

UNITEDHEALTHCARE® COMMUNITY PLAN: RADIOLOGY IMAGING COVERAGE DETERMINATION GUIDELINE

Pediatric Pelvis Imaging Guidelines (For Ohio Only)

V1.0.2025

Guideline Number: CSRAD022OH.D

Effective Date: November 1, 2025

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.

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D UnitedHealthcare Community Plan Coverage Determination Guideline

Table of Contents

Guideline

Related Community Plan Policies

Application (For Ohio Only)

Guideline Development (Preface-1)

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

Clinical Information (Preface-3)

Coding Issues (Preface-4)

Whole-Body Imaging (Preface-5)

References (Preface-6)

Copyright Information (Preface-7)

Trademarks (Preface-8)

General Guidelines (PEDPV-1)

Abnormal Uterine Bleeding (PEDPV-2)

Pelvic Inflammatory Disease (PID) (PEDPV-3)

Amenorrhea (PEDPV-4)

Endometriosis (PEDPV-5)

Suspected Adnexal Mass (PEDPV-6)

Pelvic Pain/Dyspareunia, and Ovarian Torsion (PEDPV-7)

Polycystic Ovary Syndrome (PEDPV-8)

Periurethral Cysts and Urethral Diverticula (PEDPV-9)

Fetal MRI (PEDPV-10)

Undescended Testis (PEDPV-11)

Scrotal Pathology (PEDPV-12)

Penis-Soft Tissue Mass (PEDPV-13)

Incontinence (PEDPV-14)

Patent Urachus (PEDPV-15)

Policy History and Instructions for Use

V1.0.2025

Related Community Plan Policies

\sim			
Gι	JIC	е	line

Related Community Plan Policies

V1.0.2025

Related Community Plan Policies

Related Community Plan Policies

v1.0.2025

General Policies

- · General Pelvis Imaging Guidelines
- General Spine Imaging Guidelines

Pediatric Policies

- Pediatric Pelvis Imaging Guidelines
- Pediatric Spine Imaging Guidelines

V1.0.2025

Application (For Ohio Only)

\sim				
Gu	IC	е	lır	ıe

Application (For Ohio Only)

Effective: November 1, 2025 Page 5 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Application (For Ohio Only)

Application for Ohio OH UHC

v1.0.2025

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.

Page 6 of 97

V1.0.2025

Guideline Development (Preface-1)

$\overline{}$				
Gι	ИC	le	lın	е

Guideline Development (Preface-1.1)

Page 7 of 97

Guideline Development (Preface-1.1)

PRF.GG.0001.1.UOH

v1.0.2025

- 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, 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.
- UnitedHealthcare supports the Choosing Wisely initiative (https:// www.choosingwisely.org/) by the American Board of Internal Medicine (ABIM) Foundation and many national physician organizations, to reduce the overuse of diagnostic tests that are low value, no value, or whose risks are greater than the benefits.

V1.0.2025

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

v1.0.2025

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 will be considered 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 supported.¹

Legislative Mandate

 State and federal legislations may need to be considered in the review of advanced imaging requests.

V1.0.2025

References (Preface-2)

v1.0.2025

1. Coverage of Clinical Trials under the Patient Protection and Affordable Care Act; 42 U.S.C.A. § 300gg-8

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

UnitedHealthcare Community Plan Coverage Determination Guideline Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

Effective: November 1, 2025 Page 11 of 97

V1.0.2025

Clinical Information (Preface-3)

Guideline

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

Clinical Information (Preface-3.1)

PRF.CL.0003.1.UOH

v1.0.2025

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 includes, but is not limited to, the following:
 - Pertinent clinical evaluation should include a recent detailed history, physical examination²⁰ since the onset or change in symptoms, and/or laboratory and 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

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

age, comorbidities, and differences in disease natural history between children and adults.

• Individuals who are 18 years old or younger¹⁹ 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.¹

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.¹
- 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.²
- Both contrast CT and MRI may be considered to have the same risk profile with renal failure (GFR <30 mL/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 may be appropriate 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, 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 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 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 may be considered to have the same risk profile with renal failure (GFR <30 mL/min).²
 - 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.³⁻⁷ 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.⁸

- A CT may be approved in place of an MRI when clinical criteria are met for MRI AND there is a contraindication to having an MRI (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 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 supported 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 indicated for surveillance imaging unless specifically stated in the condition-specific guideline sections.
- PET/MRI is generally not supported, see <u>PET-MRI (Preface-5.3)</u>.

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

- 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 supported, 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 recent 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
 indicated examination has been ordered for individuals, it may be possible to avoid
 exposing them to unnecessary risks.^{9,10} 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.

V1.0.2025

- 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 indicated if the surgery/procedure is not indicated. Once the procedure has been approved or if the procedure does not require prior authorization, the appropriate preprocedural imaging may be approved.

References (Preface-3)

v1.0.2025

- Bettmann MA. Frequently Asked Questions: Iodinated Contrast Agents. RadioGraphics. 2004;24(suppl_1):S3-S10. doi:10.1148/rg.24si045519
- 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. Intracranial Gadolinium Deposition after Contrast-enhanced MR Imaging. *Radiology*. 2015;275(3):772-782. doi:10.1148/radiol.15150025
- 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. Ramalho J, Castillo M, AlObaidy M, et al. High Signal Intensity in Globus Pallidus and Dentate Nucleus on Unenhanced T1-weighted MR Images: Evaluation of Two Linear Gadolinium-based Contrast Agents. *Radiology*. 2015;276(3):836-844. doi:10.1148/radiol.2015150872
- Radbruch A, Weberling LD, Kieslich PJ, et al. Intraindividual Analysis of Signal Intensity Changes in the Dentate Nucleus After Consecutive Serial Applications of Linear and Macrocyclic Gadolinium-Based Contrast Agents. *Invest Radiol.* 2016;51(11):683-690. doi:10.1097/rli.0000000000000008
- 8. FDA Warns That Gadolinium-Based Contrast Agents (GBCAs) Are Retained in the Body; Requires New Class Warnings. U.S. Food and Drug Administration. May 16, 2018. https://www.fda.gov/media/109825/download
- 9. Amis ES, Butler PF, Applegate KE, et al. American College of Radiology White Paper on Radiation Dose in Medicine. *J Am Coll Radiol.* 2007;4(5):272-284. doi:10.1016/j.jacr.2007.03.002
- 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.00000000000034.5
- 11. White Paper: Initiative to Reduce Unnecessary Radiation Exposure from Medical Imaging. U.S. Food and Drug Administration and Center for Devices and Radiological Health. February 2010. https://www.fda.gov/Radiation-EmittingProducts/RadiationSafety/RadiationDoseReduction/ucm199994.htm
- Fotenos A. Update on FDA approach to safety issue of gadolinium retention after administration of gadoliniumbased contrast agents. U.S. Food and Drug Administration. September 20, 2018. https://www.fda.gov/ media/116492/download
- 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). https://www.acr.org/-/media/ACR/Files/Practice-Parameters/US-Perf-Interpret.pdf
- 15. American College of Radiology. ACR ACNM SNMMI SPR Practice Parameter for Performing FDG-PET/CT in Oncology. Revised 2021. (Resolution 20). https://www.acr.org/-/media/ACR/Files/Practice-Parameters/FDG-PET-CT.pdf
- 16. American College of Radiology. ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI). Revised 2022. (Resolution 8). https://www.acr.org/-/media/ACR/Files/Practice-Parameters/MR-Perf-Interpret.pdf
- 17. American College of Radiology. ACR SPR Practice Parameter for Performing and Interpreting Diagnostic Computed Tomography (CT). Revised 2022. (Resolution 9). https://www.acr.org/-/media/ACR/Files/Practice-Parameters/CT-Perf-Interpret.pdf
- 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. U.S. Department of Health & Human Services. August 25, 2020. HHS-0938-2017-

Pediatric Pelvis Imaging Guidelines (For Ohio Only):

CSRAD022OH.D

UnitedHealthcare Community Plan Coverage Determination Guideline

Effective: November 1, 2025

Page 22 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

- F-5484. https://www.hhs.gov/guidance/document/implementation-guide-medicaid-state-plan-eligibility-eligibility-groups-aeu-mandatory-2
- 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. https://www.jointcommission.org/standards/standard-faqs/hospital-and-hospital-clinics/provision-of-care-treatment-and-services-pc/000002272/
- 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.00000000000000392
- 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

Coding Issues (Preface-4)

Guideline

3D Rendering (Preface-4.1)

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

Unlisted Procedures/Therapy Treatment Planning (Preface-4.3)

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

SPECT/CT Imaging (Preface-4.6)

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

Quantitative MR Analysis (Preface-4.8)

HCPCS Codes (Preface-4.9)

References (Preface-4)

Page 24 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

3D Rendering (Preface-4.1)

PRF.CD.0004.1.UOH

v1.0.2025

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) recommends 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 computeraided detection (CAD), MRA, CTA, nuclear medicine SPECT studies, PET, PET/ CT, Mammogram, MRI Breast, US Breast, CT Colonography (virtual colonoscopy), Cardiac MRI, Cardiac CT, or Coronary CTA studies.

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

- 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 preoperative planning when conventional imaging is insufficient)
 - Spine fractures, pelvic/acetabulum fractures, intra-articular fractures (for preoperative 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 <u>Abnormal Uterine</u> <u>Bleeding (AUB) (PV-2.1)</u> and <u>Leiomyoma/Uterine Fibroids (PV-12.1)</u> 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 <u>Intrauterine</u>
 <u>Device (PV-10.1)</u> in the Pelvis Imaging Guidelines.
 - Uterine anomalies with initial US: See <u>Uterine Anomalies (PV-14.1)</u> in the Pelvis Imaging Guidelines.
 - Infertility: See <u>Initial Infertility Evaluation</u>, <u>Female (PV-9.1)</u> in the Pelvis Imaging Guidelines.
 - Abdomen conditions:
 - CT Urogram: See <u>Hematuria and Hydronephrosis (AB-39)</u> in the Abdomen Imaging Guidelines.
 - MRCP: See <u>MR Cholangiopancreatography (MRCP) (AB-27)</u> in the Abdomen Imaging Guidelines.

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

PRF.CD.0004.2.A

v1.0.2025

- 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

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.³
- 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.

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

- CPT® 77021 (MR guidance for needle placement) is not an appropriate code for breast 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

v1.0.2025

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

- 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) can be considered in the following clinical scenarios:
 - Studies done for navigation and planning for neurosurgical procedures (i.e., Stealth or Brain Lab Imaging)^{1,2}
 - 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 <u>Navigational Bronchoscopy (CH-1.7)</u> in the Chest Imaging Guidelines.

Therapy Treatment Planning

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

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

PRF.CD.0004.5.UOH

v1.0.2025

- 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 indicated for treatment planning purposes. See <u>Unlisted Procedure Codes in Oncology (ONC-1.5)</u> 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.

SPECT/CT Imaging (Preface-4.6)

PRF.CD.0004.6.A

v1.0.2025

- 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 ¹²³I- or ¹³¹I-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.

V1.0.2025

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

PRF.CD.0004.7.UOH

v1.0.2025

- 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.⁴
 - CPT® 76140 is the appropriate code to use for an exam which was completed elsewhere and a secondary interpretation of the images is requested.⁵

Quantitative MR Analysis (Preface-4.8)

PRF.CD.0004.8.A

v1.0.2025

- 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. At present, these procedures are primarily being used in clinical trials and there is no widely recommended indications in clinical practice. As such, these procedures are considered to be investigational and experimental for coverage purposes.
 - CPT® 0648T (without diagnostic MRI) and CPT® 0649T (with diagnostic MRI) refer to data analysis with and without associate imaging of a single organ, with its most common use being LiverMultiScan (LMS).
 - See <u>Fatty Liver (AB-29.2)</u> in the Abdomen Imaging Guidelines.
 - CPT® 0697T (without diagnostic MRI) and CPT® 0698T (with diagnostic MRI) refer to data analysis with and without associate imaging of a multiple organs, with its most common use being CoverScan.
 - Volumetric and quantitative MRI analysis of the brain (CPT® 0865T or CPT® 0866T) lack sufficient specificity and sensitivity to be clinically useful. Its use is limited to research studies and is otherwise considered to be not medically necessary in routine clinical practice.

HCPCS Codes (Preface-4.9)

PRF.CD.0004.9.UOH

v1.0.2025

- 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.⁶
 - 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)

v1.0.2025

- 1. Society of Nuclear Medicine and Molecular Imaging Coding Corner. http://www.snmmi.org/ClinicalPractice/ CodingCornerPT.aspx?ItemNumber=1786
- 2. Intraoperative MR. Brainlab. https://www.brainlab.com/surgery-products/overview-neurosurgery-products/ intraoperative-mr/
- 3. Citardi MJ, Agbetoba A, Bigcas JL, Luong A. Augmented reality for endoscopic sinus surgery with surgical navigation: a cadaver study. Int Forum Allergy Rhinol. 2016;6(5):523-528. doi:10.1002/alr.21702
- ^{4.} ACR Radiology Coding Source™ March-April 2007 Q and A. American College of Radiology. https:// www.acr.org/Advocacy-and-Economics/Coding-Source/ACR-Radiology-Coding-Source-March-April-2007-Qand-A
- 5. 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
- 6. Healthcare Common Procedure Coding System (HCPCS). Centers for Medicare and Medicaid Services. www.cms.gov/medicare/coding/medhcpcsgeninfo.

V1.0.2025

Whole-Body Imaging (Preface-5)

Guideline

Whole-Body CT Imaging (Preface-5.1) Whole-Body MR Imaging (Preface-5.2) PET-MRI (Preface-5.3) References (Preface-5)

Whole-Body CT Imaging (Preface-5.1)

PRF.WB.0005.1.UOH

v1.0.2025

- Whole-body CT or LifeScan (CT Brain, Chest, Abdomen, and Pelvis) for screening of asymptomatic individuals is not indicated. 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 CT is supported for oncologic staging in Multiple Myeloma.
 See <u>Multiple Myeloma and Plasmacytomas (ONC-25)</u> in the Oncology Imaging Guidelines.

Whole-Body MR Imaging (Preface-5.2)

PRF.WB.0005.2.A

v1.0.2025

- Whole-body MRI (WBMRI) is, with the exception of select cancer predisposition syndromes and autoimmune conditions discussed below, generally not supported 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 <u>Li-Fraumeni Syndrome (LFS)</u> (PEDONC-2.2), <u>Neurofibromatosis 1 and 2 (NF1 and NF2) (PEDONC-2.3)</u>, <u>Rhabdoid Tumor Predisposition Syndrome (PEDONC-2.11)</u>, <u>Hereditary Paraganglioma-Pheochromocytoma (HPP) Syndromes (PEDONC-2.13)</u>, <u>Constitutional Mismatch Repair Deficiency (CMMRD or Turcot Syndrome) (PEDONC-2.15)</u>, or <u>Infantile Myofibromatosis (PEDONC-2.18)</u> in the Pediatric and Special Populations Oncology Imaging Guidelines.
 - Cancer staging and restaging:
 - While the feasibility of WBMRI has been established, data remain conflicting on whether WBMRI is of equivalent diagnostic accuracy compared with standard imaging modalities such as CT, scintigraphy, and PET imaging.
 - Evidence has not been published establishing WBMRI as a standard evaluation for any type of cancer.
 - Autoimmune disease:
 - WBMRI can be approved in some situations for individuals with chronic recurrent multifocal osteomyelitis.
 - For additional information, see <u>Chronic Recurrent Multifocal Osteomyelitis</u> (<u>PEDMS-10.2</u>) in the Pediatric Musculoskeletal Imaging Guidelines.

Pediatric Pelvis Imaging Guidelines (For Ohio Only): CSRAD022OH.D

UnitedHealthcare Community Plan Coverage Determination Guideline

Effective: November 1, 2025

Page 39 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

PET-MRI (Preface-5.3)

PRF.WB.0005.3.A

v1.0.2025

- PET-MRI is generally not supported for a vast majority of oncologic and neurologic conditions due to lack of standardization in imaging technique and interpretation.
 However, it may be appropriate 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 may be 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 may be indicated at the same time as the PET-MRI code combination.
- For more information, see <u>PET Imaging in Pediatric Oncology (PEDONC-1.4)</u> in the Pediatric and Special Populations Oncology Imaging Guidelines, and <u>PET Brain</u> <u>Imaging (PEDHD-2.3)</u> and <u>Special Imaging Studies in Evaluation for Epilepsy</u> <u>Surgery (PEDHD-6.3)</u> in the Pediatric Head Imaging Guidelines.

References (Preface-5)

v1.0.2025

- Villani A, Tabori U, Schiffman J, et al. Biochemical and imaging surveillance in germline TP53 mutation carriers with Li-Fraumeni syndrome: a prospective observational study. *Lancet Oncol*. 2011;12(6):559-567. doi:10.1016/ S1470-2045(11)70119-X
- 2. Siegel MJ, Acharyya S, Hoffer FA, et al. Whole-Body MR Imaging for Staging of Malignant Tumors in Pediatric Patients: Results of the American College of Radiology Imaging Network 6660 Trial. *Radiology*. 2013;266(2):599-609. doi:10.1148/radiol.12112531
- 3. Antoch G. Whole-Body Dual-Modality PET/CT and Whole-Body MRI for Tumor Staging in Oncology. *JAMA*. 2003;290(24):3199. doi:10.1001/jama.290.24.3199
- 4. Lauenstein TC, Semelka RC. Emerging techniques: Whole-body screening and staging with MRI. *J Magn Reson Imaging*. 2006;24(3):489-498. doi:10.1002/jmri.20666
- 5. Khanna G, Sato TSP, Ferguson P. Imaging of Chronic Recurrent Multifocal Osteomyelitis. *RadioGraphics*. 2009;29(4):1159-1177. doi:10.1148/rg.294085244
- Ferguson PJ, Sandu M. Current Understanding of the Pathogenesis and Management of Chronic Recurrent Multifocal Osteomyelitis. Curr Rheumatol Rep. 2012;14(2):130-141. doi:10.1007/s11926-012-0239-5
- National Comprehensive Cancer Network® (NCCN®). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Genetic/Familial High Risk Assessment: Breast, Ovarian, and Pancreatic. Version 3.2024. February 12, 2024. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic V.3.2024. ©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.

V1.0.2025

References (Preface-6)

Guideline

References (Preface-6.1)

Page 42 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

References (Preface-6.1)

PRF.RF.0006.1.A

v1.0.2025

- 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.
- The website addresses for certain references are included in the body of the guidelines but are not hyperlinked to the actual website.
- The website address for the American College of Radiology (ACR) Appropriateness Criteria® is http://www.acr.org.

V1.0.2025

Copyright Information (Preface-7)

$\overline{}$				
Gu	Id	e	lın	ıe

Copyright Information (Preface-7.1)

V1.0.2025

Copyright Information (Preface-7.1)

PRF.CI.0007.1.UOH

v1.0.2025

©2025 United HealthCare Services, Inc. All rights reserved. No part of these materials may be changed, reproduced, or transmitted in any form or by any means, electronic or mechanical, including photocopying or recording, or in any information storage or retrieval system, without the prior express written permission of United HealthCare Services, Inc.

V1.0.2025

Page 46 of 97

Trademarks (Preface-8)

Guideline

Trademarks (Preface-8.1)

V1.0.2025

Trademarks (Preface-8.1)

PRF.TM.0008.1.A

v1.0.2025

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA). CPT® five-digit codes, nomenclature, and other data are copyright 2025 American Medical Association. All Rights Reserved. No fee schedules, basic units, relative values, or related listings are included in the CPT® book. AMA does not directly or indirectly practice medicine or dispense medical services. AMA assumes no liability for the data contained herein or not contained herein.

Page 48 of 97

General Guidelines (PEDPV-1)

Guideline

Procedure Codes Associated with Pelvis Imaging General Guidelines (PEDPV-1.0) Pediatric Pelvis Imaging Age Considerations (PEDPV-1.1) Pediatric Pelvis Imaging Modality General Considerations (PEDPV-1.3) References (PEDPV-1)

Procedure Codes Associated with Pelvis Imaging

PVP.GG.ProcedureCodes.A

v1.0.2025

MRI	CPT®
MRI Pelvis without contrast	72195
MRI Pelvis with contrast (rarely used)	72196
MRI Pelvis without and with contrast	72197
Unlisted MRI procedure (for radiation planning or surgical software)	76498

MRA	CPT®
MRA Pelvis	72198

СТ	CPT®
CT Abdomen and Pelvis without contrast	74176
CT Abdomen and Pelvis with contrast	74177
CT Abdomen and Pelvis without and with contrast	74178
CT Pelvis without contrast	72192
CT Pelvis with contrast	72193
CT Pelvis without and with contrast	72194
CT Guidance for Needle Placement (Biopsy, Aspiration, Injection, etc.)	77012
CT Guidance for and monitoring of Visceral Tissue Ablation	77013

Pediatric Pelvis Imaging Guidelines (For Ohio Only):

CSRAD022OH.D

UnitedHealthcare Community Plan Coverage Determination Guideline Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

Effective: November 1, 2025

Page 49 of 97

СТ	CPT®
CT Guidance for Placement of Radiation Therapy Fields	77014
Unlisted CT procedure (for radiation planning or surgical software)	76497

СТА	CPT ®
CTA Abdomen and Pelvis	74174
CTA Pelvis	72191

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
Urinary Bladder Residual Study	78730
Ureteral Reflux Study (Radiopharmaceutical Voiding Cystogram)	78740
Testicular Scan – Vascular Flow and Delayed Images	78761
Radiopharmaceutical Imaging of Lymphatic System	78195
Radiopharmaceutical Localization Imaging Limited area	78800
Radiopharmaceutical Localization Imaging Whole Body	78802

Pediatric Pelvis Imaging Guidelines (For Ohio Only):

CSRAD022OH.D

UnitedHealthcare Community Plan Coverage Determination Guideline

Effective: November 1, 2025 Page 50 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

Nuclear Medicine	CPT [®]
Radiopharmaceutical Localization Imaging SPECT	78803

Ultrasound	CPT ®
Ultrasound, pelvic (nonobstetric), complete	76856
Ultrasound, pelvic transvaginal	76830
Ultrasound, pelvic (nonobstetric), limited or follow-up	76857
Ultrasound, scrotum and contents	76870
Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; complete study	93975
Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; limited study	93976
Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; complete	93978
Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts; limited	93979
Duplex scan of arterial inflow and venous outflow of penile vessels; complete	93980
Duplex scan of arterial inflow and venous outflow of penile vessels; limited study	93981

General Guidelines (PEDPV-1.0)

PVP.GG.0001.0.A

v1.0.2025

- A pertinent clinical evaluation since the onset or change in symptoms, including a detailed history, physical examination, appropriate laboratory studies, and basic imaging such as plain radiography or ultrasound should be performed prior to considering advanced imaging (CT, MRI, Nuclear Medicine), unless the individual is undergoing guideline-supported scheduled imaging evaluation. A meaningful technological contact (telehealth visit, telephone call, electronic mail or messaging) since the onset or change in symptoms can serve as a pertinent clinical evaluation.
- Unless otherwise stated in a specific guideline section, the use of advanced imaging
 to screen asymptomatic individuals for disorders involving the pelvis is not supported.
 Advanced imaging of the pelvis is only indicated in individuals who have documented
 active clinical signs or symptoms of disease involving the pelvis.
- Unless otherwise stated in a specific guideline section, repeat imaging studies of the
 pelvis 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.
- Ultrasound
 - Ultrasound should be the initial imaging in most pelvic conditions to rule out those situations that do not require additional advanced imaging.
 - For those individuals who do require advanced imaging after ultrasound, 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.
 - CPT® codes vary by body area and presence or absence of Doppler imaging and are included in the table at the beginning of this guideline.
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Ultrasound (complete CPT® 76856 or, limited CPT® 76857) should substitute for TV in pediatric individuals or non-sexually active adult females

V1.0.2025

Pediatric Pelvis Imaging Age **Considerations (PEDPV-1.1)**

PVP.GG.0001.1.A

v1.0.2025

Many conditions affecting the pelvis in the pediatric population are different diagnoses than those occurring in the adult population. For those diseases which occur in both pediatric and adult populations, differences may exist in management due to individual age, comorbidities, and differences in disease natural history between children and adults.

Individuals who are age 18 years or younger should be imaged according to the Pediatric Pelvis Imaging Guidelines if discussed. Any conditions not specifically discussed in the Pediatric Pelvis Imaging Guidelines should be imaged according to the General Pelvis Imaging Guidelines. Individuals who are >19 years should be imaged according to the General Pelvis Imaging Guidelines, except where directed otherwise by a specific guideline section.

Page 53 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

Pediatric Pelvis Imaging Modality General Considerations (PEDPV-1.3)

PVP.GG.0001.3.A

v1.0.2025

- Ultrasound
 - See General Guidelines (PEDPV-1.0)
- MRI
 - MRI Pelvis is generally performed without and with contrast (CPT® 72197) unless the individual has a documented contraindication to gadolinium or 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:</p>
 - 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.
 - 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 the guidelines for the clinical condition being evaluated, MRI of all necessary body areas should be obtained concurrently in the same anesthesia session.
 - The presence of surgical hardware or implanted devices may preclude MRI.

 The selection of best examination may require coordination between the provider and the imaging service.

CT

- CT Pelvis typically extends from the iliac crest to the ischial tuberosities, and CT Abdomen and Pelvis extends from the dome of the diaphragm through the ischial tuberosities.
 - In general, CT Pelvis is appropriate when evaluating solid pelvic organs.
 - In general, CT Abdomen and Pelvis is appropriate when evaluating inflammatory or infections processes, hematuria, or conditions which appear to involve both the abdomen and the pelvis.
 - In some cases, especially in follow-up of a known finding, it may be appropriate
 to limit the exam to the region of concern to reduce radiation exposure.
- The contrast level in pediatric CT imaging is specific to the clinical indication, as listed in the specific guideline sections.
- CT Pelvis or Abdomen and Pelvis may be indicated for further evaluation of abnormalities suggested on prior US or MRI Procedures.
- CT may be appropriate without prior MRI or US, as indicated in specific sections of these guidelines.
- CT should not be used to replace MRI in an attempt to avoid sedation unless listed as a recommended study in a specific guideline section.
- The selection of best examination may require coordination between the provider and the imaging service.

Nuclear Medicine

- Nuclear medicine studies are rarely used in imaging of the pediatric pelvis but are indicated in rare circumstances, including the following:
 - Lymph system mapping (CPT® 78195) is indicated for lower extremity lymphedema with recent negative Doppler ultrasound, or a history of Milroy's disease or prior pelvic lymph node dissection.

3D Rendering

 3D Rendering indications in pediatric pelvis imaging are identical to those in the general imaging guidelines. See <u>3D Rendering (Preface-4.1)</u> in the Preface Imaging Guidelines

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 (PEDPV-1)

v1.0.2025

- 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
- 2. Faerber EN, Abramson SJ, Benator RM, et al. ACR-ASER-SCBT-MR-SPR Practice parameter for the performance of pediatric computed tomography (CT). American College of Radiology. Revised 2014
- 3. 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. Published 2022 Jun 1. doi:10.1001/jamanetworkopen.2022.17427
- 4. Macdonald A, Burrell S. Infrequently Performed Studies in Nuclear Medicine: Part 2. Journal of Nuclear Medicine Technology. 2009;37(1):1-13. doi:10.2967/jnmt.108.057851
- 5. FDA Drug Safety Communication: FDA identifies no harmful effects to date with brain retention of gadoliniumbased contrast agents for MRIs; review to continue. FDA Drug Safety Communication. May 22, 2017
- 6. Siegel MJ. Pediatric Sonography. 5th ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins; 2018:513-556.
- 7. Fraum TJ, Ludwig DR, Bashir MR, Fowler KJ. Gadolinium-based contrast agents: A comprehensive risk assessment. Journal of Magnetic Resonance Imaging. 2017;46(2):338-353. doi:10.1002/jmri.25625
- 8. Update on FDA approach to safety issue of gadolinium retention after administration of gadolinium-based contrast agents available at https://www.fda.gov/media/116492/download
- 9. Implementation Guide: Medicaid State Plan Eligibility Eligibility Groups Mandatory Coverage Infants and Children under Age 19 Guidance Portal. https://www.hhs.gov/guidance/document/implementation-guidemedicaid-state-plan-eligibility-eligibility-groups-aeu-mandatory-2

V1.0.2025

Abnormal Uterine Bleeding (PEDPV-2)

Guideline

Abnormal Uterine Bleeding (PEDPV-2.1) References (PEDPV-2)

Abnormal Uterine Bleeding (PEDPV-2.1)

PVP.UB.0002.1.A

v1.0.2025

- Abnormal uterine bleeding imaging indications in pediatric individuals are very similar to those for adult individuals. See Abnormal Uterine Bleeding (AUB) (PV-2.1) in the Pelvis Imaging Guidelines.
- Pediatric-specific imaging considerations include the following:
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in pediatric individuals or in individuals who have never been sexually active.
 - MRI Pelvis without contrast or without and with contrast (CPT® 72195 or CPT® 72197) is indicated if ultrasound is inconclusive.

Background and Supporting Information

The causes of vaginal bleeding in children differ from those in adolescents. Vaginal bleeding after the first week or so of life but before menarche is always abnormal and warrants evaluation. Common conditions before normal menarche include vaginal foreign bodies, infections, precocious puberty, and estrogen exposure. After menarche, pregnancy and excessive menstrual bleeding (ovulatory dysfunction) must be considered.

V1.0.2025

References (PEDPV-2)

v1.0.2025

- 1. Emans SJ, Laufer MR. Precocious Puberty. In: *Emans, Laufer, Goldstein's Pediatric and Adolescent Gynecology*. 7th ed. Wolters Kluwer Health; 2019:114-124.
- 2. Upadhya KK, Sucato GS. Abnormal Uterine Bleeding. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. *Nelson Textbook of Pediatrics*, 21st ed. 2020:1060-1062.

V1.0.2025

Pelvic Inflammatory Disease (PID) (PEDPV-3)

Guideline

Pelvic Inflammatory Disease (PID) (PEDPV-3.1) References (PEDPV-3)

Pelvic Inflammatory Disease (PID) (PEDPV-3.1)

PVP.ID.0003.1.A

v1.0.2025

- Pelvic inflammatory disease imaging indications in pediatric individuals are very similar to those for adult individuals. See <u>Pelvic Inflammatory Disease (PV-7.1)</u> in the Pelvis Imaging Guidelines.
- Pediatric-specific imaging considerations include the following:
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in individuals who are pre-pubescent or victims of abuse.
 - MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72197) is indicated if ultrasound is inconclusive.
 - CT Pelvis with contrast (CPT® 72193) is indicated if MRI is not readily available.

Page 61 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

References (PEDPV-3)

v1.0.2025

- 1. Burstein GR. Sexually transmitted infections. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. *Nelson Textbook of Pediatrics*. 21st ed. 2020:1081-1091
- 2. Cohen HL, Raju AD. Abnormalities of the female genital tract. In: Coley B, Saunders E, eds. *Caffey's Pediatric Diagnostic Imaging*. Philadelphia PA, 2019:1201-1211
- 3. Caprio MG, Serafino MD, Feo AD, et al. Ultrasonographic and multimodal imaging of pediatric genital female diseases. *Journal of Ultrasound*. 2019;22(3):273-289. doi:10.1007/s40477-019-00358-5

V1.0.2025

Amenorrhea (PEDPV-4)

Guideline

Amenorrhea (PEDPV-4.1) References (PEDPV-4)

Amenorrhea (PEDPV-4.1)

PVP.AA.0004.1.A

v1.0.2025

- Females with primary amenorrhea and any of the following should be evaluated initially with pelvic ultrasound (CPT® 76856 or CPT® 76857):
 - Amenorrhea is usually primary and refers to absence of menstrual periods by age 16.
 - Normal pubertal development and negative pregnancy test.
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound (CPT® 76830) is indicated for better view of genitourinary anomalies in sexually active females.
 - Delayed puberty with follicle-stimulating hormone (FSH) or luteinizing hormone (LH) that is elevated for the individual's age and Tanner stage.
- MRI Pelvis without contrast or without and with contrast (CPT® 72195 or CPT® 72197) and/or MRI Abdomen without contrast or without and with contrast (CPT® 74181 or CPT® 74183) are indicated for congenital anomalies or for pre-operative planning.

References (PEDPV-4)

v1.0.2025

- 1. Langer JE, Oliver ER, Lev-Toaff AS, Coleman BG. Imaging of the Female Pelvis through the Life Cycle. RadioGraphics. 2012;32(6):1575-1597. doi:10.1148/rg.326125513
- 2. Upadhya KK, Suscato GS. Amenorrhea. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. Nelson Textbook of Pediatrics. 21st ed. Elsevier. 2019:1059-1060.
- 3. Cohen HL, Raju AD. Amenorrhea and abnormalities of puberty. In: Coley B, Saunders E, eds. Caffey's Pediatric Diagnostic Imaging. 13th ed. Elsevier. 2019:12.
- 4. Behr SC, Courtier JL, Qayyum A. Imaging of Müllerian Duct Anomalies. RadioGraphics. 2012;32(6). doi:10.1148/rg.326125515
- 5. Caprio MG, Serafino MD, Feo AD, et al. Ultrasonographic and multimodal imaging of pediatric genital female diseases. Journal of Ultrasound. 2019;22(3):273-289. doi:10.1007/s40477-019-00358-5

V1.0.2025

Endometriosis (PEDPV-5)

Guideline

Endometriosis (PEDPV-5.1) Reference (PEDPV-5)

Endometriosis (PEDPV-5.1)

PVP.EM.0005.1.A

v1.0.2025

- Endometriosis imaging indications in pediatric individuals are very similar to those for adult individuals. See <u>Endometriosis (PV-6.1)</u> in the Pelvis Imaging Guidelines.
- · Pediatric-specific imaging considerations include:
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in individuals who are pre-pubescent or have never been sexually active.

V1.0.2025

Reference (PEDPV-5)

v1.0.2025

1. Upadhya KK, Suscato GS. Dysmenorrhea. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. Nelson Textbook of Pediatrics, 21st ed. 2020:1062-1063.

Page 68 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Suspected Adnexal Mass (PEDPV-6)

Guideline

Suspected Adnexal Mass (PEDPV-6.1) References (PEDPV-6)

Suspected Adnexal Mass (PEDPV-6.1)

PVP.AM.0006.1.A

v1.0.2025

- Suspected adnexal mass imaging indications in pediatric individuals are very similar
 to those for adult individuals. See <u>Adnexal Mass/Ovarian Cysts (PV-5)</u> in the
 Pelvis Imaging Guidelines. Ultrasound is the first study indicated for evaluation of a
 suspected adnexal mass.
- · Pediatric-specific imaging considerations include the following:
 - Transabdominal ultrasound is appropriate in all pediatric individuals.
 - Transvaginal (TV) Ultrasound is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in individuals who are pre-pubescent or have never been sexually active.
 - Adnexal masses with a solid component in individuals, age ≥15 years, should be imaged according to <u>Pediatric Germ Cell Tumors (PEDONC-10)</u> in the Pediatric and Special Populations Oncology Imaging Guidelines.

V1.0.2025

References (PEDPV-6)

v1.0.2025

- 1. Allen-Rhoades WA and Steuber CP. Clinical assessment and differential diagnosis of the child with suspected cancer. In: Pizzo PA and Poplack DG, eds. Principles and Practice of Pediatric Oncology. 2016:7:101-111
- 2. Kelleher CM, Goldstein AM. Adnexal Masses in Children and Adolescents. Clinical Obstetrics and Gynecology. 2015;58(1):76-92. doi:10.1097/grf.0000000000000084
- 3. Caprio MG, Serafino MD, Feo AD, et al. Ultrasonographic and multimodal imaging of pediatric genital female diseases. Journal of Ultrasound. 2019;22(3):273-289. doi:10.1007/s40477-019-00358-5

Effective: November 1, 2025

Page 71 of 97

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Pelvic Pain/ Dyspareunia, and Ovarian Torsion (PEDPV-7)

Guideline

Pelvic Pain/Dyspareunia, and Ovarian Torsion (PEDPV-7.1) References (PEDPV-7)

Pelvic Pain/Dyspareunia, and Ovarian Torsion (PEDPV-7.1)

PVP.PP.0007.1.A

v1.0.2025

- Pelvic Pain/Dyspareunia imaging indications in pediatric individuals are identical to those for adult individuals. See <u>Pelvic Pain/Dyspareunia</u>, <u>Female (PV-11.1)</u> in the Pelvis Imaging Guidelines.
- Ovarian torsion in children is typically associated with a normal ovary. Spontaneous
 torsion of a normal ovary is more common than torsion caused by a lead mass, such
 as a cyst or tumor. Torsion involves both the ovary and fallopian tube and typically
 presents with acute of onset of lower abdominal pain, often associated with nausea or
 vomiting.
 - Transabdominal ultrasound (CPT® 76856) with Doppler (CPT® 93975) is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound (CPT® 76830) with Doppler (CPT® 93975) is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in individuals who are pre-pubescent or have never been sexually active.

References (PEDPV-7)

v1.0.2025

- Naffaa L, Deshmukh T, Tumu S, Johnson C, Boyd KP, Meyers AB. Imaging of Acute Pelvic Pain in Girls: Ovarian Torsion and Beyond. Current Problems in Diagnostic Radiology. 2017;46(4):317-329. doi:10.1067/j.cpradiol.2016.12.010
- Siegel MJ. Pediatric Sonography. 5th ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins; 2018:513-556
- 3. Sintim-Damoa A, Majmudar AS, Cohen HL, Parvey LS. Pediatric Ovarian Torsion: Spectrum of Imaging Findings. *RadioGraphics*. 2017;37(6):1892-1908. doi:10.1148/rg.2017170026
- 4. Cohen HL, Raju AD. Abnormalities of the female genital tract. In: Coley B, Saunders E, eds. *Caffey's Pediatric Diagnostic Imaging*. Philadelphia PA, 2019:1201-1211
- 5. Caprio MG, Serafino MD, Feo AD, et al. Ultrasonographic and multimodal imaging of pediatric genital female diseases. *Journal of Ultrasound*. 2019;22(3):273-289. doi:10.1007/s40477-019-00358-5
- 6. Ssi-Yan-Kai G, Rivain A-L, Trichot C, et al. What every radiologist should know about adnexal torsion. *Emergency Radiology.* 2017;25(1):51-59. doi:10.1007/s10140-017-1549-8

V1.0.2025

Polycystic Ovary Syndrome (PEDPV-8)

Guideline

Polycystic Ovary Syndrome (PEDPV-8.1) References (PEDPV-8)

Polycystic Ovary Syndrome (PEDPV-8.1)

PVP.OS.0008.1.A

v1.0.2025

- Polycystic ovary syndrome imaging indications in pediatric individuals are very similar to those for adult individuals. See <u>Polycystic Ovary Syndrome (PCOS) (PV-8.1)</u> in the Pelvis Imaging Guidelines.
- Pediatric-specific imaging considerations include:
 - Transabdominal ultrasound (CPT® 76856) is appropriate in all pediatric individuals.
 - Transvaginal (TV) ultrasound (CPT® 76830) is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study. Transvaginal ultrasound is generally not appropriate in individuals who are pre-pubescent or have never been sexually active.

Background and Supporting Information

Adolescent girls may have multiple ovarian cysts as part of normal pubertal development. As such the diagnosis should not be based on morphology alone, but requires abnormal laboratory studies.

V1.0.2025

References (PEDPV-8)

v1.0.2025

- 1. Fondin M, Rachas A, Huynh V, et al. Polycystic Ovary Syndrome in Adolescents: Which MR Imaging-based Diagnostic Criteria? Radiology. 2017;285(3):961-970. doi:10.1148/radiol.2017161513
- 2. Cohen HL, Raju AD. Abnormalities of the female genital tract. In: Coley B, Saunders E, eds. Caffey's Pediatric Diagnostic Imaging. Philadelphia PA, 2019:1201-1211
- 3. Huddleston HG, Quinn M, Gibson M. Polycystic Ovary Syndrome and Hirsutism. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. Nelson Textbook of Pediatrics, 21st ed. 2020:2857-2861
- 4. DiVall S, Merjaneh L. Adolescent Polycystic Ovary Syndrome: An Update. Pediatric Annals. 2019;48(8):e304e310. doi:10.3928/19382359-20190729-01
- 5. Baldauff NH, Witchel SF. Polycystic ovary syndrome in adolescent girls. Current Opinion in Endocrinology, Diabetes and Obesity. 2017 Feb 1;24(1):56-66.

V1.0.2025

Periurethral Cysts and Urethral Diverticula (PEDPV-9)

Gι	JIC	lel	line	

Periurethral Cysts and Urethral Diverticula (PEDPV-9.1)

Page 78 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Periurethral Cysts and Urethral Diverticula (PEDPV-9.1)

PVP.CD.0009.1.A

v1.0.2025

 Periurethral cysts and urethral diverticula imaging indications in pediatric individuals are identical to those for adult individuals. See <u>Periurethral Cysts and Urethral</u> <u>Diverticula (PV-13)</u> in the Pelvis Imaging Guidelines.

V1.0.2025

Fetal MRI (PEDPV-10)

Guideline

Fetal MRI (PEDPV-10.1)

V1.0.2025

Fetal MRI (PEDPV-10.1)

PVP.MR.0010.1.A

v1.0.2025

Fetal MRI indications in pediatric individuals are identical to those for adult individuals. See Fetal MRI (PV-15.1) in the Pelvis Imaging Guidelines.

Page 81 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Undescended Testis (PEDPV-11)

Guideline

Undescended Testis (PEDPV-11.1) References (PEDPV-11)

Undescended Testis (PEDPV-11.1)

PVP.UT.0011.1.A

v1.0.2025

- Males with a history of cryptorchidism (undescended testis) have a several-fold risk increase of testicular cancer. It is important to diagnose and treat this condition either by bringing the undescended testis into the scrotum, or resecting the testis.
- Pediatric-specific imaging considerations include the following:
 - Suspected undescended testis is an indication for referral to a surgical subspecialist who should make the decision or be consulted on necessary imaging studies.
- After surgical evaluation or consultation, the following imaging is indicated for preoperative evaluation:
 - Scrotal ultrasound (CPT® 76870) if testis not palpable in the scrotal sac and there
 is concern for retractile or inguinal testis. In general CT and MRI are not indicated
 to localize non-palpable testes, as the findings would typically not alter the surgical
 procedure.
 - If after ultrasound there is concern for associated urogenital abnormalities, or the surgical consultant or any provider in consultation with the surgical consultant indicates that advanced imaging results would significantly alter the surgical procedure either of the studies below are indicated:
 - MRI Abdomen (CPT® 74183) and Pelvis (CPT® 72197) without and with contrast
 - CT Abdomen and Pelvis with contrast (CPT® 74177)

References (PEDPV-11)

v1.0.2025

- 1. Kolon TF, Herndon CDA, Baker LA, et al. Evaluation and treatment of cryptorchidism: AUA Guideline, Copyright © 2018 American Urological Association Education and Research, Inc.®
- 2. Inappropriate Use of Ultrasound in Management of Pediatric Cryptorchidism. Pediatrics. 2015;136(3). doi:10.1542/peds.2015-0222d
- 3. Elder JS. Disorders and anomalies of the scrotal contents. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. Nelson Textbook of Pediatrics, 21st ed. 2020:2827-2833.
- 4. Poppas DP and Medina C. Undescended testicle or cryptorchidism. Cornell University Institute for Pediatric
- 5. Krishnaswami S, Fonnesbeck C, Penson D, Mcpheeters ML. Magnetic Resonance Imaging for Locating Nonpalpable Undescended Testicles: A Meta-analysis. Pediatrics. 2013;131(6). doi:10.1542/peds.2013-0073
- 6. Aggarwal H, Rehfuss A, Hollowell J. Management of undescended testis may be improved with educational updates for referring providers. Journal of Pediatric Urology. 2014;10(4):707-711. doi:10.1016/ j.jpurol.2013.10.025
- 7. Cohen HL, Miller SF. Abnormalities of the male genital tract. In: Coley B, Saunders E, eds. Caffey's Pediatric Diagnostic Imaging. Philadelphia, PA. 2019:1193-1200
- 8. Gates RL, Shelton J, et al. Management of the undescended testis in children: An American Pediatric Surgical Association Outcomes and Evidence Based Practice Committee Systematic Review. J Pediatr Surg. 2022 Jul;57(7):1293-1308. doi: 10.1016/j.jpedsurg.2022.01.003

V1.0.2025

Scrotal Pathology (PEDPV-12)

Guideline

Scrotal Pathology (PEDPV-12.1) References (PEDPV-12)

Scrotal Pathology (PEDPV-12.1)

PVP.SP.0012.1.A

v1.0.2025

- Scrotal pathology imaging indications in pediatric individuals are very similar to those for adult individuals. See <u>Scrotal Pathology (PV-20.1)</u> in the Pelvis Imaging Guidelines.
- Pediatric-specific imaging considerations include the following:
 - Scrotal US (CPT® 76870) with Doppler (CPT® 93975 or CPT® 93976) is indicated for concerns of testicular torsion.
 - MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72197) is indicated if torsion is unlikely on ultrasound and no surgical exploration is planned. MRI is not typically used for the acute scrotum due to the limited availability of equipment and the long examination time involved.
 - Since the acceptance of Doppler US as the primary imaging for evaluation of acute scrotum, scintigraphy is not indicated. The unavailability of nuclear medicine imaging in many practices and its use of ionizing radiation, its poor anatomical details, and the time required for imaging are other limiting factors.

References (PEDPV-12)

v1.0.2025

- 1. Wang, CL, Aryal, B, et al; ACR Appropriateness Criteria®Acute Onset of Scrotal Pain-Without Trauma, Without Antecedent Mass. American College of Radiology. 2018. https://acsearch.acr.org/docs/69363/Narrative/
- 2. Elder JS. Disorders and anomalies of the scrotal contents. In: Kliegman RM, Stanton BF, St. Geme JW III, et al., eds. Nelson Textbook of Pediatrics, 20th ed. 2016:2592-2598
- 3. Macdonald A, Burrell S. Infrequently Performed Studies in Nuclear Medicine: Part 2. Journal of Nuclear Medicine Technology. 2009;37(1):1-13. doi:10.2967/jnmt.108.057851
- 4. Tekgül S, Riedmiller H, Gerharz E, et al. Guidelines on paediatric urology. European Association of Urology. Revised March 2013
- 5. Alkhori NA, Barth RA. Pediatric scrotal ultrasound: review and update. Pediatric Radiology. 2017;47(9):1125-1133. doi:10.1007/s00247-017-3923-9
- 6. Cohen HL, Miller SF. Abnormalities of the male genital tract. In: Coley B, Saunders E, eds. Caffey's Pediatric Diagnostic Imaging. Philadelphia, PA. 2019:1193-1200
- 7. Lyshchik, A, Nikolaidis, P, et al. ACR Appropriateness Criteria® Newly Diagnosed Palpable Scrotal Abnormality. American College of Radiology, 2021. https://acsearch.acr.org/docs/3158184/Narrative/

V1.0.2025

Penis-Soft Tissue Mass (PEDPV-13)

$\overline{}$				
(🕁	IIIC	е	line	١

Penis-Soft Tissue Mass (PEDPV-13.1)

V1.0.2025

Penis-Soft Tissue Mass (PEDPV-13.1)

PVP.ST.0013.1.A

v1.0.2025

Penile soft tissue masses are very rare in pediatric individuals, and imaging indications are identical to those for adult individuals. See Penis-Soft Tissue Mass (PV-18.1) in the Pelvis Imaging Guidelines.

V1.0.2025

Incontinence (PEDPV-14)

Guideline

Incontinence (PEDPV-14.1) References (PEDPV-14)

Incontinence (PEDPV-14.1)

PVP.IN.0014.1.A

v1.0.2025

- Incontinence imaging indications in pediatric individuals are very similar to those for adult individuals. See <u>Urinary Incontinence/Pelvic Prolapse/Fecal Incontinence</u> (<u>PV-22</u>) in the Pelvis Imaging Guidelines.
- Most often incontinence in children is not due to a medical condition. Several
 uncommon disorders that can lead to urinary incontinence include a spinal cord
 defect such as spina bifida, ureteral duplication with ectopic insertion, and overactive
 bladder or dysfunctional voiding.
- No imaging is needed if primary enuresis is suspected; however, imaging evaluation
 may be warranted if ureteral duplication or overactive bladder or dysfunctional voiding
 is suspected. The physician should obtain a full medical history and urinalysis before
 imaging is done.
- Radiopharmaceutical urinary bladder residual study (CPT® 78730) is indicated for suspicion of urinary retention and a recent non-diagnostic ultrasound.
- · Pediatric-specific imaging considerations include the following:
 - MRI Pelvis without and with contrast (CPT® 72197) is indicated if ultrasound is inconclusive or spinal abnormality is suspected.
 - CT Pelvis with contrast (CPT® 72193) is appropriate if MRI is not readily available.

V1.0.2025

References (PEDPV-14)

v1.0.2025

- Elder JS. Enuresis and voiding dysfunction. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. Nelson Textbook of Pediatrics, 21st ed. 2020:2816-2821
- 2. Mandell GA, Eggli DF, Gilday DL, et al. Procedure guideline for radionuclide cystography in children. *Society of Nuclear Medicine*. Version 3.0 approved January 2003.
- 3. Arlen AM, Cooper CS. New trends in voiding cystourethrography and vesicoureteral reflux: who, when and how?. *Int J Urol.* 2019;26(4):440-445. doi:10.1111/iju.13915
- 4. Fettich J, Colarinha P, Fischer S, et al. Guidelines for direct radionuclide cystography in children. *Paediatric Committee of the European Association of Nuclear Medicine*. Dec 2002.

Page 92 of 97

Effective: November 1, 2025

Proprietary Information of United Healthcare. Copyright © 2025 United Healthcare Services, Inc.

V1.0.2025

Patent Urachus (PEDPV-15)

Guideline

Patent Urachus (PEDPV-15.1) References (PEDPV-15)

Patent Urachus (PEDPV-15.1)

PVP.UR.0015.1.A

v1.0.2025

- Ultrasound pelvis (CPT® 76856) is indicated as the initial evaluation for patent urachus.
 - ANY of the following are indicated if the ultrasound is inconclusive or insufficient for preoperative planning:
 - MRI Pelvis without contrast (CPT® 72195)
 - MRI Pelvis without and with contrast (CPT® 72197)
 - CT Pelvis with contrast (CPT® 72193)
- · Repeat imaging of asymptomatic individuals is not generally necessary, but is indicated for the following:
 - New or worsening symptoms
 - Preoperative planning

Background and Supporting Information

The urachus is a "tube" connecting the fetal bladder to the umbilical cord. It is usually obliterated during fetal growth, but if it remains patent, there can be a complete or partial connection between the bladder and the umbilicus.

Ultrasound has an accuracy greater than 90%.

References (PEDPV-15)

v1.0.2025

- Villavicencio CP, Adam SZ, Nikolaidis P, Yaghmai V, Miller FH. Imaging of the Urachus: Anomalies, Complications, and Mimics. RadioGraphics. 2016;36(7):2049-2063. doi:10.1148/rg.2016160062
- Berrocal T, López-Pereira P, Arjonilla A, Gutiérrez J. Anomalies of the Distal Ureter, Bladder, and Urethra in Children: Embryologic, Radiologic, and Pathologic Features. *RadioGraphics*. 2002;22(5):1139-1164. doi:10.1148/radiographics.22.5.g02se101139
- 3. Little DC, Shah SR, Peter SDS, et al. Urachal anomalies in children: the vanishing relevance of the preoperative voiding cystourethrogram. *Journal of Pediatric Surgery*. 2005;40(12):1874-1876. doi:10.1016/j.jpedsurg.2005.08.029
- 4. Buddha S, Menias CO, Katabathina VS. Imaging of urachal anomalies. *Abdom Radiol (NY)*. 2019;44(12):3978-3989. doi:10.1007/s00261-019-02205-x
- 5. Parada Villavicencio C, Adam SZ, Nikolaidis P, Yaghmai V, Miller FH. Imaging of the Urachus: Anomalies, Complications, and Mimics. *Radiographics*. 2016;36(7):2049-2063. doi:10.1148/rg.2016160062
- 6. West HC, Anton CG. Bladder and Urethra. In: Coley B, Saunders E, eds. *Caffey's Pediatric Diagnostic Imaging*. Philadelphia PA; 2019:1157-1166
- 7. Elder JS. Anomilies of the Bladder. In: Kliegman RM, St. Geme JW III, Blum NJ, Shah SS, Tasker RC, Wilson KM, eds. *Nelson Textbook of Pediatrics*, 21st ed. 2020:2810-2813

V1.0.2025

Policy History and Instructions for Use

\sim				
Gu	IC	е	lır	ıe

Policy History and Instructions for Use

Policy History and Instructions for Use

Policy History and Instructions for Use

v1.0.2025

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