Procedures (Preface-4.2)

PRF.CD.0004.2.A

v2.0.2026

- CT-, MR-, and Ultrasound-guidance procedure codes contain all of the imaging necessary to guide a needle or catheter. It is inappropriate to routinely bill a diagnostic procedure code in conjunction with a guidance procedure code.
- Imaging studies performed as part of a CT-, MR-, or Ultrasound-guided procedure should be reported using the CPT® codes in the following table:

TABLE: Imaging Guidance Procedure Codes

CPT®	Description
19085	Biopsy, breast, with placement of breast localization device(s), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including MR guidance
19086	Biopsy, breast, with placement of breast localization device(s), when performed, and imaging of the biopsy specimen, when performed, percutaneous; each additional lesion, including MR guidance
75989	Imaging guidance for percutaneous drainage with placement of catheter (all modalities)
76942	Ultrasonic guidance for needle placement
77011	CT guidance for stereotactic localization
77012	CT guidance for needle placement
77013	CT guidance for, and monitoring of parenchymal tissue ablation
77021	MR guidance for needle placement
77022	MR guidance for, and monitoring of parenchymal tissue ablation
C8001	3D anatomical segmentation imaging for preoperative planning, data preparation and transmission, obtained from previous diagnostic CT or MR examination of the same anatomy

CPT® 19085 and CPT® 19086

- The proper way to bill an MRI-guided breast biopsy is CPT® 19085 (Biopsy, breast, with placement of breast localization device(s), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including MR guidance). Additional lesions should be billed using CPT® 19086.
  - **CPT® 77021** (MR guidance for needle placement) is not an appropriate code for a breast biopsy.

CPT® 75989

- This code is used to report imaging guidance for a percutaneous drainage procedure in which a catheter is left in place.
- This code can be used to report whether the drainage catheter is placed under fluoroscopy, Ultrasound-, CT-, or MR-guidance modality.

CPT® 77011

- A stereotactic CT localization scan is frequently obtained prior to sinus surgery. The dataset is then loaded into the navigational workstation in the operating room for use during the surgical procedure. The information provides exact positioning of surgical instruments with regard to the individual's 3D CT images.
- In most cases, the pre-operative CT is a technical-only service that does not require interpretation by a radiologist.
  - The imaging facility should report CPT® 77011 when performing a scan not requiring interpretation by a radiologist.
  - If a diagnostic scan is performed and interpreted by a radiologist, the appropriate diagnostic CT code (e.g., CPT® 70486) should be used.
  - It is not appropriate to report both CPT® 70486 and CPT® 77011 for the same CT stereotactic localization imaging session.
  - 3D Rendering (CPT® 76376 or CPT® 76377) should not be reported in conjunction with CPT® 77011 (or CPT® 70486 if used). The procedure inherently generates a 3D dataset.

CPT® 77012 (CT) and CPT® 77021 (MR)

- These codes are used to report imaging guidance for needle placement during biopsy, aspiration, and other percutaneous procedures.
- They represent the radiological supervision and interpretation of the procedure and are often billed in conjunction with surgical procedure codes.
  - For example, CPT® 77012 is reported when CT guidance is used to place the needle for a conventional arthrogram.

- Only codes representing percutaneous surgical procedures should be billed with CPT® 77012 and CPT® 77021. It is inappropriate to use with surgical codes for open, excisional, or incisional procedures.
- **CPT® 77021** (MR guidance for needle placement) is not an appropriate code for breast or prostate biopsy.
  - CPT® 19085 would be appropriate for the first breast biopsy site and CPT® 19086 would be appropriate for additional concurrent biopsies.

CPT® 77013 (CT) and CPT® 77022 (MR)

- These codes include the initial guidance to direct a needle electrode to the tumor(s), monitoring for needle electrode repositioning within the lesion, and as necessary for multiple ablations to coagulate the lesion and confirmation of satisfactory coagulative necrosis of the lesion(s) and comparison to pre-ablation images.
  - **NOTE:** CPT® 77013 should only be used for non-bone ablation procedures.
    - CPT® 20982 includes CT guidance for bone tumor ablations.
  - Only codes representing percutaneous surgical procedures should be billed with CPT® 77013 and CPT® 77022. It is inappropriate to use with surgical codes for open, excisional, or incisional procedures.
- CPT® 77012 and CPT® 77021 (as well as guidance codes CPT® 76942 [US], and CPT® 77002 - CPT® 77003 [fluoroscopy]) describe radiologic guidance by different modalities.
  - Only one unit of any of these codes should be reported per individual encounter (date of service). The unit of service is considered to be the individual encounter, not the number of lesions, aspirations, biopsies, injections, or localizations.

Unlisted Procedures/Therapy Treatment Planning (Preface-4.3)

PRF.CD.0004.3.UOH
v2.0.2026

Unlisted Procedures

CPT ®	Description
76497	Unlisted CT procedure (e.g., diagnostic or interventional)
76498	Unlisted MR procedure (e.g., diagnostic or interventional)
78999	Unlisted procedure, diagnostic nuclear medicine

- For general information related to unlisted procedures, please refer to **Management of Unlisted Codes**.
- These unlisted codes should be reported whenever a diagnostic or interventional CT or MR study is performed in which an appropriate anatomic site-specific code is not available.
  - A Category III code that describes the procedure performed must be reported rather than an unlisted code if one is available.
- CPT® 76497 or CPT® 76498 (Unlisted CT or MRI procedure) is medically necessary in the following clinical scenarios:
  - Studies done for navigation and planning for neurosurgical procedures (i.e., Stealth or Brain Lab Imaging)
  - Custom joint arthroplasty planning (not as an alternative recommendation): See **Osteoarthritis (MS-12.1)** in the Musculoskeletal Imaging Guidelines.
  - Any procedure/surgical planning if thinner cuts or different positional acquisition (than those on the completed diagnostic study) are needed. These could include navigational bronchoscopy: See **Navigational Bronchoscopy and Biopsy (CH-1.7)** in the Chest Imaging Guidelines.

Therapy Treatment Planning

- Radiation Therapy Treatment Planning: See **Unlisted Procedure Codes in Oncology (ONC-1.5)** in the Oncology Imaging Guidelines.

CPT® 76380 Limited or Follow-up CT (Preface-4.5)

PRF.CD.0004.5.UOH

v2.0.2026

- CPT® 76380 describes a limited or follow-up CT scan. The code is used to report any CT scan, for any given area of the body, in which the work of a full diagnostic code is not performed.
- Common examples include, but are not limited to, the following:
  - Limited sinus CT imaging protocol
  - Limited or follow-up slices through a known pulmonary nodule
  - Limited slices to assess a non-healing fracture (such as the clavicle)
- Limited CT (CPT® 76380) is not medically necessary for treatment planning purposes. See **Unlisted Procedure Codes in Oncology (ONC-1.5)** in the Oncology Imaging Guidelines.
- It is inappropriate to report CPT® 76380, in conjunction with other diagnostic CT codes, to cover 'extra slices' in certain imaging protocols.
  - There is no specific number of sequences or slices defined in any CT CPT® code definition.
  - The AMA, in *CPT® 2019*, does not describe nor assign any minimum or maximum number of sequences or slices for any CT study.
    - A few additional slices or sequences are not uncommon.
    - CT imaging protocols are often influenced by the individual's clinical situation. Sometimes the protocols require more time and sometimes less.

Click Anywhere in the Header to Return to the Main Table of Contents

SPECT/CT Imaging (Preface-4.6)

PRF.CD.0004.6.A

v2.0.2026

- SPECT/CT involves SPECT (Single Photon Emission Computed Tomography) nuclear medicine imaging and CT for optimizing location, accuracy, and attenuation correction and combines functional and anatomic information.
  - Common studies using this modality include ^{123}I- or ^{131}I-Metaiodobenzylguanidine (MIBG) and octreotide scintigraphy for neuroendocrine tumors.
- Hybrid Nuclear/CT scan can be reported as CPT® 78830 (single area and single day), CPT® 78831 (2 or more days), or CPT® 78832 (2 areas with one day and 2-day study).
- CPT® 78072 became effective January 1, 2013 for SPECT/CT parathyroid nuclear imaging.

Click Anywhere in the Header to Return to the Main Table of Contents

CPT® 76140 Interpretation of an Outside Study (Preface-4.7)

PRF.CD.0004.7.UOH

v2.0.2026

- It is inappropriate to use diagnostic imaging codes for interpretation of a previously performed exam that was completed at another facility.
  - If the outside exam is being used for comparison with a current exam, the diagnostic code for the current examination includes comparison to the prior study.
  - CPT® 76140 is the appropriate code to use for an exam which was completed elsewhere and a secondary interpretation of the images is requested.

Click Anywhere in the Header to Return to the Main Table of Contents

Quantitative MR Analysis (Preface-4.8)

PRF.CD.0004.8.A

v2.0.2026

- Category III CPT® codes for quantitative analysis of multiparametric-MR (mp-MRI) data with and without an associated diagnostic MRI have been established. Quantitative mp-MRI uses software to analyze tissue physiology of visceral organs and other anatomic structures non-invasively.
- For criteria associated with these types of studies, please see the condition-specific guidelines.

Click Anywhere in the Header to Return to the Main Table of Contents

HCPCS Codes (Preface-4.9)

PRF.CD.0004.9.UOH

v2.0.2026

- Healthcare Common Procedure Coding System (HCPCS) codes are utilized by some hospitals in favor of the typical Level-III CPT® codes. These codes are typically 4 digits preceded by a C or S.
  - Many of these codes have similar code descriptions to Level-III CPT® codes (i.e., C8931 – MRA with dye, Spinal Canal; and, CPT® 72159 – MRA Spinal Canal).
  - If cases are submitted with HCPCS codes with similar code descriptions to the typical Level-III CPT® codes, those procedures should be managed in the same manner as the typical CPT® codes.
  - HCPCS code management is discussed further in the applicable guideline sections.
- Requests for many Healthcare Common Procedure Coding System (HCPCS) codes, including non-specific codes such as S8042 (Magnetic resonance imaging [MRI], low-field), should be redirected to a more appropriate and specific CPT® code. Exceptions are noted in the applicable guideline sections.

References (Preface-4)

v2.0.2026

1. Intraoperative MRI. Brainlab.com. Published 2024.
2. Neves CA, Vaisbuch Y, Leuze C, et al. Application of holographic augmented reality for external approaches to the frontal sinus. *Int Forum Allergy Rhinol*. 2020;10(7):920-925. doi:10.1002/alr.22546
3. Chung CY, Alson MD, Duszak R, Degnan AJ. From imaging to reimbursement: what the pediatric radiologist needs to know about health care payers, documentation, coding and billing. *Pediatr Radiol*. 2018;48(7):904-914. doi:10.1007/s00247-018-4104-1
4. Centers for Medicare & Medicaid Services. Healthcare Common Procedure Coding System (HCPCS). Cms.gov. Published 2025.

Click Anywhere in the Header to Return to the Main Table of Contents

Whole-Body Imaging (Preface-5)

Guideline

Whole-Body CT Imaging (Preface-5.1)

PRF.WB.0005.1.UOH

v2.0.2026

- Whole-body CT or LifeScan (CT Brain, Chest, Abdomen, and Pelvis) for screening of asymptomatic individuals is not a covered benefit. The performance of whole-body screening CT examinations in healthy individuals does not meet any of the current validity criteria for screening studies and there is no clear documentation of benefit versus radiation risk.
- Whole-body low-dose skeletal CT is supported for oncologic staging in Multiple Myeloma. See **Multiple Myeloma and Plasmacytomas (ONC-25)** in the Oncology Imaging Guidelines.

Whole-Body MR Imaging (Preface-5.2)

PRF.WB.0005.2.A

v2.0.2026

- Whole-body MRI (WBMRI) is, with the exception of select cancer predisposition syndromes and autoimmune conditions discussed below, generally not medically necessary at this time due to lack of standardization in imaging technique and lack of evidence that WBMRI improves outcome for any individual disease state.
  - While WBMRI has the benefit of whole-body imaging and lack of radiation exposure, substantial variation still exists in the number of images, type of sequences (STIR vs. diffusion weighting, for example), and contrast agent(s) used.
- Coding considerations:
  - There are no established CPT® or HCPCS codes for reporting WBMRI.
  - WBMRI is at present only reportable using CPT® 76498. All other methods of reporting whole-body MRI are inappropriate including the following:
    - Separate diagnostic MRI codes for multiple individual body parts
    - MRI Bone Marrow Supply (CPT® 77084)
- Disease-specific considerations:
  - Cancer screening:
    - Interval WBMRI is recommended for cancer screening in individuals with select cancer predisposition syndromes. Otherwise, WBMRI has not been shown to improve outcomes for cancer screening.
      - For additional information, see **Li-Fraumeni Syndrome (LFS) (PEDONC-2.2)**, **Neurofibromatosis 1 and 2 (NF1 and NF2) (PEDONC-2.3)**, **Rhabdoid Tumor Predisposition Syndrome (PEDONC-2.11)**, **Hereditary Paraganglioma-Pheochromocytoma (HPP) Syndromes (PEDONC-2.13)**, **Constitutional Mismatch Repair Deficiency (CMMRD or Turcot Syndrome) (PEDONC-2.15)**, **Infantile Myofibromatosis (PEDONC-2.18)**, or **Bloom Syndrome (PEDONC-2.19)** in the Pediatric and Special Populations Oncology Imaging Guidelines.
  - Cancer staging and restaging:
    - Whole-body MRI has limited indications in staging and restaging of multiple myeloma. See **Multiple Myeloma and Plasmacytomas (ONC-25)** in the Oncology Imaging Guidelines for additional details.
    - Evidence has not been published establishing WBMRI as a standard evaluation for any other type of cancer.
  - Autoimmune disease:
    - WBMRI can be approved in some situations for individuals with chronic recurrent multifocal osteomyelitis.

- For additional information, see **Chronic Recurrent Multifocal Osteomyelitis (PEDMS-10.2)** in the Pediatric Musculoskeletal Imaging Guidelines.

Click Anywhere in the Header to Return to the Main Table of Contents

PET/MRI (Preface-5.3)

PRF.WB.0005.3.A

v2.0.2026

- PET/MRI is generally not medically necessary for a vast majority of oncologic and neurologic conditions due to lack of standardization in imaging technique and interpretation. However, it is medically necessary in select circumstances when the following criteria are met:
  - The individual meets condition-specific guidelines for PET/MRI OR
  - The individual meets ALL of the following:
    - The individual meets guideline criteria for PET/CT, **AND**
    - PET/CT is not available at the treating institution, **AND**
    - The provider requests PET/MRI in lieu of PET/CT
- When the above criteria are met, PET/MRI is reported using the code combination of PET Whole-Body (CPT® 78813) and MRI Unlisted (CPT® 76498). All other methods of reporting PET/MRI are inappropriate.
  - When clinically appropriate, diagnostic MRI codes can be medically necessary at the same time as the PET/MRI code combination.
- For more information, please see the appropriate condition-based guideline.

References (Preface-5)

v2.0.2026

1. Bojadzieva J, Amini B, Day SF, et al. Whole body magnetic resonance imaging (WB-MRI) and brain MRI baseline surveillance in TP53 germline mutation carriers: experience from the Li-Fraumeni Syndrome Education and Early Detection (LEAD) clinic. *Fam Cancer.* 2018;17(2):287-294. doi:10.1007/s10689-017-0034-6
2. Li J, Zhou H, Zhang X, Song F, Pang X, Wei Z. A two-way comparison of whole-body 18FDG PET-CT and whole-body contrast-enhanced MRI for distant metastasis staging in patients with malignant tumors: a meta-analysis of 13 prospective studies. *Ann Palliat Med*. 2020;9(2):247-255. doi:10.21037/apm.2020.02.30
3. Zhang C, Liang Z, Liu W, Zeng X, Mo Y. Comparison of whole-body 18F-FDG PET/CT and PET/MRI for distant metastases in patients with malignant tumors: a meta-analysis. *BMC Cancer*. 2023;23(1):37. Published 2023 Jan 10. doi:10.1186/s12885-022-10493-8
4. Petralia G, Padhani AR. Whole-Body Magnetic Resonance Imaging in Oncology: Uses and Indications. *Magn Reson Imaging Clin N Am*. 2018;26(4):495-507. doi:10.1016/j.mric.2018.06.003
5. Sato TS, Watal P, Ferguson PJ. Imaging mimics of chronic recurrent multifocal osteomyelitis: avoiding pitfalls in a diagnosis of exclusion. *Pediatr Radiol.* 2020;50(1):124-136. doi:10.1007/s00247-019-04510-5
6. Krout JC, Rees AB, Goldin AN, et al. Chronic Recurrent Multifocal Osteomyelitis: A Review of the Noninfectious Inflammatory Bone Disease and Lessons for More Timely Diagnosis. *Orthopedics*. 2023;46(3):e149-e155. doi:10.3928/01477447-20220719-08
7. National Comprehensive Cancer Network® (NCCN®). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Genetic/Familial High-Risk Assessment: Breast, Ovarian, Pancreatic, and Prostate. Version 2.2026. October 10 10, 2025. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Breast, Ovarian, Pancreatic, and Prostate V2.2026. ©2025 National Comprehensive Cancer Network, Inc. All rights reserved. The NCCN Guidelines® and illustrations herein may not be reproduced in any form for any purpose without the express written permission of the NCCN. To view the most recent and complete version of the NCCN Guidelines®, go online to NCCN.org.
8. National Comprehensive Cancer Network® (NCCN®). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Multiple Myeloma. Version 4.2026 - November 26, 2025. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Multiple Myeloma V4.2026. ©2024 National Comprehensive Cancer Network, Inc. All rights reserved. The NCCN Guidelines® and illustrations herein may not be reproduced in any form for any purpose without the express written permission of the NCCN. To view the most recent and complete version of the NCCN Guidelines®, go online to NCCN.org.

Click Anywhere in the Header to Return to the Main Table of Contents

References (Preface-6)

Guideline

References (Preface-6.1)

Click Anywhere in the Header to Return to the Main Table of Contents

References (Preface-6.1)

PRF.RF.0006.1.A

v2.0.2026

- Complete reference citations for the journal articles are embedded within the body of the guidelines and/or may be found on the Reference pages at the end of some guideline sections.

Click Anywhere in the Header to Return to the Main Table of Contents

General Guidelines (PEDSP-1.0)

Guideline

Procedure Codes Associated with Spine Imaging (PEDSPINE)
General Guidelines (PEDSP-1.0)
Pediatric Spine Imaging Age Considerations (PEDSP-1.1)
Pediatric Spine Imaging Appropriate Clinical Evaluation (PEDSP-1.2)
Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)
References (PEDSP-1)

Click Anywhere in the Header to Return to the Main Table of Contents

Procedure Codes Associated with Spine Imaging (PEDSPINE)

SPP.GG.ProcedureCodes.A
v2.0.2026

Procedure Codes Associated with Spine Imaging	
MRI	**CPT®**
MRI Cervical without contrast	72141
MRI Cervical with contrast	72142
MRI Cervical without and with contrast	72156
MRI Thoracic without contrast	72146
MRI Thoracic with contrast	72147
MRI Thoracic without and with contrast	72157
MRI Lumbar without contrast	72148
MRI Lumbar with contrast	72149
MRI Lumbar without and with contrast	72158
MRI Unlisted procedure (for radiation planning or surgical software)	76498
MRA	**CPT®**
MRA Spinal Canal	72159
CT	**CPT®**
CT Cervical without contrast	72125
CT Cervical with contrast	72126

Procedure Codes Associated with Spine Imaging	
CT Cervical without and with contrast	72127
CT Thoracic without contrast	72128
CT Thoracic with contrast	72129
CT Thoracic without and with contrast	72130
CT Lumbar without contrast	72131
CT Lumbar with contrast	72132
CT Lumbar without and with contrast	72133
CT Pelvis without contrast	72192
CT Pelvis with contrast	72193
CT Pelvis without and with contrast	72194
CT Guidance for Placement of Radiation Therapy Fields	77014
CT Unlisted procedure (for radiation planning or surgical software)	76497
Nuclear Medicine	**CPT®**
PET Imaging; limited area (this code not used in pediatrics)	78811
PET Imaging: skull base to mid-thigh (this code not used in pediatrics)	78812
PET Imaging: whole body (this code not used in pediatrics)	78813
PET with concurrently acquired CT; limited area (this code rarely used in pediatrics)	78814
PET with concurrently acquired CT; skull base to mid-thigh	78815
PET with concurrently acquired CT; whole body	78816

Procedure Codes Associated with Spine Imaging	
Bone Marrow Imaging Limited Areas	78102
Bone Marrow Imaging Multiple Areas	78103
Bone Marrow Imaging Whole Body	78104
Nuclear Bone Scan Limited	78300
Nuclear Bone Scan Multiple Areas	78305
Nuclear Bone Scan Whole Body	78306
Bone Scan Three Phase	78315
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, single area (e.g., head, neck, chest, pelvis), single day imaging	78800
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, 2 or more areas (e.g., abdomen and pelvis, head and chest), 1 or more days imaging or single area imaging over 2 or more days	78801
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, whole body, single day imaging	78802
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (SPECT), single area (e.g., head, neck, chest, pelvis), single day imaging	78803
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, whole body, requiring 2 or more days imaging	78804

Procedure Codes Associated with Spine Imaging	
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (SPECT) with concurrently acquired computed tomography (CT) transmission scan for anatomical review, localization and determination/detection of pathology, single area (e.g., head, neck, chest, pelvis), single day imaging	78830
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (SPECT), minimum 2 areas (e.g., pelvis and knees, abdomen and pelvis), single day imaging, or single area imaging over 2 or more days	78831
Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); tomographic (SPECT) with concurrently acquired computed tomography (CT) transmission scan for anatomical review, localization and determination/detection of pathology, minimum 2 areas (e.g., pelvis and knees, abdomen and pelvis), single day imaging, or single area imaging over 2 or more days	78832
Ultrasound	**CPT®**
Ultrasound, spinal canal and contents	76800

General Guidelines (PEDSP-1.0)

SPP.GG.0001.0.A

v2.0.2026

- A pertinent clinical evaluation since the onset or change in symptoms, including a detailed history, physical examination with a thorough neurologic examination, appropriate laboratory studies and basic imaging such as plain radiography or ultrasound should be performed prior to considering advanced imaging (CT, MR, Nuclear Medicine), unless the individual is undergoing guideline-supported scheduled imaging evaluation. A meaningful technological contact (telehealth visit, telephone call, electronic mail or messaging) can serve as a pertinent clinical evaluation.
  - A thorough neurologic examination should include results of manual motor testing, specific dermatomal distribution of altered sensation, reflex examination, nerve root tension signs (e.g., straight leg raise test, slump test, femoral nerve tension test), and documentation of any specific radicular features.
- For those spinal conditions/disorders for which the Spine Imaging Guidelines require a plain x-ray of the spine prior to consideration of an advanced imaging study, the plain x-ray must be performed after the current episode of symptoms started or changed and results need to be available to the requesting provider of the advanced imaging study.
- Unless otherwise stated in a specific guideline section, the use of advanced imaging to screen asymptomatic individuals for disorders involving the spine is not supported. Advanced imaging of the spine should only be approved in individuals who have documented active clinical signs or symptoms of disease involving the spine.
- Unless otherwise stated in a specific guideline section, repeat imaging studies of the spine are not necessary unless there is evidence for progression of disease, new onset of disease, and/or documentation of how repeat imaging will affect individual management or treatment decisions.

Health Equity Considerations

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Click Anywhere in the Header to Return to the Main Table of Contents

Pediatric Spine Imaging Age Considerations (PEDSP-1.1)

SPP.GG.0001.1.A

v2.0.2026

- Many conditions affecting the spine in the pediatric population have different diagnoses than those occurring in the adult population. For those diseases which occur in both pediatric and adult populations, minor differences may exist in management due to individual age, comorbidities, and differences in disease natural history between children and adults.
- Individuals who are ≤18 years old should be imaged according to the Pediatric Spine Imaging Guidelines if discussed. Any conditions not specifically discussed in the Pediatric Spine Imaging Guidelines should be imaged according to the General Spine Imaging Guidelines. Individuals who are >18 years old should be imaged according to the General Spine Imaging Guidelines, except where directed otherwise by a specific guideline section.

Click Anywhere in the Header to Return to the Main Table of Contents

Pediatric Spine Imaging Appropriate Clinical Evaluation (PEDSP-1.2)

SPP.GG.0001.2.A
v2.0.2026

- See: **General Guidelines (PEDSP-1.0)**

Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)

SPP.GG.0001.3.UOH
v2.0.2026

- MRI
  - MRI is the preferred modality for imaging the pediatric spine unless otherwise stated in a specific guideline section.
  - Due to the length of time required for MRI acquisition and the need to minimize individual movement, anesthesia is usually required for almost all infants (except neonates) and young children (age <7 years), as well as older children with delays in development or maturity. This anesthesia may be administered via oral or intravenous routes. In this individual population, MRI sessions should be planned with a goal of minimizing anesthesia exposure by adhering to the following considerations:
    - MRI procedures can be performed without and/or with contrast use as supported by these condition based guidelines. If intravenous access will already be present for anesthesia administration and there is no contraindication for using contrast, imaging without and with contrast may be appropriate if requested. By doing so, the requesting provider may avoid repetitive anesthesia administration to perform an MRI with contrast if the initial study without contrast is inconclusive.
    - Recent evidence-based literature demonstrates the potential for gadolinium deposition in various organs including the brain, after the use of MRI contrast.
      - The U.S. Food and Drug Administration (FDA) has noted that there is currently no evidence to suggest that gadolinium retention in the brain is harmful and restricting gadolinium-based contrast agents (GBCAs) use is not warranted at this time. It has been recommended that GBCA use should be limited to circumstances in which additional information provided by the contrast agent is necessary and the necessity of repetitive MRIs with GBCAs should be assessed.
    - If multiple body areas are supported by these guidelines for the clinical condition being evaluated, MRI of all necessary body areas should be obtained concurrently in the same anesthesia session.
- CT
  - CT is generally inferior to MRI for imaging the pediatric spine, but has specific indications in which it is the preferred modality listed in specific sections of these guidelines.
    - CT is the imaging study of choice in the setting of trauma

        - CT should not be used to replace MRI in an attempt to avoid sedation unless it is listed as a recommended study in a specific guideline section.
    - Myelogram with post-myelogram CT imaging is rarely indicated in children except in certain limited indications (usually requested after specialist consultation), including:
        - Evaluation of spine in individuals with fixation hardware which limits utility of MRI.
        - Severe congenital scoliosis with inconclusive MRI.
        - Evaluation of nerve root avulsion in patients with a brachial plexus injury and inconclusive MRI.
        - Evaluation of paraspinal cyst to assess continuity with the subarachnoid space.
        - Coding note: CT of appropriate spinal level with or without contrast may be appropriate. If the radiologist performs the myelogram the exam should be coded with contrast. If a clinician performs the myelogram the exam should be coded without contrast.
- Ultrasound
    - Spinal canal ultrasound (CPT® 76800) describes the ultrasonic evaluation of the spinal cord (canal and contents) and should not be reported multiple times for imaging of different areas of the spinal canal.
    - Do not use CPT® 76800 for intraoperative spinal canal ultrasound as CPT® 76998 (intraoperative ultrasonic guidance) is the appropriate code in this circumstance.
    - Spinal canal ultrasound (CPT® 76800) is generally limited to infants up to 6 months of age because of the bone mass surrounding the spinal cord limits evaluation of the intraspinal contents in older infants.
        - **Exception:** the persisting acoustic window in children with posterior spinal defects of spinal dysraphism enables spinal canal ultrasound to be performed at any age (see: **Spinal Dysraphism (PEDSP-4)**).
        - In general, additional imaging studies of the spine are not indicated in asymptomatic individuals with normal spinal ultrasound findings.
- Nuclear Medicine
    - Nuclear medicine studies are rarely used in the evaluation of the spine, but are medically necessary in the following circumstances:
        - Evaluation of suspected loosening of orthopedic hardware when recent plain x-ray is nondiagnostic (see: **Nuclear Medicine (MS-28)**).
            - Bone scan (CPT® 78315) or
            - Distribution Of Radiopharmaceutical Agent SPECT (CPT® 78803, or 78831) or
            - SPECT/CT (CPT® 78830 or CPT® 78832)
        - For suspected spondylolysis, see: **Spondylolysis (PEDSP-2.4)**

  - Evaluation of back pain when no cause is demonstrated on MRI, see: **Back and Neck Pain in Children Age 5 and Under (PEDSP-2.2)** or **Back and Neck Pain in Children Age 6 and Older (PEDSP-2.3)**
- The guidelines listed in this section for certain specific indications are not intended to be all-inclusive; clinical judgment remains paramount and variance from these guidelines may be appropriate and warranted for specific clinical situations.

References (PEDSP-1)

v2.0.2026

1. Berland LL, Cernigliaro JG, Ho VB, et. al. ACR Practice parameter for performing and interpreting magnetic resonance imaging (MRI). American College of Radiology. Revised 2017. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/mr-perf-interpret.pdf?la=en.
2. Biassoni L, Easty M. Pediatric nuclear medicine imaging. *Br Med Bull*. 2017;123:127-48.
3. Newman B, Carmody TJ, Catanzano TM, et al. ACR–ASER–SCBT-MR–SPR Practice parameter for the performance of pediatric computed tomography (CT) Revised 2019 (Resolution 6). American College of Radiology. 2019. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ct-ped.pdf?la=en.
4. Ing C, DiMaggio C, Whitehouse A, et al. Long-term differences in language and cognitive function after childhood exposure to anesthesia. *Pediatrics*. 2012;130(3). doi:10.1542/peds.2011-3822.
5. Monteleone M, Khandji A, Cappell J, et al. Anesthesia in children: perspectives from nonsurgical pediatric specialists. *J Neurosurg Anesthesiol*. 2014;26(4):396-398. doi:10.1097/ana.0000000000000124.
6. Reighard C, Junaid S, Jackson WM, et. al. Anesthetic exposure during childhood and neurodevelopmental outcomes: A systematic review and meta-analysis. *JAMA Netw Open*. 2022;5(6):e2217427. doi:10.1001/jamanetworkopen.2022.17427.
7. Fraum TJ, Ludwig DR, Bashir MR, et al. Gadolinium-based contrast agents: a comprehensive risk assessment. *J Magn Reson Imaging*. 2017;46(2):338–353. doi:10.1002/jmri.25625.
8. Fotenos, A. Update on FDA approach to safety issue of gadolinium retention after administration of gadolinium-based contrast agents. FDA. https://www.fda.gov/media/116492/download. Accessed April 22, 2020.
9. Blumfield E, Swenson DW, Iyer RS, Stanescu AL. Gadolinium-based contrast agents – review of recent literature on magnetic resonance imaging signal intensity changes and tissue deposits, with emphasis on pediatric patients. *Pediatric Radiology*. 2019;49(4):448-457. doi:10.1007/s00247-018-4304-8.
10. Siegel MJ. Spinal Ultrasonography. Pediatric sonography. 5th ed. Philadelphia. Wolters Kluwer. 2018;653-76.
11. Implementation Guide: Medicaid State Plan Eligibility Groups Mandatory Coverage Infants and Children under Age 19. https://www.hhs.gov/guidance/document/implementation-guide-medicaid-state-plan-eligibility-eligibility-groups-aeu-mandatory-2
12. Soares BP, Lequin MH, Huisman TAGM. Safety of Contrast Material Use in Children. *Magn Reson Imaging Clin N Am*. 2017;25(4):779-785. doi:10.1016/j.mric.2017.06.009
13. Graham MR. Clinical update regarding general anesthesia-associated neurotoxicity in infants and children. *Curr Opin Anaesthesiol*. 2017;30(6):682-687. doi:10.1097/ACO.0000000000000520

Click Anywhere in the Header to Return to the Main Table of Contents

Pediatric Back and Neck Pain and Trauma (PEDSP-2)

Guideline

Introduction (PEDSP-2.1)

SPP.TR.0002.1.A

v2.0.2026

- Currently, only about 20% of back pain in children over age 5 is from a discoverable cause. Scoliosis, spondylitic disorders, Scheuermann disease, tumor, and trauma are the most common causes.
- Back pain in children under age 5 is uncommon and often reflects underlying serious disease when present.
- Disc herniations are rare in children, but become more frequent as activity increases during adolescence.

Back and Neck Pain in Children Age 5 and Under (PEDSP-2.2)

SPP.TR.0002.2.A

v2.0.2026

- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, and plain radiography should be performed prior to considering advanced imaging.
- Advanced imaging is medically necessary in all individuals in this age group except those with mild and transient back pain.
  - MRI of the symptomatic spinal region is medically necessary.
    - Individuals in this age group will require sedation to complete MRI imaging. See: **Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)** for contrast and body area considerations.
  - CT without contrast of the symptomatic spinal region is medically necessary when:
    - plain x-rays suggest an isolated vertebral bone abnormality without any concern for spinal canal or cord abnormalities (which is rare in this age group)
    - a recent MRI does not provide sufficient detail of the bony anatomy to allow for acute patient care decision making
  - Bone scan is medically necessary for evaluation of suspected spinal fracture when x-ray is negative using any of the following CPT® code combinations:
    - CPT® 78300, CPT® 78305, or CPT® 78306 as a single study
    - CPT® 78315 or CPT® 78803 can be approved as a single study when stress fracture is suspected.
  - Bone scan is medically necessary for evaluation of suspected spondylolysis, or if recent spine MRI is inconclusive using any of the following CPT code combinations: SPECT bone scans are especially sensitive for detecting spondylolysis, revealing areas of bone turnover; and the findings are generally positive for a prolonged period.
    - CPT® codes: CPT® 78300, CPT® 78305, CPT® 78306, CPT® 78315, or CPT® 78803 as a single study
    - CPT® 78305 and CPT® 78803 concurrently
    - CPT® 78306 and CPT® 78803 concurrently

Back and Neck Pain in Children Age 6 and Older (PEDSP-2.3)

SPP.TR.0002.3.A
v2.0.2026

Radicular back and neck pain is common in adult patients but is uncommon in adolescents and rare in children.

- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination including results of manual motor testing, the specific dermatomal distribution of altered sensation, reflex examination, and nerve root tension signs (e.g., straight leg raise test, slump test, femoral nerve tension test) and documentation of any specific radicular features, should be performed prior to considering advanced imaging.
- X-rays, while not required prior to conservative treatment, must be obtained before advanced imaging can be approved.
  - The results of plain x-rays performed after the current episode of symptoms started or changed need to be available to the requesting provider of the advanced imaging study.
- Advanced imaging is medically necessary following x-ray when one or more of the following pediatric “red flags” are present:
  - Accompanying systemic symptoms (fever, weight loss, etc.)
  - Functional disability (daily limitation in normal activities because of pain)
  - Pain which is extremely severe or worse at night
  - Constant or radicular pain lasting ≥4 weeks
  - Pain which worsens despite an attempt at symptomatic treatment
  - Neurological symptoms or abnormal neurological examination findings
  - An established diagnosis of cancer other than leukemia
  - Abnormal x-rays
  - Individuals having undergone spinal surgery
  - Associated bowel or bladder dysfunction
- In the absence of any “red flags”, a 4-week trial of provider-supervised conservative treatment (after the current set of symptoms or physical exam findings started or changed) should be attempted before advanced imaging is medically necessary.
  - It can be assumed that children who are being evaluated by a pediatric spine surgeon have failed a reasonable trial of conservative treatment under the care of the primary care provider, as this is by far the most common reason for such referrals.

- X-rays of the involved regions should be obtained prior to advanced imaging in individuals with “red flag” findings, or who remain symptomatic after a 4-week trial of provider-supervised conservative treatment.
  - The results of plain x-rays performed after the current episode of symptoms started or changed need to be available to the requesting provider of the advanced imaging study.
- MRI without contrast of the symptomatic spinal region is medically necessary for the evaluation of pediatric spine pain, and should be approved unless one of the following conditions applies, in which case MRI without and with contrast is medically necessary:
  - Fever (≥100° F)
  - Clinical suspicion of infection (discitis, osteomyelitis, paraspinous or epidural abscess)
  - Physical examination or plain x-ray suggests a mass lesion
  - New or worsening pain in a patient with an established diagnosis of cancer
- CT without contrast of the symptomatic spinal region is medically necessary when:
  - the request is for re-evaluation of a known vertebral bony disorder
  - plain x-rays show spondylotic changes or suggest an isolated vertebral bone abnormality without any concern for spinal canal or cord abnormalities (which is rare in this age group)
  - a recent MRI does not provide sufficient detail of the bony anatomy to allow for acute individual care decision making
- Bone scan is medically necessary for evaluation of suspected spinal fracture when x-ray is negative, or if recent MRI is inconclusive using any of the following CPT® code combinations:
  - CPT® codes: CPT® 78300, CPT® 78305, or CPT® 78306 as a single study
  - CPT® 78315 or CPT® 78803 as a single study when stress fracture is suspected

Spondylolysis (PEDSP-2.4)

SPP.TR.0002.4.A
v2.0.2026

Most cases of childhood spondylolysis are believed to be caused by repeated microtrauma, resulting in stress fracture of the pars interarticularis. Heredity is also believed to be a factor in some cases. It is the most common cause of low back pain in children older than age 10.

- Activity modification, NSAID treatment, physical therapy, and/or immobilization with various braces are the initial treatments for symptomatic individuals.
- Surgical treatment is only recommended for individuals with disabling symptoms that have not responded to non-surgical care.
- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, and plain radiography should be performed prior to considering advanced imaging.
- Spondylolysis is screened with plain x-rays.
  - MRI without contrast of the symptomatic spinal level is medically necessary to evaluate for stress reaction in bone and visualizing nerve roots if symptoms have continued despite a provider-directed 4-week course of conservative care after the current set of symptoms or physical exam findings started or changed, or if there is a documented need for preoperative planning.
  - If additional imaging is needed because of radiological uncertainty or associated spondylolisthesis, SPECT Radiopharmaceutical Localization Imaging (CPT® 78803) or SPECT/CT (CPT® 78830) is medically necessary to identify stress reaction in spondylolysis cases which are radiographically occult. Bone scan has been demonstrated to be superior to MRI in detecting active spondylolysis.
  - SPECT bone scans are especially sensitive for detecting spondylolysis, revealing areas of bone turnover; and the findings are generally positive for a prolonged period. CT without contrast of the symptomatic spinal level is medically necessary to provide detailed evaluation of bony anatomy, if there is a documented need for preoperative planning. CT scans have been considered the criterion standard for characterizing fractures and for detailing bone morphology and anatomy.

Spine Pain Due to Infectious Causes (PEDSP-2.5)

SPP.TR.0002.5.A

v2.0.2026

- Entities including, but not limited to, discitis and vertebral osteomyelitis, typically present with sudden onset of back pain, fever, and elevated white blood cell count, occurring most commonly in the first decade of life.
- A detailed history and physical examination with thorough neurologic examination should be performed initially.

Initial Imaging Studies

- Plain x-rays should be performed initially.
  - The results of plain x-rays performed after the current episode of symptoms started or changed need to be available to the requesting provider of the advanced imaging study.
- MRI without and with contrast of the symptomatic spinal level is very sensitive at detecting early changes and is medically necessary when discitis or osteomyelitis is clinically suspected.
- Nuclear medicine imaging also can be positive as soon as 1 to 2 days after the onset of symptoms. Any of the following studies are medically necessary for initial evaluation of suspected osteomyelitis:
  - Bone scan (one of CPT® codes: CPT® 78300, 78305, 78306, or 78315)
  - Nuclear Bone Marrow imaging (one of CPT® codes: CPT® 78102, 78103, or 78104)
  - Radiopharmaceutical inflammatory imaging (one of CPT® codes: CPT® 78800, 78801, 78802, 78803, or 78804)
  - SPECT (CPT® 78831)
  - SPECT/CT (CPT® 78830, or CPT® 78832)

Follow-Up Imaging Studies

- Follow-up plain x-rays may show disc space narrowing and bony changes of osteomyelitis.
- MRI without and with contrast of the symptomatic spinal level or CT with contrast (including myelography) is medically necessary for follow-up evaluating bony changes of osteomyelitis or concern for epidural abscess.
- Any of the following studies are medically necessary for evaluation of response to treatment in established osteomyelitis:
  - Bone scan (one of CPT® codes: CPT® 78300, 78305, 78306, or 78315)

- Nuclear Bone Marrow imaging (one of CPT® codes: CPT® 78102, 78103, or 78104)
- Radiopharmaceutical localization imaging (one of CPT® codes: CPT® 78800, 78801, 78803, 78830, 78831, or 78832)

Spine Pain Related To Trauma and Painless Spine Trauma (PEDSP-2.6)

SPP.TR.0002.6.A

v2.0.2026

- Imaging evaluation of traumatic spine injury in children is generally directed based on clinical examination. 60% to 80% of all spinal injuries in children involve the cervical spine as opposed to the thoracic spine and lumbar spine. Common causes are motor vehicle accidents, falls, and sports-related injuries.
- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, should be performed prior to considering advanced imaging.
- When advanced imaging is appropriate, MRI without contrast or CT without contrast of the involved level is medically necessary as discussed in **Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)**
  - If the initial CT or MRI study is considered inconclusive, an exam of the other modality is medically necessary if needed to direct clinical management.

Cervical Spine

- The results of plain x-rays performed after the current episode of symptoms started or changed need to be available to the requesting provider of the advanced imaging study
- Advanced imaging of the cervical spine is medically necessary in children under 3 years of age when one or more of the following “red flags” are present:
  - Glasgow Coma Scale <14
  - Individual does not open eyes regardless of stimulus
  - Motor vehicle collision
- Advanced imaging of the cervical spine is medically necessary in children ≥3 years of age when one or more of the following “red flags” are present:
  - Altered mental status
  - Focal neurologic findings
  - Neck pain
  - Torticollis not present prior to trauma
  - Substantial torso injury
  - Diving or head-first injury
  - High speed motor vehicle collision
  - Predisposing conditions, e.g., Down syndrome
- Advanced imaging of the cervical spine is not medically necessary in children older than 2 years of age if they meet ALL of the following criteria:

- Absence of posterior midline cervical pain
- Absence of focal neurologic deficit
- Normal level of alertness
- No evidence of intoxication
- Absence of other clinically apparent pain which could distract patient from the pain of a cervical injury

Thoracolumbar Spine

- Advanced imaging of the thoracolumbar spine is medically necessary in children following a recent x-ray when x-rays are inconclusive, or there is an abnormal neurological examination.

Suspected Physical Child Abuse

- In children with suspected physical child abuse and documented findings suggesting abuse (e.g., fractures on skeletal survey or other clinical indicators), MRI Cervical (CPT® 72141), Thoracic (CPT® 72146), and Lumbar (CPT® 72148) Spine without contrast are medically necessary to search for associated abnormalities.
  - If intravenous access will already be present for anesthesia administration and there is no contraindication for using contrast, imaging without and with contrast is medically necessary. See: **Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)**

References (PEDSP-2)

v2.0.2026

1. Booth TN, Iyer RS, Falcone Jr RA, et. al. ACR Appropriateness Criteria® Back pain-child. American College of Radiology; Updated: 2016. https://acsearch.acr.org/docs/3099011/Narrative/.
2. Calloni SF, Huisman TA, Poretti A, Soares BP. Back pain and scoliosis in children: when to image, what to consider. *The Neuroradiology Journal*. 2017;30(5):393-404.
3. Eckel T, Lehman R, and Paik H. Spondylolisthesis. Scoliosis Research Society. Scoliosis Research Society E-Text ©, 2022. http://etext.srs.org/book/.
4. León-Domíngues A, Cansino-Román R, Martínez-Sala JM, Farrington DM. Clinical examination and imaging resources in children and adolescent back pain. *Journal of Children's Orthopaedics*. 2023;17(6):512-526. doi:10.1177/18632521231215860.
5. MacDonald J, Stuart E, Rodenberg R. Musculoskeletal low back pain in school-aged children: a review. *JAMA pediatrics*. 2017;171(3):280-7.
6. Matesan M, Behnia F, Bermo M, et al. SPECT/CT bone scintigraphy to evaluate low back pain in young athletes: common and uncommon etiologies. *J Ortho Surg*. 2016;11:76.
7. Mistovich RJ, Spiegel DA. The Spine. In: Kliegman RM, St. Geme JW III, Blum NJ, et. al. Nelson Textbook of Pediatrics. 21st edition. Philadelphia, PA: Elsevier; 2020:3633-3646.
8. Ramirez N, Flynn JM, Hill BW, et al. Evaluation of a systematic approach to pediatric. *J Pediat Ortho*. 2015;35-28-32.
9. Trout AT, Sharp SE, Anton CG, et al. Spondylolysis and beyond: value of SPECT/CT in evaluation of low back pain in children and young adults. *Radiographic*. 2015;35:819-34.
10. Kadom N, Palasis S, Pruthi S, et al. ACR Appropriateness Criteria® Suspected Spine Trauma–Child. American College of Radiology; Date of Origin: 2018. https://acsearch.acr.org/docs/3101274/Narrative/.
11. Kim H, Crawford C, Ledonio C, et al. Current evidence regarding the diagnostic methods for pediatric lumbar spondylolisthesis: a report from the Scoliosis Research Society Evidence Based Medicine Committee. *Spine Deform*. 2018;6(2):185-188.
12. Oetgen ME. Current Use of Evidence-Based Medicine in Pediatric Spine Surgery. *Orthopedic Clinics*. 2018;49(2):191-4.
13. McAlister AS, Nagaraji U, Radhakrishnan R. Emergent imaging of pediatric cervical spine trauma. Radiographic. 2019;39:1126-1142.
14. Trout AT, Sharp SE, Anton CG, Gelfand MJ, Mehlman CT. Spondylolysis and beyond: value of SPECT/CT in evaluation of low back pain in children and young adults. *Radiographics*. 2015;35(3):819-34.
15. Born M, Schwier F, Stoever B, Mentzel HJ, Freiberg J. The German evidence-based child protection guideline–imaging in suspected child abuse. *Rofo*. 2020;192(4):343-348. doi:10.1055/a-1019-8018.
16. Wooten-Gorges SL, Soares BP, Alazarki AL, et al. ACR Appropriateness Criteria®. Suspected Physical Abuse —Child. Date of origin: 1984. Last review: 2016.
17. Tofte JN, CarlLee TL, Holte AJ, Sitton SE, Weinstein SL. Imaging pediatric spondylolysis: A systematic review. *Spine*. 2017;42(10):777-782. doi:10.1097/BRS.0000000000001912.
18. Ledonio CGT, Burton DC, Crawford CH. Current evidence regarding diagnostic imaging methods for pediatric lumbar spondylolysis: A report from the scoliosis research society evidence-based medicine committee. *Spine Deformity.* 2017;5:97-101.
19. Saleh ES, Vasileff CC, Omari AM, Khalil JG. The diagnosis and management of pediatric spine infections. *Cureus*. 2021;13(7):e16748. doi:10.7759/cureus.16748.
20. Biagiarelli FS, Piga S, Reale A et al. Management of children presenting with low back pain to emergency department. *Am J Emerg Med*. 2019;37(4):672-679. doi:10.1016/j.ajem.2019.07.012.

Click Anywhere in the Header to Return to the Main Table of Contents

Kyphosis and Scoliosis (PEDSP-3)

Guideline

Juvenile Thoracic Kyphosis (Scheuermann Disease) (PEDSP-3.1)

SPP.KS.0003.1.A

v2.0.2026

- This condition is also known as Scheuermann Kyphosis, and these individuals generally present with chronic and recurrent back pain.
- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, and plain radiography should be performed prior to considering advanced imaging.
- X-rays will typically show anterior wedging in three or more adjacent vertebral bodies.
  - Lower thoracic kyphosis from developmental vertebral wedging with thoracic kyphosis varying between 20° and 45° should be identified by plain x-rays before considering advanced imaging.
  - MRI is not an effective diagnostic modality and is therefore not medically necessary for this condition since the incidence of false positive vertebral changes in normal individuals is high.
- MRI Thoracic Spine without contrast (CPT® 72146) is medically necessary preoperatively to rule out any associated spinal cord problems.
- MRI Lumbar Spine without contrast (CPT® 72148) is medically necessary preoperatively to rule out any associated spinal cord conditions when there is clinical or radiographic evidence of lumbar abnormalities.

Scoliosis (PEDSP-3.2)

SPP.KS.0003.2.A

v2.0.2026

- Scoliosis is an abnormal lateral curve of the thoracic or thoraco-lumbar spine in the frontal plane. A small lateral curve in a skeletally mature person is not uncommon and generally does not require further investigation.
- Using the Cobb technique for measuring these curves, a curve of under 10˚ is normal, a curve from 10˚ to 20˚ is mildly abnormal, a curve over 20˚ is significantly abnormal, and a curve over 40˚ is severely abnormal.
- Most individual with significant scoliosis have some element of kyphosis as well.
  - There are many ways of classifying scoliosis. These guidelines will classify scoliosis as congenital, idiopathic, and neuromuscular scoliosis.
- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, detailed examination of the spine in different body positions, and plain radiography should be performed prior to considering advanced imaging.
  - Standing posteroanterior (PA) and lateral x-rays of the spine are the initial imaging studies and are used for follow-up. If anteroposterior (AP) x-rays are to be performed, breast shields should be used to reduce breast radiation exposure.
  - Spine surgical specialists sometimes appropriately request both MRI and CT together for preoperative planning of scoliosis surgery.
    - In addition, MR and CT are useful to identify an underlying cause of scoliosis, such as congenital and developmental anomalies.
    - MR or CT Spine is medically necessary postoperatively when recent postoperative x-rays are inconclusive for managing individual treatment.
      - Individuals with severe scoliosis may have compromised lung development. CT Chest with contrast (CPT® 71260) or without contrast (CPT® 71250) is medically necessary in the perioperative period as well as 2 and 5 years postoperatively to assess lung growth.

Congenital Scoliosis

Cases are recognized in infancy or early childhood. Most cases arise from anomalies of vertebral development, and many are associated with anomalies of the genitourinary system or of other organs.

- In infants under 6 months of age spinal ultrasound (CPT® 76800) is medically necessary after initial imaging with plain x-rays.
- MRI Cervical (CPT® 72141), Thoracic (CPT® 72146), and Lumbar (CPT® 72148) Spine without contrast are medically necessary to search for underlying anomalies.

  - If intravenous access will already be present for anesthesia administration and there is no contraindication for using contrast, imaging without and with contrast may, is medically necessary. See: **Pediatric Spine Imaging Modality General Considerations (PEDSP-1.3)**
- MRI Brain without and with contrast is medically necessary if the clinical evaluation or preliminary imaging studies suggest an associated intracranial anomaly.
- Renal ultrasound (CPT® 76770 or CPT® 76775) is medically necessary since nearly one-third of individuals also have genitourinary anomalies.
  - CT, MRI, or nuclear medicine studies of the genitourinary tract are medically necessary if the ultrasound is abnormal.

Idiopathic Scoliosis

Idiopathic scoliosis is the most common form of pediatric scoliosis and is divided into infantile (0-3 years of age), juvenile (4-9 years of age), and adolescent (10-17 years of age). Idiopathic scoliosis is defined as having no underlying structural abnormality or accompanying syndrome.

- The following clinical features are associated with an increased risk of underlying vertebral or spinal cord abnormality:
  - Associated back pain
  - Age younger than 10 years
  - Neurological abnormalities on examination or neurological symptoms
  - Left sided curve (concave to right)
  - Absence of apical segment lordosis/kyphosis
  - Rapid curve progression (>1 degree per month)
  - Pes Cavus (see: **Occult Spinal Dysraphism (PEDSP-4.3)**
  - Double curves or high thoracic curves
  - Kyphosis
  - Spinal x-ray abnormalities other than the curve itself (widened spinal canal, dysplastic changes in spine or ribs, etc.)
  - Midline spinal cutaneous markers (esp. sacral) such as dermal tracts, tufts of hair, skin tags, etc.
  - Abnormal number or size of café au lait spots (neurofibromatosis)
- MRI Cervical (CPT® 72141), Thoracic (CPT® 72146), and Lumbar (CPT® 72148) Spine without contrast are the medically necessary studies for the evaluation of scoliosis when any of the above clinical features is present or if imaging is requested for individuals who are being actively evaluated for corrective surgery.

Neuromuscular Scoliosis

Scoliosis can result from many disorders of the nervous system. In some conditions, including (but not limited to) cerebral palsy, muscular dystrophy, and spinal muscular atrophy, associated scoliosis may develop over time.

The appropriate spinal level, modality, and contrast level of advanced imaging will depend on the nature of the underlying disease.

- MRI without contrast or without and with contrast or CT without contrast of the cervical, thoracic, and/or lumbar spine is medically necessary in these individuals with painful neuromuscular scoliosis, or when they are actively being evaluated for spinal deformity corrective surgery.
- Bone scans (one of CPT® codes: CPT® 78300, CPT® 78305, CPT® 78306, or CPT® 78315) are medically necessary to evaluate cases of painful scoliosis and to identify tumors or infections. They are more sensitive than plain radiography.
  - Post-surgical considerations are similar to adult post-operative indications (see: **Post-Operative Spinal Disorders (SP-15)** in the General Spine Imaging Guidelines) except as follows:
    - Post-operative CT Chest without contrast (CPT® 71250) with 3D reconstruction is medically necessary for lung volume measurement in children with early onset scoliosis, (e.g., congenital/thoracogenic type), due to risk of restrictive lung disease and thoracic insufficiency syndrome which occur from failure of spine and chest to support normal lung growth.

References (PEDSP-3)

v2.0.2026

1. ACR-SPR-SSR Practice parameter for the performance of radiography for scoliosis in children. Revised 2014.
2. Alsharief AN, El-Hawary R, Schmit P. Pediatric spine imaging post scoliosis surgery. *Pediatric radiology*. 2018;48(1):124-40.
3. Calloni SF, Huisman TA, Poretti A, Soares BP. Back pain and scoliosis in children: when to image, what to consider. *The Neuroradiology Journal*. 2017;30(5):393-404.
4. El-Hawary R, Chuckwunyerenwa C. Update on evaluation and treatment of scoliosis. *Pediat Clin N Am*. 2014;61:1223-41.
5. Mistovich RJ and Spiegel DA. The spine. In: Kliegman RM, St. Geme JW III, Blum NJ, et. al. Nelson Textbook of Pediatrics. 21st edition. Philadelphia, PA: Elsevier; 2020:3633-3646.
6. Shafa E, Shah SA. Scheuermann kyphosis. *Scoliosis Research Society.* E-Text. 2019.
7. Oetgen ME. Current use of evidence-based medicine in pediatric spine surgery. *Orthopedic Clinics*. 2018;49(2):191-4.
8. Gokce E, Beyhan M. Radiological imaging findings of Scheuermann disease. *World J Radiol*. 2016; 28:895-901.
9. NG S, Bettany-Saltikov J. Imaging in the diagnosis and monitoring of children with idiopathic scoliosis. *Open Orthop J*. 2017;11:1500-1520.
10. Jones JY, Saigal G, Palasis S, et al. ACR Appropriateness Criteria® Scoliosis-Child. American College of Radiology. Updated: 2018.

Click Anywhere in the Header to Return to the Main Table of Contents

Spinal Dysraphism and Tethered Spinal Cord (PEDSP-4)

Guideline

Introduction (PEDSP-4.1)

SPP.TC.0004.1.A
v2.0.2026

Spinal Dysraphism

- Spinal dysraphism refers to a group of disorders characterized by incomplete or absent fusion of posterior midline structures. This includes a range of congenital and/or developmental anomalies of the spinal cord and associated spinal structures that can affect any level of the spine, but most commonly the lumbosacral region.
- Based on clinical classification, dysraphism is grouped into two categories:
  - Open dysraphism (spina bifida aperta), which are non-skin-covered, open neural tube defects (myelomeningocele).
  - Occult spinal dysraphism (also called closed spinal dysraphism), which includes skin-covered defects (either with or without an associated subcutaneous mass).

Normal position of spinal cord

- In newborns, the spinal cord should terminate (at the conus medullaris) at L2-3 or higher.
- By 3 months of age, the conus should lie at or above the L2 level.
- Afterwards, in normal infants and children, the conus medullaris should be positioned at L1-2.
- Of note, however, in premature infants, the conus medullaris may be located at the mid L3-level.
  - If such a finding on an initial spinal ultrasound results in uncertainty as to whether cord termination is low, repeat spinal ultrasound (CPT® 76800) is medically necessary in 4 to 6 weeks, since a normal cord will have “moved” higher within the spinal canal by this time.

Tethered cord

- Tethering is certain when the cord terminates at or below L4 and there is other supporting evidence of tethering such as limited spinal cord pulsatility, posterior positioning in the spinal canal, thick filum terminale, intraspinous mass, or lipoma.
- If the conus terminates at a normal position (at L2-3 under 3 months of age, at L2 by 3 months of age, at L1-2 in older infants and children), the cord may still be tethered by an abnormal structure. Such tethering of the spinal cord can be found in some (but not all) individuals with occult spinal dysraphism. Abnormalities can be found in both lumbosacral and thoracic regions and are often associated with spinal lipomas in either region.
- Open spinal dysraphism is frequently associated with tethering of the spinal cord; symptoms of or findings from that tethering may manifest initially or may increase

after the newborn period and the initial imaging evaluation. See: **Open Dysraphism (PEDSP-4.4)**.

"Tethered cord Syndrome"

- "Tethered Cord Syndrome" refers to symptoms and abnormal physical findings (such as low back or leg pain, decreased or absent lower extremity reflexes, urinary urgency, urinary incontinence, bowel incontinence, and constipation) that arise when a pathologic attachment causes abnormal spinal tension (increased by axial growth), with ensuing pathophysiologic effects. Some of these patients do have an abnormally low conus medullaris; other patients have other spinal abnormalities (such as spinal dysraphism) that causes the spinal cord to be abnormally tethered. Other patients with spinal dysraphism who may present with symptoms or findings suggestive of "Tethered Cord Syndrome" may have those clinical manifestations caused by primary dysplasia of neural tissue, instead of being caused by abnormal tethering. See: **Non-Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.3)**.
- Not all anatomically tethered spinal cords result in symptoms of "Tethered Cord Syndrome."

Imaging Studies to Evaluate Suspected Occult Spinal Dysraphism and/or Tethered Cord

- Plain x-rays are not indicated for suspected occult spinal dysraphism and/or tethered cord.
- Spina bifida occulta, an incomplete fusion of the posterior lumbosacral bony elements (present in in about 25% of people), is often discovered as an incidental finding on x-rays and other imaging exams. In asymptomatic individuals it is of no consequence, and is not an indication for further imaging.
- A plain spine x-ray finding suggesting an absent or distorted pedicle (the "winking owl sign") can be indicative of occult spinal dysraphism, for which an initial MRI without contrast or MRI without and with contrast of the appropriate spinal level is medically necessary.
- When indicated (See: **Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.2)**, **Non-Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.3)**, and **Open Dysraphism (PEDSP-4.4)** for indications), the following imaging is medically necessary:
  - Spinal ultrasound (CPT® 76800) for initial evaluation in infants up to 6 months of age, in premature infants whose "corrected age" (subtracting the number of weeks of prematurity from the infant's actual age) is less than or equal to 6 months, or in older individuals with open spinal dysraphism (see: **Open Dysraphism (PEDSP-4.4)**).
  - In a term infant, the diagnosis of tethered cord is likely if the conus terminates below the L2-L3 disc space. Of note, however, in premature infants, the conus medullaris may be located at the mid L3-level; if there is uncertainty as to whether

cord termination is low in a premature infant, repeat spinal ultrasound (CPT® 76800) is medically necessary in 4 to 6 weeks, since a normal cord will have "moved" higher within the spinal canal by this time.

- MRI Cervical, Thoracic, and Lumbar spine without contrast (CPT® 72141, 72146, and 72148) or without and with contrast (CPT® 72156, 72157, and 72158) is medically necessary for initial evaluation in individuals older than 6 months of age.
  - MRI is medically necessary at a younger age when there are symptoms or physical findings or concerning findings on ultrasound showing the need for more prompt MRI imaging, or when MRI imaging prior to 6 months of age has been ordered by (or in consultation with) an appropriate specialist for an indication from **Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.2)**, **Non-Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.3)**, or **Open Dysraphism (PEDSP-4.4)**.
- The appropriate spinal level, modality, and contrast level of follow-up advanced imaging will depend on the nature of the underlying disease, usually ordered by (or after consultation with) an appropriate specialist.
- Postoperative MRI is not done routinely but is medically necessary if there are recurrent symptoms or findings suggesting recurrent tethering or other deterioration. Contrast level per ordering specialist.
- A complete abdominal ultrasound (CPT® 76700) or retroperitoneal ultrasound (CPT® 76770) is medically necessary as an initial evaluation for patients with newly diagnosed neurogenic bladder, myelomeningocele (open spinal dysraphism), or occult spinal dysraphism.
  - A complete retroperitoneal ultrasound (CPT® 76770) is medically necessary every 6 to 12 months for follow-up/surveillance for any of the above conditions.
- CT of the effected spinal level is medically necessary for surgical planning when a complex bony deformity of the spine is present, or when the Guidelines support doing MRI of the spine in an individual for whom MRI is contraindicated.

Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.2)

SPP.TC.0004.2.A

v2.0.2026

- More than 80% of individuals with occult spinal dysraphism and/or tethered spinal cord will have a cutaneous lesion overlying the lower spine.
- Spine imaging is not medically necessary in the following situations:
  - Pilonidal cysts below the level of the intergluteal fold.
    - For discussion of imaging in pilonidal cysts, see: **Pilonidal Cyst (PV-21.4)** in the Pelvis Imaging Guidelines
  - Non-specific darkened areas of skin over the sacrum (such as dermal melanosis) unless there are other associated midline cutaneous abnormalities
  - Occult bony dysraphism incidentally noted on x-ray
- Screening with advanced imaging is medically necessary in the following clinical conditions which are associated with an increased risk of underlying spinal dysraphism:
  - Spinal dimples (midline soft tissue depression over the spine); or deviated or split (bifid) gluteal cleft
    - Spinal ultrasound (CPT® 76800) is medically necessary for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up to 6 months of age). Follow-up of a normal screening spinal ultrasound with ultrasound is not medically necessary.
    - MRI of the involved spinal level without contrast or without and with contrast is medically necessary for initial evaluation in individuals older than 6 months of age. MRI is medically necessary at a younger age when there are symptoms or physical findings or concerning findings on ultrasound showing the need for more prompt MRI imaging, or if ordered by (or in consultation with) an appropriate specialist.
    - A screening MRI is medically necessary after a normal screening spinal ultrasound exam. Follow-up of a normal screening MRI imaging study is not medically necessary.
  - Dermal sinuses overlying the lumbar, thoracic, or cervical spine, and sacral dermal sinuses, whether manifested by a dermal sinus tract (a small opening in the skin, which leads into a narrow duct; it may be associated with protruding hairs) or a dermal cyst. They may be associated with an overlying or nearby hairy patch or vascular nevus
    - Spinal ultrasound (CPT® 76800) is medically necessary for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up

to 6 months of age). Follow-up of a normal screening spinal ultrasound is not medically necessary.
    - MRI of the involved spinal level without contrast or without and with contrast is medically necessary if an ultrasound shows abnormalities other than a cutaneous dermal cleft, if ordered after 6 months of age, or at a younger age if ordered by (or in consultation with) an appropriate specialist.
    - A screening MRI is medically necessary after a normal screening spinal ultrasound exam. Follow-up of a normal screening MRI imaging study is not medically necessary.
- Subcutaneous midline masses (including cysts and lipomas) at any level.
    - Plain x-rays are not required to approve other imaging for midline masses overlying the spine when occult spinal dysraphism and/or tethered cord is suspected.
    - Spinal ultrasound (CPT® 76800) is medically necessary for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up to 6 months of age), but MRI of the involved spinal level without contrast or without and with contrast is the preferred medically necessary initial imaging for midline masses overlying the spine. Repeat ultrasound follow-up of a normal screening spinal ultrasound is not medically necessary.
    - MRI of the involved spinal level without contrast or without and with contrast is medically necessary for initial evaluation in patients older than 6 months of age. MRI is medically necessary at a younger age when there are symptoms or physical findings or concerning findings on ultrasound showing the need for more prompt MRI imaging, or if ordered by (or in consultation with) an appropriate specialist.
    - A screening MRI is medically necessary after a normal screening spinal ultrasound exam. Follow-up of a normal screening MRI imaging study is not medically necessary.
- Caudal extensions (including tail-like appendages), midline skin tags, abnormal patches of hair over the spine at any level, infantile hemangiomas overlying any spinal level, and complex midline birthmarks above the upper sacral region.
    - Spinal ultrasound (CPT® 76800) is medically necessary for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up to 6 months of age). Repeat ultrasound follow-up of a normal screening spinal ultrasound is not medically necessary.
    - MRI of the involved spinal level without contrast or without and with contrast is medically necessary for initial evaluation in individuals older than 6 months of age. MRI is medically necessary at a younger age when there are symptoms or physical findings or concerning findings on ultrasound showing the need for more prompt MRI imaging, or if ordered by (or in consultation with) an appropriate specialist.

    - A screening MRI is medically necessary after a normal screening spinal ultrasound exam. Follow-up of a normal screening MRI imaging study is not medically necessary.
- Café au lait spots are a marker for type 1 neurofibromatosis
    - See imaging indications in **Neurofibromatosis 1 and 2 (NF1 and NF2) (PEDONC-2.3)** and/or **Neurofibromatosis (PEDPN-2)**.

Non-Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.3)

SPP.TC.0004.3.A
v2.0.2026

- Imperforate anus
- VACTERL (vertebral malformations, anal atresia, cardiac anomalies, tracheo-esophageal fistula, renal abnormalities, and limb defects) syndrome
- Currarino triad (sacral dysgenesis, presacral mass, anorectal malformation), OEIS (omphalocele, exstrophy, imperforate anus, spinal defects) syndrome
- Caudal regression syndrome
- Sacral agenesis (when 2 or more of the sacral vertebral bodies are absent; about 20% of children with sacral agenesis are not detected prior to age of 3 years).
- For all of the above conditions, the following imaging is medically necessary:
  - Spinal ultrasound (CPT® 76800) for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up to 6 months of age). Repeat ultrasound follow-up of a normal screening spinal ultrasound is not medically necessary.
  - MRI Lumbar Spine without contrast (CPT® 72148) or without and with contrast (CPT® 72158); and/or MRI Pelvis without contrast (CPT® 72195) or MRI Pelvis without and with contrast (CPT® 72197).
  - Appropriate MRI (or other modality) imaging (including contrast level) of any other spinal level will depend on the nature of the underlying disease, usually ordered by (or in consultation with) an appropriate specialist.
  - Follow-up of a normal screening MRI imaging study is not medically necessary, but an initial MRI can be approved if the first screening study was an ultrasound.
  - Postoperative MRI is not done routinely but is medically necessary if there are recurrent symptoms or findings suggesting recurrent tethering. Contrast level per ordering specialist.
- For Rubinstein-Taybi syndrome (gait abnormalities, short stature, short limbs, characteristic facies, developmental delay, tethered spinal cord), the following imaging is medically necessary:
  - Spinal ultrasound (CPT® 76800) for initial evaluation in infants up to 6 months of age (or in premature infants with a “corrected” age up to 6 months of age). Repeat ultrasound follow-up of a normal screening spinal ultrasound is not medically necessary.
  - MRI Lumbar spine without contrast (CPT® 72148) or without and with contrast (CPT® 72158)

- Appropriate MRI (or other modality) imaging (including contrast level) of any other spinal level will depend on the nature of the underlying disease, usually ordered by (or in consultation with) an appropriate specialist.
- Follow-up of a normal screening MRI imaging study is not medically necessary, but an initial MRI can be approved if the first screening study was an ultrasound.

- For individuals with known DiGeorge Syndrome (22q11.2 deletion syndrome), the following imaging is medically necessary when tethered cord syndrome or occult spinal dysraphism is suspected:
  - Spinal ultrasound (CPT® 76800) for initial evaluation in infants up to 6 months of age
  - MRI Lumbar Spine without contrast (CPT® 72148) or without and with contrast (CPT® 72158)
  - Appropriate MRI (or other modality) imaging (including contrast level) of any other spinal level will depend on the nature of the underlying disease, usually ordered by (or in consultation with) an appropriate specialist.
  - Follow-up of a normal screening MRI imaging study is not medically necessary, but an initial MRI can be approved if the first screening study was an ultrasound.
- MRI of the involved spinal level without contrast or without and with contrast is medically necessary for neurologic related symptoms and physical exam findings suggestive of occult spinal dysraphism, tethered cord syndrome, and/or low lying conus medullaris when any of the following are present:
  - Asymmetry of the feet, with one smaller foot, a high arch, and/or clawing of the toes. This is sometimes called the “neuroorthopedic syndrome”, and is associated with lack of an ipsilateral ankle jerk deep tendon reflex and calf atrophy.
  - Cavus foot (also called pes cavus or pes cavovarus)
  - Toe walking, when associated with upper motor neuron signs including hyperreflexia, spasticity, and positive Babinski sign
  - Ataxia (see: **Ataxia (PEDHD-20)**)
  - Absent perineal sensation
  - Lower urinary tract dysfunction, including urinary urgency or urinary incontinence. Though not a requirement for advanced imaging, some of these patients will have had abnormal urodynamic studies (such as cystometrography and/or sphincter electromyography).
  - Constipation, especially if there are abnormal physical exam findings related to the spine (such as lower extremity weakness, decreased lower extremity tone, abnormal lower extremity reflexes, a tuft of hair over the spine or covering a pilonidal dimple, a sacral dimple, gluteal cleft deviation, or absent anal or cremasteric reflex), failure of maximal laxative therapy (see: **Constipation, Diarrhea, and Irritable Bowel Syndrome (PEDAB-12)**) and/or bowel incontinence, when tethered cord syndrome or occult spinal dysraphism is suspected as the cause

  - Back or leg pain when tethered cord syndrome or occult spinal dysraphism is suspected as the cause. In this setting, neither a plain x-ray of the spine nor a recent period of provider directed conservative treatment is required to approve an MRI spine).
- See: **Myelopathy (SP-7.1)**, **Myelopathy (PEDSP-6)**, and **Developmental Motor Delay (PEDHD-19.3)** for spinal cord involvement suspected in individuals with developmental motor delay.

Spinal Dysraphism (PEDSP-4.4)

SPP.TC.0004.4.A

v2.0.2026

- Clinically significant dysraphism includes findings ranging from complex vertebral anomalies to myelomeningocele.
- Dysraphism is categorized into 2 major groups:
  - Open Dysraphism - lack of skin covering with exposed neural elements
  - Closed Dysraphism - skin covered
- It is rare to perform MRI in neonates with open dysraphism as the diagnosis is usually made with obstetric ultrasound and confirmed with visual inspection
  - MRI of the entire spine is medically necessary for preoperative planning if ordered by a specialist.
- MRI Brain without contrast (CPT® 70551) or with and without contrast (CPT® 70553) is medically necessary in all cases of open dysraphism as Chiari II malformation will be present
- Closed Dysraphism
  - MRI of the entire spine without contrast or without and with contrast is medically necessary at the time of initial diagnosis.
    - MRI Brain without contrast (CPT® 70551) or without and with contrast (CPT® 70553) or CT without contrast of the brain (CPT® 70450) is medically necessary in cases with associated hydrocephalus, signs of cerebral involvement, or the presence of multiple hydromyelia (which suggests hydrocephalus).
    - MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72196) is medically necessary once if there are clinical signs of pelvic malformation or anorectal anomaly.
  - MRI Cervical, Thoracic, and Lumbar spine without contrast (CPT® 72141, 72146, 72148) or without and with contrast (CPT® 72156, 72157, 72158) is medically necessary when ordered for preoperative planning.
  - Spinal canal ultrasound (CPT® 76800) is medically necessary as an alternative to MRI, if requested, in individuals with open dysraphism as the posterior bony defect provides an acoustic window for ultrasound.
  - MRI of the appropriate spinal level without contrast or without and with contrast is medically necessary when there are new and/or worsened neurologic symptoms and/or physical exam findings suggestive of new or worsened tethering of the spinal cord, such as any of the following:
    - New or worsened cavus foot
    - New or worsened toe walking and/or upper motor neuron signs (including hyperreflexia, spasticity, and positive Babinski sign)
    - New or worsened leg weakness or numbness or difficulty in ambulation

- New or worsened loss of perineal sensation
- New or worsened lower urinary tract dysfunction (including urinary urgency or urinary incontinence, or new or worse changes on diagnostic urodynamic studies)
- New or worsened constipation
- New or worsened pain in the back or legs suspected to have been caused by tethering of the spinal cord
  - MRI Brain without contrast (CPT® 70551) or without and with contrast (CPT® 70553) or CT without contrast of the brain (CPT® 70450) is medically necessary in cases with associated hydrocephalus, signs of cerebral involvement, or the presence of multiple hydromyelia (which suggests hydrocephalus).
  - MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72196) is medically necessary once if there are clinical signs of pelvic malformation or anorectal anomaly.

◦ The appropriate spinal level, modality, and contrast level of follow-up advanced imaging will depend on the nature of the underlying disease, usually requested after specialist consultation.

References (PEDSP-4)

v2.0.2026

1. Haynes, KB, Wimberly RL, VanPelt JM, et al. Toe walking: a neurological perspective after referral from pediatric orthopaedic surgeons. *Journ of Ped Ortho*. 2018;38(3):152-6.
2. Kinsman SL and Johnson MV. Congenital anomalies of the central nervous system. In: Kliegman RM, St. Geme JW III, Blum NJ, et. al. Nelson Textbook of Pediatrics. 21st edition. Philadelphia, PA: Elsevier; 2020:3063-3082.
3. Kucera JN, Coley I, O'Hara, et al. The simple sacral dimple: diagnostic yield of ultrasound in neonates. *Pediat Radiol*. 2015;45:211-6.
4. Wang LL, Bierbrauer KS. Congenital and hereditary diseases of the spinal cord. *Semin Ultrasound CT, MRI*. 2017;38:105-25.
5. AIUM Practice Parameter for the Performance of an Ultrasound Examination of the Neonatal and Infant Spine. Revised 2016
6. Subiabre-Ferrer D, García-Rabasco A, Correa-González N, Ortiz-Salvador JM, Barreda-Solana M. Role of magnetic resonance image in children with lumbosacral and perineal hemangiomas: case reports and review of the literature. *Actas Dermo-Sifiliográficas (English Edition)*. 2019;110(9):728-33.
7. Farmakis SG and Siegel MJ. Spinal ultrasonography. In: Sanders RC and Hall-Terracciano B, et. al. Clinical Sonography: A Practical Guide. 5th edition. Philadelphia, PA: Wolters Kluwer. 2016;657-669.
8. Halevi PD, Udayakumaran S, Ben-Sira L, et al. The value of postoperative MR. *Childs Nerv Syst*. 2011;27:2159-62.
9. Hertzler DA, DePowell JJ, Stevenson CB, et al. Tethered cord syndrome: a review of the literature from embryology to adult presentation. *Neurosurg Focus*. 2010;29(1):E1. doi:10.3171/2010.3.FOCUS1079.
10. Hervey-Jumper SL, Garton HJL, Wetjen NM, et al. Neurosurgical management of congenital malformations and inherited disease of the spine. *Neuroimaging Clin N Am*. 2011;21(3):719-731. doi:10.1016/j.nic.2011.05.009.
11. Siegel MJ. Spinal ultrasonography. In: Pediatric sonography. 5th ed. Philadelphia, PA: Wolters Kluwer. 2018;653-76.
12. Proctor MR. Tethered Cord. In: Kliegman RM, St. Geme JW III, Blum NJ, et. al. Nelson Textbook of Pediatrics. 21st edition. Philadelphia, PA; 2020:3238-3239.
13. Tuite GF, Thompson DN, Austin PF, Bauer SB. Evaluation and management of tethered cord syndrome in occult spinal dysraphism: Recommendations from the International Children's Continence Society. Neurology and urodynamics. 2018;37(3):890-903.
14. Wang LL, Bierbrauer KS. Congenital and hereditary diseases of the spinal cord. *Semin Ultrasound CT, MRI*. 2017;38:105-25
15. G Tamura, N Morota, S Ihara. Impact of magnetic resonance imaging and urodynamic studies on the management of sacrococcygeal dimples. *Journal of Neurosurgery: Pediatrics*. 2017. Doi:10.3171/2017.5.PEDS16719.
16. Gomi, A., Oguma, H. & Furukawa, R. Sacrococcygeal dimple: new classification and relationship with spinal lesions. *Childs Nerv Syst*. 2013;29:1641–1645. doi:10.1007/s00381-013-2135-3 1231438.
17. Harada A, Nishiyama K, Yoshimura J, Sano M, Fujii Y. Intraspinal lesions associated with sacrococcygeal dimples. *J Neurosurg Pediatr*. 2014;14:81–86.
18. O'Neill BR, Gallegos D, Herron A, Palmer C, Stence NV, Hankinson TC, et al. Use of magnetic resonance imaging to detect occult spinal dysraphism in infants. *J Neurosurg Pediatr*. 2016;19:1---10.
19. Moore, KR. Congenital Abnormalities of the Spine. In: Brian Coley, ed. Caffey's Pediatric Diagnostic Imaging. 13th edition. Philadelphia, PA: 2019;408-418.
20. Greenan K, et. al. Imaging of Occult Spinal Dysraphism. In: Tubbs RS, et. al. *Occult Spinal Dysraphism*. doi.org/10.1007/978-3-030-10994-3_15.
21. Trapp B, Freddi TDL, Hans MDM, et. al. A practical approach to diagnosis of spinal dysraphism. *RadioGraphics*. 2021;41(2). doi:10.1148/rg.2021200103.
22. Jyoti K, Muhammed A, Anju G. Imaging spectrum of spinal dysraphism on magnetic resonance: A pictorial review. *World J Radiol*. 2017;9(4):178-190. doi:10.4329/wjr.v9.i4.178.
23. Gunes O, Maud PMT, Donna S, Ingmar G, Thierry AGMH. Ultrasound to evaluate neonatal spinal dysraphism: A First-line alternative to CT and MRI. *J Neuroimaging*. 2019;29(5):553-564. doi:10.1111/jon.12649.

24. Clemente EJI, Iruju MN, Navarro OM, et al. US of the spine in neonates and infants: a practical guide. *Radiographics*. 2023;43(6):e220136. doi:10.1148/rg.220136.

Tethered Cord (PEDSP-5)

Guideline

Tethered Cord (PEDSP-5)

Click Anywhere in the Header to Return to the Main Table of Contents

Tethered Cord (PEDSP-5)

SPP.TetheredCord.PEDSP.5.A

v2.0.2026

- See: **Spinal Dysraphism and Tethered Spinal Cord (PEDSP-4)**

Click Anywhere in the Header to Return to the Main Table of Contents

Myelopathy (PEDSP-6)

Guideline

Myelopathy (PEDSP-6)

Myelopathy (PEDSP-6)

SPP.Myelopathy.PEDSP.6.A

v2.0.2026

Myelopathy imaging indications in pediatric individuals are similar to those for adult individuals. See: **Myelopathy (SP-7)** in the Spine Imaging Guidelines and/or **Non-Cutaneous Indications to Suspect Occult Spinal Dysraphism (PEDSP-4.3)**

Click Anywhere in the Header to Return to the Main Table of Contents

Other Congenital and Pediatric Spine Disorders (PEDSP-7)

Guideline

General Guidelines - Other Congenital and Pediatric Spine Disorders (PEDSP-7.0)

SPP.CD.0007.0.A

v2.0.2026

- Many congenital spine disorders also affect adults as survival continues to improve for these individuals. Adults with disorders covered in this section may follow these guidelines except where contraindicated by specific statements in the general imaging guidelines.

Achondroplasia (PEDSP-7.1)

SPP.CD.0007.1.A

v2.0.2026

- The diagnosis of achondroplasia is made clinically. Individuals with achondroplasia are at risk for hydrocephalus as well as myelopathy from spinal stenosis with increasing age.
- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, and plain radiography should be performed prior to considering advanced imaging.
- MRI without contrast or without and with of the symptomatic spinal region is medically necessary when new or worsening clinical symptoms suggest achondroplasia-related spinal stenosis.
- MRI Brain without contrast (CPT® 70551) or CT Head without contrast (CPT® 70450) is medically necessary when new or worsening clinical symptoms suggest hydrocephalus.

Inflammatory Spondylitis (PEDSP-7.2)

SPP.CD.0007.2.A

v2.0.2026

- Except as listed below, imaging considerations in pediatric and adult individuals are identical for this condition and these individuals should be imaged according to **Inflammatory Spondylitis (SP-10.2)**.

For pediatric individuals with juvenile idiopathic arthritis, the following imaging is medically necessary:

- MRI without and with contrast or without contrast of the involved levels
- An initial x-ray is not necessary prior to MRI in these individuals.
- For evaluation of facet arthropathy in patients with ankylosing spondylitis, osteoarthritis, or rheumatoid arthritis:
  - Whole body radiopharmaceutical localization imaging (CPT® 78802) and SPECT (CPT® 78803) OR
  - SPECT/CT (CPT® 78830)

Click Anywhere in the Header to Return to the Main Table of Contents

Atlantoaxial Instability in Trisomy 21 (Down Syndrome) (PEDSP-7.3)

SPP.CD.0007.3.A

v2.0.2026

- The diagnosis of atlantoaxial instability is a recognized complication of trisomy 21, and individuals are routinely screened with lateral x-rays of the cervical spine.
- MRI Cervical Spine without contrast (CPT® 72141) or without and with contrast (CPT® 72156) is medically necessary in individuals where the lateral cervical spine x-ray demonstrates an atlantodental (pre-dens) interval of ≥4.5 mm, and/or a neural canal width of ≤14 mm.
- MRI Cervical Spine without contrast (CPT® 72141) or without and with contrast (CPT® 72156) is medically necessary when new or worsening clinical symptoms suggest myelopathy in a trisomy 21 individual.

Click Anywhere in the Header to Return to the Main Table of Contents

Basilar Impression (PEDSP-7.4)

SPP.CD.0007.4.A
v2.0.2026

See: **Basilar Impression/Basilar Invagination (PEDHD-9.4)** in the Pediatric Head Imaging Guidelines

Click Anywhere in the Header to Return to the Main Table of Contents

Chiari Malformation (PEDSP-7.5)

SPP.CD.0007.5.A
v2.0.2026

See: **Chiari and Skull Base Malformations (PEDHD-9)** in the Pediatric Head Imaging Guidelines

Click Anywhere in the Header to Return to the Main Table of Contents

Klippel-Feil Anomaly (Congenital Fusion of Cervical Vertebrae) (PEDSP-7.6)

SPP.CD.0007.6.A
v2.0.2026

This is generally an incidental finding. A detailed history and physical examination with thorough neurologic examination, and plain x-rays should be performed initially. Klippel-Feil can occur in conjunction with platybasia and/or Chiari malformation.

- Plain x-rays of the cervical spine are sufficient to establish the diagnosis. Advanced imaging is medically necessary if there are acute or worsening neurologic symptoms (including pain), or if multiple levels are involved.
  - MRI Cervical Spine without contrast (CPT® 72141) or CT Cervical Spine without contrast (CPT® 72125) for these indications.

Marfan Syndrome (PEDSP-7.7)

SPP.CD.0007.7.A
v2.0.2026

Individuals with Marfan syndrome are at risk for scoliosis (see **Scoliosis (PEDSP-3.2)**) and dural ectasias. Dural ectasias are usually asymptomatic but can be associated with other spinal lesions.

- A pertinent clinical evaluation including a detailed history, physical examination with thorough neurologic examination and documentation of any specific radicular features, and plain radiography should be performed prior to considering advanced imaging.
- MRI without contrast of the symptomatic spinal region is medically necessary for the following:
  - New or worsening clinical symptoms suggest a complicated dural ectasia.
  - The individual is under active consideration for surgery.

Neurofibromatosis (PEDSP-7.8)

SPP.CD.0007.8.A

v2.0.2026

- See: **Neurofibromatosis 1 and 2 (NF1 and NF2) (PEDONC-2.3)** in the Pediatric and Special Populations Oncology Imaging Guidelines for screening recommendations in neurofibromatosis.
- See: **Neurofibromatosis (PEDPN-2)** in the Pediatric Peripheral Nerve and Neuromuscular Disorders Imaging Guidelines for imaging considerations in neurofibromatosis individuals with known plexiform neurofibromas.
- See: **Non-Rhabdomyosarcoma Soft Tissue Sarcomas (PEDONC-8.3)** in the Pediatric and Special Populations Oncology Imaging Guidelines for imaging in individuals with neurofibromatosis and malignant peripheral nerve sheath tumors.

Click Anywhere in the Header to Return to the Main Table of Contents

Von Hippel-Lindau Syndrome (VHL) (PEDSP-7.9)

SPP.CD.0007.9.A

v2.0.2026

- See: **Von Hippel-Lindau Syndrome (VHL) (PEDONC-2.10)** in the Pediatric and Special Populations Oncology Imaging Guidelines for screening recommendations in VHL patients.
- MRI without and with contrast of the affected spinal level is medically necessary for individuals with known spinal hemangioblastomas in the following conditions:
  - Annually for asymptomatic individuals with unresected spinal hemangioblastoma(s).
  - Preoperative planning for resection of a hemangioblastoma.
  - New or worsening symptoms suggesting progression of a known hemangioblastoma.

References (PEDSP-7)

v2.0.2026

1. Child AH. Non-cardiac manifestations of marfan syndrome. *Ann Cardiothorac Surg*. 2017;6:599-609.
2. Frantzen C, Klasson TF, Links TP, et al. Von Hippel-lindau disease. GeneReviews™.[Internet] eds. Pagon RA, Adam MP, Bird TD et al. https://www.ncbi.nlm.nih.gov/books/NBK1463/
3. Khalid K, Saifuddin A. Pictorial review: imaging of the spinal manifestations of achondroplasia. *The British Journal of Radiology*. 2021;94(1123):20210223.
4. Lambert RG, Bakker PA, van der Heijde D, et al. Defining active sacroiliitis on MRI for classification of axial spondyloarthritis: update by the ASAS MRI working group [epub ahead of print]. *Ann Rheum Dis*. 2016. doi:10.1136/annrheumdis-2015-208642.
5. Rossi A. Pediatric spinal infection and inflammation. *Neuroimaging Clinics*. 2015;25(2):173-91.
6. Restropo R, Lee EY, Babyn PS. Juvenile idiopathic arthritis: Current practical imaging assessment with emphasis on magnetic resonance imaging. *Radiol Clin N Am*. 2013;51(4):703-719. doi:10.1016/j.rcl.2013.03.003.
7. Vezina G, Barkovich AJ. Neurocutaneous disorders. In: Barkovich AJ, Raybaud C, eds. Pediatric Neuroimaging, 6th ed. Philadelphia PA. Wolters Kluwer. 2015;633-702.
8. White KK, Bompadre V, Goldberg MJ, et al. Best practices in the evaluation and treatment of foramen magnum stenosis in achondroplasia during infancy. *Am J MedGenet A*. 2016;170A:42-51.
9. Dweck J, Lachman RS “Skeletal Dysplasias and Selected Chromosomal Disorders (Chapter 132)” in Caffey’s Pediatric Diagnostic Imaging. 13th edition Brian Coley editor, Elsevier Saunders, Philadelphia PA, 2019. 1258-1295.
10. Sarioglu FC, Sarioglu O, Guleryuz H. Neuroimaging and calvarial findings in achondroplasia. *Pediatr Radiol.* 2020;50(12):1669-1679. doi:10.1007/s00247-020-04841-8.
11. Sudoł-Szopińska I, Znajdek M, Gietka P, Vasilevska-Nikodinovska V, Ptrovic L, Salapura V. Imaging of juvenile spondyloarthritis. Part II: ultrasonography and magnetic resonance imaging. *Journal of Ultrasonography*. 2017;17(70):176-181. doi:10.15557/jou.2017.0026.
12. Herregods N, Dehoorne J, Jaremko J et al. Diagnostic value of MRI of the sacroiliac joints in juvenile spondyloarthritis. *Journal of the Belgian Society of Radiology*. 2016;100(1):95. doi:10.5334/jbr-btr.1198.

Click Anywhere in the Header to Return to the Main Table of Contents

Policy History and Instructions for Use

Guideline

Policy History and Instructions for Use

Policy History and Instructions for Use

Policy History and Instructions for Use

v2.0.2026

Instructions for Use

This Medical Policy provides assistance in interpreting United HealthCare Services, Inc. standard benefit plans. When deciding coverage, the federal, state (Ohio Administrative Code [OAC]) or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state (OAC) or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state (OAC) or contractual requirements for benefit plan coverage govern.

Before using this policy, please check the federal, state (OAC) or contractual requirements for benefit plan coverage. United HealthCare Services, Inc. reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

United HealthCare Services, Inc. uses InterQual® for the primary medical/surgical criteria, and the American Society of Addiction Medicine (ASAM) for substance use, in administering health benefits. If InterQual® does not have applicable criteria, United HealthCare Services, Inc. may also use United HealthCare Services, Inc.'s Medical Policies, Coverage Determination Guidelines, and/or Utilization Review Guidelines that have been approved by the Ohio Department for Medicaid Services. The United HealthCare Services, Inc.'s Medical Policies, Coverage Determination Guidelines, and Utilization Review Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

Policy History/Revision Information

Date	Summary of Changes
02/01/2024	Annual evidence-based updates
07/01/2024	Interim evidence-based updates
05/01/2025	Annual evidence-based updates
11/06/2025	Annual evidence-based updates
05/07/2026	Interim evidence-based updates