



**UnitedHealthcare® Community Plan: *Radiology Imaging Coverage Determination Guideline***

**Adult Pelvis Imaging Guidelines (For Ohio Only)**

**V1.0.2023**

**Guideline Number: CSRAD011OH.A**

**Effective Date: June 1, 2023**

**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.*

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UnitedHealthcare Community Plan Coverage Determination Guideline

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# Related Community Plan Policies

## Related Community Plan Policies

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### General Policies

- General Abdomen Imaging Guidelines
- General Oncology Imaging Guidelines

### Pediatric Policies

- Pediatric Pelvis Imaging Guidelines

Related Community Plan Policies

# Application (For Ohio Only)

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Application (for Ohio only)

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## Application for Ohio OH UHC

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# Guideline Development (Preface-1)

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### Guideline Development (Preface-1.1)

# Guideline Development (Preface-1.1)

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- The UnitedHealthcare's 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. United HealthCare's guidelines are based upon 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.
- 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.



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

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## Guideline

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

References (Preface-2)

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

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## **Investigational and Experimental Studies**

- Certain advanced imaging studies, or other procedures, may be considered investigational and experimental if there is a paucity of supporting evidence; if the evidence has not matured to exhibit improved health parameters or; the advanced imaging study/procedure lacks a collective opinion of support.

## **Clinical and Research Trials**

- Similar to investigational and experimental studies, clinical trial imaging requests will be considered to determine whether they meet UnitedHealthcare's evidence-based 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.

## **Legislative Mandate**

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

## References (Preface-2)

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

# Clinical Information (Preface-3)

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Clinical Information (Preface-3.1)

References (Preface-3)

# Clinical Information (Preface-3.1)

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## Clinical Documentation and Age Considerations

- UnitedHealthcare’s 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. UnitedHealthcare’s 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 examination<sup>20</sup> 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; x-ray imaging does not have to be within the past 60 days.
      - 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.
  - UnitedHealthcare’s evidence-based approach to determine the most appropriate procedure for each individual requires submission of medical records pertinent to the requested imaging or other designated procedures.
- Many conditions affecting the pediatric population are different diagnoses than those occurring in the adult population. For those diseases which occur in both pediatric and adult populations, minor differences may exist in management due to individual age, comorbidities, and differences in disease natural history between children and adults.

- Individuals who are 18 years old or younger<sup>19</sup> 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.
- The terms “male” and “female” used in these guidelines refer to anatomic-specific diseases and disease predispositions associated with individuals’ sex assigned at birth rather than their gender identity. It should be noted that gender identity and anatomic-specific diseases as well as disease predispositions are not always linked. As such, these guidelines should be applied to the individual’s corresponding known or suspected anatomic-specific disease or disease predisposition. At UnitedHealthcare, we believe that it is important to understand how all individuals, including those who are gender-diverse, choose to identify themselves. To ensure that gender-diverse individuals are treated with respect and that decisions impacting their healthcare are made correctly and with sensitivity, UnitedHealthcare recognizes all individuals with the following gender marker options: Male, Female, Transgender male, Transgender female, “X,” and “Not specified.”

### **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.<sup>1</sup>

### **Ultrasound**

- Diagnostic ultrasound uses high frequency sound waves to evaluate soft tissue structures and vascular structures utilizing greyscale 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 to evaluate 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:

- 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 clinical situation of the individual 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:
    - 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.<sup>1</sup>
- 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 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.<sup>2</sup>
- 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:
  - 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 clinical situation of the individual 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:
    - 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 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).<sup>2</sup>
  - 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.<sup>3,4,5,6,7</sup> 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.<sup>8</sup>
- 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 of 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 **PET-MRI (Preface-5.3)**
- PET is rarely performed as a single modality, but is typically performed as a combined PET/CT.
  - The unbundling of PET/CT into separate PET and diagnostic CT CPT® codes is not 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
  - Fluorodeoxyglucose (fluorine-18-2-fluoro-2-deoxy-D-glucose [FDG]) is the most common PET radiotracer and images glucose metabolism
  - Some specialized radiotracers including Gallium-68 DOTATATE, C-11 Choline, F-18 Fluciclovine (AXUMIN®), 68Ga PSMA-11, and 18F Piflufolastat PSMA (Pylarify®) are supported in evaluation for some oncologic conditions, while the use of other radiotracers including but not limited to F-18 Sodium Fluoride is not supported.
- Indications for PET/CT may include
  - 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:
  - 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.<sup>9, 10</sup> To avoid these unnecessary risks, the precautions below should be considered.
  - The results of initial diagnostic tests or radiologic studies to narrow the differential diagnosis should be obtained prior to performing further tests or radiologic studies.
  - The clinical history should include a potential indication such as a known or suspected abnormality involving the body part for which the imaging study is being requested. These potential indications are addressed in greater detail within the applicable guidelines.
  - The results of the requested imaging procedures should be expected to have an impact on individual management or treatment decisions.
  - Repeat imaging studies are not generally necessary unless there is evidence of disease progression, recurrence of disease, and/or the repeat imaging will affect an individual’s clinical management.
- Preoperative 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 pre-procedural imaging may be approved.

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# Coding Issues (Preface-4)

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## Guideline

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## 3D Rendering (Preface-4.1)

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### **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 computer-aided 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.

- 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 preoperative 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)
    - Preoperative planning for other complex surgical cases
    - Complex facial fractures
  - Preoperative planning for other complex surgical cases
  - Cerebral angiography
  - Pelvis conditions:
    - Uterine intra-cavitary lesion when initial US is equivocal (See **Abnormal Uterine Bleeding (AUB) (PV-2.1)** and **Leiomyoma/Uterine Fibroids (PV-12.1)** in the Pelvis Imaging Guidelines)
    - Hydrosalpinx or peritoneal cysts when initial US is indeterminate (See **Complex Adnexal Masses (PV-5.3)** in the Pelvis Imaging Guidelines)
    - Lost IUD (inability to feel or see IUD string) with initial US (See **Intrauterine Device (PV-10.1)** in the Pelvis Imaging Guidelines)
    - Uterine anomalies with initial US (See **Uterine Anomalies (PV-14.1)** in the Pelvis Imaging Guidelines)
    - Infertility (See **Initial Infertility Evaluation, Female (PV-9.1)** in the Pelvis Imaging Guidelines)
  - Abdomen conditions:
    - CT Urogram (See **Hematuria and Hydronephrosis (AB-39)** in the Abdomen Imaging Guidelines)
    - MRCP (See **MR Cholangiopancreatography (MRCP) (AB-27)** in the Abdomen Imaging Guidelines)



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

PRF.CD.0004.2.UOH  
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- CT, MR, and Ultrasound guidance procedure codes contain all 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
76942	Ultrasonic guidance for needle placement
77022	MR guidance for, and monitoring of parenchymal tissue ablation
77021	MR guidance for needle placement
77013	CT guidance for, and monitoring of parenchymal tissue ablation
77012	CT guidance for needle placement
77011	CT guidance for stereotactic localization
75989	Imaging guidance for percutaneous drainage with placement of catheter (all modalities)
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
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

**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:**

Preface to the Imaging Guidelines

- 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.<sup>3</sup>
- In most cases, the preoperative CT is a technical-only service that does not require interpretation by a radiologist.
  - The imaging facility should report CPT® 77011 when performing a scan not requiring interpretation by a radiologist.
  - If a diagnostic scan is performed and interpreted by a radiologist, the appropriate diagnostic CT code (e.g., CPT® 70486) should be used.
  - It is not appropriate to report both CPT® 70486 and CPT® 77011 for the same CT stereotactic localization imaging session.
  - 3D Rendering (CPT® 76376 or CPT® 76377) should not be reported in conjunction with CPT® 77011 (or CPT® 70486 if used). The procedure inherently generates a 3D dataset.

**CPT® 77012 (CT) and CPT® 77021 (MR):**

- These codes are used to report imaging guidance for needle placement during biopsy, aspiration, and other percutaneous procedures.
- They represent the radiological supervision and interpretation of the procedure and are often billed in conjunction with surgical procedure codes.
  - For example, CPT® 77012 is reported when CT guidance is used to place the needle for a conventional arthrogram.
  - Only codes representing percutaneous surgical procedures should be billed with CPT® 77012 and CPT® 77021. It is inappropriate to use with surgical codes for open, excisional, or incisional procedures.
  - **CPT® 77021** (MR guidance for needle placement) is not an appropriate code for breast 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  
v1.0.2023

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

- 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)<sup>1,2</sup>
  - Custom joint Arthroplasty planning (not as Alternative Recommendation) (See **Osteoarthritis (MS-12.1)** in the Musculoskeletal Imaging Guidelines)
  - Any procedure/surgical planning if thinner cuts or different positional acquisition (than those on the completed diagnostic study) are needed. These could include navigational bronchoscopy. See **Navigational Bronchoscopy (CH-1.7)** in the Chest Imaging Guidelines

### **Therapy Treatment Planning**

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

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

PRF.CD.0004.5.UOH

v1.0.2023

- 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):
  - 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. Please See **Unlisted Procedure Codes in Oncology (ONC-1.5)** in the Oncology Imaging Guidelines.
- It is inappropriate to report CPT® 76380, in conjunction with other diagnostic CT codes, to cover 'extra slices' in certain imaging protocols.
  - There is no specific number of sequences or slices defined in any CT CPT® code definition.
  - The AMA, in *CPT® 2019*, does not describe nor assign any minimum or maximum number of sequences or slices for any CT study.
    - A few additional slices or sequences are not uncommon.
    - CT imaging protocols are often influenced by the individual clinical situation of the individual. Sometimes the protocols require more time and sometimes less.

## SPECT/CT Imaging (Preface-4.6)

PRF.CD.0004.6.UOH

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

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

PRF.CD.0004.7.UOH

v1.0.2023

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

# Quantitative MR Analysis of Tissue Composition (Preface-4.8)

PRF.CD.0004.8.UOH

v1.0.2023

- 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 **Fatty Liver (AB-29.2)** 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.



## HCPCS Codes (Preface-4.9)

PRF.CD.0004.9.UOH

v1.0.2023

- Healthcare Common Procedure Coding System (HCPCS) codes are utilized by some hospitals in favor of the typical Level 3 CPT® Codes. These codes are typically 4 digits preceded by a C, or S<sup>6</sup>
  - Many of these codes have similar code descriptions to level 3 CPT® codes (i.e. C8931 – MRA with dye, Spinal Canal, and 72159-MRA Spinal canal)
  - If cases are submitted with HCPCS codes with similar code descriptions to the typical level 3 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 nonspecific 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)

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1. Society of Nuclear Medicine and Molecular Imaging Coding Corner <http://www.snmni.org/ClinicalPractice/CodingCornerPT.aspx?ItemNumber=1786>
2. Intraoperative MR. Brainlab. <https://www.brainlab.com/surgery-products/overview-neurosurgery-products/intraoperative-mr/>
3. Experience the Advanced 3D Sinus Surgery Planning with Scopis Building Blocks planning software. Scopis Planning. <http://planning.scopis.com/>
4. ACR Radiology Coding Source™ March-April 2007 Q and A. [www.acr.org](http://www.acr.org). <https://www.acr.org/Advocacy-and-Economics/Coding-Source/ACR-Radiology-Coding-Source-March-April-2007-Q-and-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. *Pediatric Radiology*. 2018;48(7):904-914. doi:10.1007/s00247-018-4104-1
6. HCPCS - General Information from CMS.gov at <https://www.cms.gov/medicare/coding/medhcpcsgeninfo>

# Whole Body Imaging (Preface-5)

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## Guideline

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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

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- 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 **Multiple Myeloma and Plasmacytomas (ONC-25)** in the Oncology Imaging Guidelines)

# Whole Body MR Imaging (Preface-5.2)

PRF.WB.0005.2.UOH

v1.0.2023

- 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 individual 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:
    - 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. See **Li-Fraumeni Syndrome (LFS) (PEDONC-2.2)**, **Hereditary Paraganglioma-Pheochromocytoma (HPP) Syndromes (PEDONC-2.13)**, **Constitutional Mismatch Repair Deficiency (CMMRD or Turcot Syndrome) (PEDONC-2.15)** in the Pediatric Oncology Imaging Guidelines for additional information
  - 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. See **Chronic Recurrent Multifocal Osteomyelitis (PEDMS-10.2)** in the Pediatric Musculoskeletal Imaging Guidelines for additional information.

## PET-MRI (Preface-5.3)

PRF.WB.0005.3.UOH

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- 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 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.
- See **PET Imaging in Pediatric Oncology (PEDONC-1.4)** in the Pediatric Oncology Imaging Guidelines, **PET Brain Imaging (PEDHD-2.3)**, and **Special Imaging Studies in Evaluation for Epilepsy Surgery (PEDHD-6.3)** in the Pediatric Head Imaging Guidelines for more information

## References (Preface-5)

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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
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# References (Preface-6)

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## Guideline

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### References (Preface-6.1)



## References (Preface-6.1)

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- 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>.

# Copyright Information (Preface-7)

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## Guideline

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### Copyright Information (Preface-7.1)

## Copyright Information (Preface-7.1)

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# Trademarks (Preface-8)

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## Guideline

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### Trademarks (Preface-8.1)

## Trademarks (Preface-8.1)

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<b>Pelvic Imaging Guidelines</b>
<b>Abbreviations for Pelvis Imaging Guidelines</b>
<b>General Guidelines (PV-1)</b>
<b>Abnormal Uterine Bleeding (PV-2)</b>
<b>Amenorrhea (PV-3)</b>
<b>Adenomyosis (PV-4)</b>
<b>Adnexal Mass/Ovarian Cysts (PV-5)</b>
<b>Endometriosis (PV-6)</b>
<b>Pelvic Inflammatory Disease (PID) (PV-7)</b>
<b>Polycystic Ovary Syndrome (PV-8)</b>
<b>Initial Infertility Evaluation, Female (PV-9)</b>
<b>Intrauterine Device (IUD) and Tubal Occlusion (PV-10)</b>
<b>Pelvic Pain/Dyspareunia, Female (PV-11)</b>
<b>Leiomyoma/Uterine Fibroids (PV-12)</b>
<b>Periurethral Cysts and Urethral Diverticula (PV-13)</b>
<b>Uterine Anomalies (PV-14)</b>
<b>Fetal MRI and Other Pregnancy Imaging (PV-15)</b>
<b>Molar Pregnancy and Gestational Trophoblastic Neoplasia (GTN) (PV-16)</b>
<b>Impotence/Erectile Dysfunction (PV-17)</b>
<b>Penis–Soft Tissue Mass (PV-18)</b>
<b>Male Pelvic Disorders (PV-19)</b>
<b>Scrotal Pathology (PV-20)</b>
<b>Fistula in Ano and Perirectal Abscess (PV-21)</b>
<b>Urinary Incontinence/Pelvic Prolapse/Fecal Incontinence (PV-22)</b>
<b>Patent Urachus (PV-23)</b>
<b>Bladder Mass (PV-24)</b>
<b>Ureteral and/or Bladder Trauma or Injury (PV-25)</b>
<b>Gender Affirmation Surgery; Pelvic (PV-26)</b>

## Abbreviations for Pelvis Imaging Guidelines

<b>CA-125</b>	cancer antigen 125 test
<b>CT</b>	computed tomography
<b>FSH</b>	follicle-stimulating hormone
<b>GTN</b>	gestational trophoblastic neoplasia
<b>HCG</b>	human chorionic gonadotropin
<b>IC/BPS</b>	interstitial cystitis/bladder pain syndrome
<b>IUD</b>	intrauterine device
<b>KUB</b>	kidneys, ureters, bladder (frontal supine abdomen radiograph)
<b>LH</b>	luteinizing hormone
<b>MRA</b>	magnetic resonance angiography
<b>MRI</b>	magnetic resonance imaging
<b>MSv</b>	millisievert
<b>PA</b>	posteroanterior projection
<b>PID</b>	pelvic inflammatory disease
<b>TA</b>	transabdominal
<b>TSH</b>	thyroid-stimulating hormone
<b>TV</b>	transvaginal
<b>UCPPS</b>	Urologic Chronic Pelvic Pain Syndrome
<b>WBC</b>	white blood cell count

## General Guidelines (PV-1)

**General Guidelines (PV-1.0)**

**General Guidelines - Overview (PV-1.1)**



## **General Guidelines (PV-1.0)**

- A current clinical evaluation since the onset or change in symptoms is required before advanced imaging can be considered. The clinical evaluation should include a relevant history and physical examination including a gynecological and/or urological exam, appropriate laboratory studies, and non-advanced imaging modalities such as plain x-ray or Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or Transvaginal ultrasound (CPT® 76830) and/or Transperineal ultrasound (CPT® 76872).
  - ◆ Other meaningful contact (telehealth visit, telephone call, electronic mail or messaging) since the onset or change in symptoms for follow up visit by an established individual can substitute for a face-to-face clinical evaluation.
- The use of gynecology CPT codes for pregnant women is not supported. Therefore, transvaginal ultrasound (CPT® 76830) and pelvic ultrasound (CPT® 76856 or CPT® 76857) are not supported for those with a positive pregnancy test or known pregnancy. If a pregnancy test is positive, then obstetrical CPT codes are indicated.
- The uterus, tubes and ovaries arise out of the pelvis and are considered pelvic organs. If the uterus rises out of the pelvic cavity, the imaging field can be determined on scout films. Imaging of the abdomen is not routinely supported for problems suspected to arise from the pelvis unless specifically described in other areas of the guidelines.
- The scout images (CT) and localizer images (MRI) are used to define the imaging field that is relevant to anatomical structures of clinical interest. The imaging field is defined by this clinical question, not by the imaging procedure code. The imaging code indicates the general anatomical region but does not define the specific imaging protocol or sequences.

## **General Guidelines – Overview (PV-1.1)**

- When indicated, pregnant women should be evaluated with ultrasound or MRI without contrast to avoid radiation exposure. In carefully selected clinical circumstances, evaluation with CT may be considered with careful attention to technique and radiation protection as deemed clinically appropriate.

## **Ultrasound**

- Transvaginal ultrasound is the recommended modality for imaging; no alternative modality has demonstrated sufficient superiority to justify routine use, and Transvaginal (TV) ultrasound (CPT® 76830) is the optimal study to evaluate adult female pelvic pathology.
- Pelvic ultrasound (complete CPT® 76856, or limited CPT® 76857) can be performed if it is a complementary study to the TV ultrasound. It may substitute for TV in pediatric individuals or non-sexually active females.
- Transperineal ultrasound (CPT® 76872) can be performed for cases of suspected urethral abnormalities, urinary incontinence, pelvic prolapse, or vaginal cysts.

- CPT® 76942 is used to report ultrasound imaging guidance for needle placement during biopsy, aspiration, and other percutaneous procedures.

### **Soft Tissue Ultrasound**

- Pelvic wall, buttocks, and penis - CPT® 76857

### **Scrotal Ultrasound**

- See
  - ◆ **Impotence/Erectile Dysfunction (PV-17.1)**
  - ◆ **Penis-Soft Tissue Mass (PV-18.1)**
- Ultrasound scrotum and contents - CPT® 76870

### **3D Rendering with Ultrasound**

- 3D Rendering (CPT® 76376 or CPT® 76377)
  - ◆ CPT® 76377 (3D rendering requiring image post-processing on an independent work station) or CPT® 76376 (3D rendering not requiring image post-processing on an independent workstation) can be considered in the following clinical scenarios:
    - Uterine intra-cavitary lesion when initial ultrasound is equivocal (See Abnormal Uterine Bleeding (AUB) (PV-2.1) and **Leiomyoma/Uterine Fibroids (PV-12.1)**)
    - Hydrosalpinges or peritoneal cysts when initial ultrasound is equivocal (See **Complex Adnexal Masses (PV-5.3)**)
    - Lost IUD (inability to feel or see IUD string) with initial ultrasound (See **Intrauterine Device (PV-10.1)**)
    - Uterine anomaly is suspected on ultrasound (See **Uterine Anomalies (PV-14.1)**)
    - Infertility if ultrasound is indeterminate or there is clinical suspicion for intra-cavitary lesion (such as polyp or fibroid), hydrosalpinx, uterine synechia, adenomyosis or uterine anomalies (See **Initial Infertility Evaluation, Female (PV-9.1)**)
- There is currently insufficient data to generate appropriateness criteria for the use of 3D and 4D rendering in conjunction with Obstetrical ultrasound imaging. Per ACOG, proof of a clinical advantage of 3-dimensional ultrasonography in prenatal diagnosis, in general, is still lacking.

### **Other Ultrasound**

- CPT® 93975 Duplex scan (complete) of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; complete study.
- CPT® 93976 Duplex scan (limited) of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs; limited study.
- CPT® 93975 and CPT® 93976 should not be reported together during the same session.

## **CT**

- CT is not generally warranted for evaluating pelvic anatomy because it is limited due to soft tissue contrast resolution.

## **MRI**

- Can be used as a more targeted study or for individuals allergic to iodinated contrast.
  - ◆ MRI Pelvis without contrast (CPT® 72195)
  - ◆ MRI Pelvis without and with contrast (CPT® 72197)
  - ◆ MRI Pelvis with contrast only (CPT® 72196) is rarely performed

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## Abnormal Uterine Bleeding (PV-2)

Abnormal Uterine Bleeding (AUB) (PV-2.1)

Retained Products of Conception (PV-2.2)

### **Abnormal Uterine Bleeding (AUB) (PV-2.1)**

- Pregnancy test should be done initially if premenopausal.
- If pregnancy test is negative or post-menopausal initial evaluation includes ANY or ALL of the following:
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or Transvaginal ultrasound (CPT® 76830), D&C and/or endometrial biopsy
- Advanced imaging is not indicated for endometrial intraepithelial hyperplasia.
- If biopsy confirms a malignancy, then see the appropriate oncology guideline.
- If ultrasound is equivocal for intracavitary lesion:
  - ◆ Duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) as an add-on to TV ultrasound (CPT® 76830).
  - ◆ 3-D Rendering (CPT® 76377 or CPT® 76376) as an add-on.
- If ultrasound is equivocal for an intracavitary lesion, saline infusion sonohysterography (CPT® 76831) is indicated.
- CT is not generally warranted for evaluating AUB since uterine anatomy is limited due to soft tissue contrast resolution.
  - ◆ An abnormal endometrium found incidentally on CT should be referred for TV ultrasound for further evaluation.
- MRI is not indicated for evaluation of abnormal uterine bleeding, please see specific Pelvis Imaging sections for MRI indications for ultrasound findings such as adnexal mass or uterine fibroids. See **Adnexal Mass/Ovarian Cysts (PV-5)** and **Leiomyoma/Uterine Fibroids (PV-12.1)**.

### **Retained Products of Conception (PV-2.2)**

- For abnormal uterine bleeding and/or pelvic pain with concern for retained products of conception (RPOC):
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or Transvaginal ultrasound (CPT® 76830) can be done one time, repeat US is indicated for continued symptoms.
  - ◆ Color Doppler ultrasonography (CPT® 93975 or CPT® 93976) may be added to ultrasound to aid in diagnosis of RPOC.
  - ◆ CT Pelvis with and without contrast (CPT® 72194) OR MRI Pelvis with and without contrast (CPT® 72197) can be considered if US with Color Doppler is equivocal AND further imaging is needed for surgical planning.

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<b>Amenorrhea (PV-3)</b>
<b>Secondary Amenorrhea (PV-3.1)</b>
<b>Primary Amenorrhea (PV-3.2)</b>

## **Secondary Amenorrhea (PV-3.1)**

- Pregnancy test should be done initially.
- If a pregnancy test is positive:
  - ◆ Refer to the member's individual coverage policy regarding obstetrical imaging indications and appropriate obstetrical imaging procedural codes. Billing of gynecology codes during pregnancy is not supported.
- If a pregnancy test is negative, further evaluation includes any of the following:
  - ◆ FSH, TSH, estradiol, and/or prolactin levels are indicated depending on clinical suspicion.
  - ◆ Serum free and total testosterone and/or DHEAS levels are indicated if there is evidence of hyperandrogenism.
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) for suspected uterine or ovarian pathology.
- The results of test(s) above determine the next steps, which include:
  - ◆ For suspected adrenal tumor, See **Adrenal Cortical Lesions (AB-16)** in the Abdomen Imaging Guidelines.
  - ◆ For suspected pituitary tumor, See **Pituitary (HD-19)** in the Head Imaging Guidelines:
  - ◆ For suspected Asherman's Syndrome:
    - Hysterosalpingogram (CPT® 74740), sonohysterosalpingography (CPT® 76831), and/or hysteroscopy if ultrasound is indeterminate for Asherman's syndrome.
    - MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72197) if hysterosalpingogram (CPT® 74740), sonohysterosalpingography (CPT® 76831), or hysteroscopy is indeterminate for Asherman's Syndrome.

### ***Background and Supporting Information***

- Asherman's syndrome: an acquired condition which refers to having scar tissue in the uterus.

## **Primary Amenorrhea (PV-3.2)**

- Prior to imaging a history, physical examination and Tanner stage should be evaluated.
- Initial evaluation may include pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) if ANY of the following:
  - ◆ Normal pubertal development and negative pregnancy test
  - ◆ Pelvic exam is indeterminate or unable to be performed
  - ◆ Delayed puberty with follicle-stimulating hormone (FSH) or luteinizing hormone (LH) that is elevated for the individual's age and Tanner stage
- If ultrasound defines a uterine or vaginal anomaly see **Uterine Anomalies (PV-14.1)**.



- For suspected pituitary tumor, See **Pituitary (HD-19)** in the Head Imaging Guidelines.

### ***Background and Supporting Information***

- Evaluation of an individual without a uterus (determined by imaging or examination) may include karyotype and/or testosterone levels.
- TV ultrasound (CPT® 76830) is appropriate in pediatric individuals who are sexually active or use a tampon and consent to the study.

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## Adenomyosis (PV-4)

### Adenomyosis (PV-4.1)

- TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76856 or CPT® 76857) is the diagnostic procedure of choice for the initial evaluation of suspected adenomyosis. Duplex Doppler (CPT® 93975 or CPT® 93976) can be added if requested.
- MRI Pelvis without contrast (CPT® 72195) or MRI Pelvis without and with contrast (CPT® 72197) is considered a second-line imaging option after transvaginal ultrasound if:
  - ◆ Diagnosis is inconclusive for adenomyosis and the individual has failed a 3-month trial of medical treatment and further delineation would affect management.
  - ◆ MRI needed to guide the treatment of adenomyosis in an individual with an enlarged uterus, and coexisting leiomyoma/fibroid following indeterminate ultrasound.

### *Background and Supporting Information*

Adenomyosis is when endometrial tissue, which normally lines the uterus, moves into the outer muscular walls of the uterus. Adenomyosis is a histologic diagnosis and is suspected by history and physical examination. Ultrasound findings of adenomyosis include heterogeneous myometrium, myometrial cysts, asymmetric myometrial thickness, and subendometrial echogenic linear striations.

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<b>Adnexal Mass/Ovarian Cysts (PV-5)</b>
<b>Suspected Adnexal Mass – Initial Evaluation (PV-5.1)</b>
<b>Simple Cysts (PV-5.2)</b>
<b>Complex Adnexal Masses (PV-5.3)</b>
<b>Screening for Ovarian Cancer/Suspected Ovary Cancer (PV-5.4)</b>

## **Suspected Adnexal Mass – Initial Evaluation (PV-5.1)**

- A potential mass is found on exam and/or found incidentally on other imaging.
- Transvaginal (TV) ultrasound imaging (CPT® 76830) is the initial study of choice.
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) can be performed if requested as a complimentary study to the TV ultrasound.
  - ◆ Once confirmed, Color Doppler ultrasonography (CPT® 93975 or CPT® 93976) may be useful to evaluate the vascular characteristics of adnexal masses.
- MRI Pelvis without contrast (CPT® 72195), OR without and with contrast (CPT® 72197; CPT® 72195 if pregnant) if ultrasound does not identify the origin of the pelvic mass (adnexal, uterine, or other in etiology).
  - ◆ If the mass is unrelated to female pelvic anatomy, see **Abdominal Mass (AB-13)** in the Abdomen Imaging Guidelines.
  - ◆ The uterus, tubes, and ovaries arise out of the pelvis and are considered pelvic organs. If the uterus rises out of the pelvic cavity, the imaging field can be determined on scout films. Imaging of the abdomen is not supported for problems suspected to arise from the pelvis.

### ***Background and Supporting Information***

- Consultation with or referral to a gynecologic oncologist is recommended for women with an adnexal mass who meet one or more of the following criteria:<sup>7</sup>
  - ◆ Postmenopausal with elevated CA-125 level, ultrasound findings suggestive of malignancy, ascites, a nodular or fixed pelvic mass, or evidence of abdominal or distant metastasis.<sup>7</sup>
  - ◆ Premenopausal with very elevated CA-125 level, ultrasound findings suggestive of malignancy, ascites, a nodular or fixed pelvic mass, or evidence of abdominal or distant metastasis.<sup>7</sup>
  - ◆ Premenopausal or postmenopausal with an elevated score on a formal risk assessment test such as the multivariate index assay, risk of malignancy index, or the Risk of Ovarian Malignancy Algorithm or one of the ultrasound-based scoring systems from the International Ovarian Tumor Analysis group.<sup>7</sup>
- Simple and Complex Adnexal Cysts
  - ◆ Simple cysts are smooth walled and clear without debris.
  - ◆ Complex cysts can have solid areas or excrescences, and/or debris in them, greater than 3mm irregular septations, mural nodules with Doppler-detected blood flow, and/or free abdominal/pelvic fluid.

- Suspected Adnexal Mass – Tumor Markers
  - ◆ The adnexa include the ovaries, Fallopian tubes, and ligaments that hold the uterus in place.
  - ◆ CA-125 is a tumor marker that is useful for the evaluation of adnexal mass:
    - Elevation occurs with both malignant (epithelial cancer) and benign entities (leiomyoma, endometriosis, PID, inflammatory disease such as lupus, and inflammatory bowel disease).
    - Increase in the markers over time occurs with malignancy only
    - Consider tumor markers in individuals with an abnormal ultrasound that is not a simple cyst
  - ◆ Other markers include Beta hCG, LDH, and AFP (germ cell tumors) and Inhibin A and B (granulosa cell tumor).

### Simple Cysts (PV-5.2)

- Simple cysts are smooth, thin walled, anechoic and clear without debris. Simple cysts up to 10 cm in diameter as measured by ultrasound are almost universally benign.
  - ◆ Repeat TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856)
    - Follow up according to the below schedule if ≤10 cm
  - ◆ Cysts >10cm have not been studied and the current recommendation is to consider surgical intervention and/or MRI Pelvis without and with contrast (CPT® 72197).
  - ◆ Routine use of 3D rendering (CPT® 76376/CPT® 76377) for evaluation of simple ovarian cysts is not supported

Simple Cyst Follow-Up		
Size	Pre-Menopausal	Post-Menopausal
≤3 cm	➤ None	➤ None
>3 cm to 5 cm	➤ None	<ul style="list-style-type: none"> <li>➤ Follow-up in 3-6 months with TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856); further follow-up intervals may be adjusted on basis of degree of cyst change.</li> <li>➤ TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856) can be considered annually and if stable for 2 years or decreasing in size, no further imaging follow-up is needed.</li> </ul>

Simple Cyst Follow-Up		
Size	Pre-Menopausal	Post-Menopausal
>5 cm to ≤10 cm	<ul style="list-style-type: none"> <li>Follow up in 8-12 weeks (proliferative phase if possible) TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856); further follow-up intervals may be adjusted on basis of degree of cyst change</li> </ul>	<ul style="list-style-type: none"> <li>Follow-up in 3-6 months with TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856); further follow-up intervals may be adjusted on basis of degree of cyst change</li> <li>Subsequent follow up with TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856), annually and if stable for 2 years or decreasing in size, no further imaging follow-up is needed.</li> </ul>

**Complex Adnexal Masses (PV-5.3)**

- Ultrasound imaging should provide characteristics of the cyst/mass prior to consideration of advanced imaging.
- Complex cysts found on ultrasound, have characteristics that include: solid areas or excrescences, and/or debris, may have greater than 3mm irregular septations, and/or mural nodules with Doppler-detected blood flow, and/or free abdominal/pelvic fluid. Complex cysts have an ORADS score of 2 or higher.
- Routine use of 3D rendering (CPT® 76376/CPT® 76377) for evaluation of complex ovarian cysts is not supported unless otherwise mentioned in the table below

Follow up Complex Adenxal Masses		
Condition	Pre-Menopausal	Post-Menopausal
Hemorrhagic cyst (ORADS 2)	<ul style="list-style-type: none"> <li>➤ If initial ultrasound imaging confirms hemorrhagic cyst ≤5 cm no further imaging is necessary</li> <li>➤ If initial ultrasound imaging confirms hemorrhagic cyst &gt;5 cm but &lt;10 cm, follow up with Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) in 8 to 12 weeks is indicated. Duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on to TV ultrasound (CPT® 76830).                             <ul style="list-style-type: none"> <li>◆ If follow-up imaging confirms a hemorrhagic cyst that has not completely resolved, or has enlarged, an MRI Pelvis without and with contrast (CPT® 72197) can be considered.</li> </ul> </li> <li>➤ MRI Pelvis without and with contrast (CPT® 72197) maybe approved for Hemorrhagic cyst ≥10cm</li> </ul>	<ul style="list-style-type: none"> <li>➤ Hemorrhagic cyst should not occur in post- menopausal individual. However, if an ultrasound shows a hemorrhagic cyst in this population, MRI Pelvis without and with contrast (CPT® 72197) can be considered</li> </ul>
Endometriomas (ORADS 2)	<ul style="list-style-type: none"> <li>➤ If initial imaging confirms an Endometrioma, follow-up Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) can be performed at 8 to 12 weeks in the proliferative phase, if possible; duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on to TV ultrasound (CPT® 76830).                             <ul style="list-style-type: none"> <li>◆ If ultrasound equivocal for Endometriomas, MRI Pelvis without and with contrast (CPT® 72197)</li> <li>◆ If follow up ultrasound imaging shows changing morphology and/or a vascular component then consider MRI Pelvis without and with contrast (CPT® 72197)</li> </ul> </li> <li>➤ MRI Pelvis without and with contrast (CPT® 72197) maybe approved for Endometriomas ≥10cm</li> </ul>	<ul style="list-style-type: none"> <li>➤ If initial ultrasound imaging confirms an endometrioma, then MRI Pelvis without and with contrast (CPT® 72197) can be considered</li> </ul>

Follow up Complex Adenxal Masses		
Condition	Pre-Menopausal	Post-Menopausal
Dermoids (ORADS 2)	<ul style="list-style-type: none"> <li>➤ If initial ultrasound imaging confirms a Dermoid, follow-up Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) can be performed at 8 to 12 weeks in the proliferative phase, if possible; duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on to TV ultrasound (CPT® 76830).                             <ul style="list-style-type: none"> <li>◆ If ultrasound equivocal for Dermoid, MRI Pelvis without and with contrast (CPT® 72197)</li> <li>◆ If follow up ultrasound imaging shows changing morphology and/or a vascular component then consider MRI Pelvis without and with contrast (CPT® 72197).</li> </ul> </li> <li>➤ If surgical resection of a definitive Dermoid is not performed, then follow-up Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) can be obtained every 6 to 12 months.</li> <li>➤ MRI Pelvis without and with contrast (CPT® 72197) maybe approved for Dermoids ≥10cm</li> </ul>	<ul style="list-style-type: none"> <li>➤ If initial imaging ultrasound confirms a Dermoid, then MRI Pelvis without and with contrast (CPT® 72197) can be considered.</li> <li>➤ If surgical resection of a definitive Dermoid is not performed, then follow-up Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) can be obtained every 6 to 12 months.</li> <li>➤ If follow-up ultrasound imaging shows changing morphology and/or a vascular component, then consider MRI Pelvis without and with contrast (CPT® 72197).</li> <li>➤ MRI Pelvis without and with contrast (CPT® 72197) for Dermoids ≥10cm</li> </ul>



Follow up Complex Adenxal Masses		
Condition	Pre-Menopausal	Post-Menopausal
Hydrosalpinges (Hydrosalpinx) or Peritoneal cysts (ORADS 2)	<ul style="list-style-type: none"> <li>➤ If initial imaging confirms hydrosalpinx or peritoneal cysts, advanced imaging is rarely indicated in these clinical scenarios.</li> <li>➤ If initial ultrasound imaging (CPT® 76857 or CPT® 76856) and/or TV ultrasound (CPT® 76830) is equivocal for Hydrosalpinges or Peritoneal cyst(s), one repeat ultrasound is indicated in 8 to 12 weeks or following a menstrual cycle to evaluate for resolution. Duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on to TV ultrasound (CPT® 76830). 3-D Rendering (CPT® 76377 or CPT® 76376) may be approved as an add-on.</li> </ul>	<ul style="list-style-type: none"> <li>➤ If initial imaging confirms hydrosalpinx or peritoneal cysts, advanced imaging is rarely indicated in these clinical scenarios.</li> <li>➤ If initial ultrasound imaging (CPT® 76857 or CPT® 76856) and/or TV ultrasound (CPT® 76830) is equivocal for Hydrosalpinges or Peritoneal cyst(s), one repeat ultrasound is indicated in 8-12 weeks to evaluate for resolution. Duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on to TV ultrasound (CPT® 76830). 3-D Rendering (CPT® 76377 or CPT® 76376) may be approved as an add-on.</li> </ul>

**Complex and/or solid adnexal mass incompletely evaluated by ultrasound**

- Generally a repeat ultrasound is recommended (see table above for appropriate time intervals): TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76857 or CPT® 76856)
- MRI Pelvis without and with contrast (CPT® 72197, CPT® 72195 if pregnant) one time for any of the following:
  - ◆ To follow masses when they cannot be optimally visualized by ultrasound (e.g. suboptimal sonography due to large mass or obese individual)
  - ◆ Unexplained change of appearance during ultrasound follow-up
  - ◆ Other Individual-driven indications (e.g. the application of established risk prediction models (e.g., family history of ovarian cancer), correlation with abnormal serum biomarkers, and/or pelvic symptoms)
  - ◆ Differentiate the origin of pelvic masses that are not clearly of ovarian origin
  - ◆ ORADS score of 3 or 4
- Concern for metastatic ovarian malignancy, see **Ovarian Cancer (ONC-21)** in the Oncology Imaging Guidelines

## **Background and Supporting Information**

### **Pre-Menopausal – see table above**

- For women of reproductive age (Pre-Menopausal), evaluation may include a pregnancy test (a quantitative hCG may be necessary if an ectopic pregnancy is suspected), CBC, serial hematocrit measurements, and appropriate cultures.
- Symptomatic individuals often require immediate interventions (antibiotics, surgery, and/or expectant management).
- Ultrasound characteristics usually suggest the diagnosis (ectopic pregnancy, functional cysts, tubo-ovarian abscess (See **Pelvic Inflammatory Disease (PID) (PV-7.1)**), hydrosalpinx, dermoid, endometrioma, hemorrhagic cyst and pedunculated fibroids (See **Leiomyoma/Uterine Fibroids (PV-12.1)**) and direct the treatment.
- An ovarian mass suspicious for metastatic disease (e.g. from breast, uterine, colorectal or gastric cancer) should be evaluated based on the appropriate Oncology Imaging Guidelines.

### **Post-Menopausal – see table above**

- For post-menopausal women, most pelvic complex cysts or solid masses should be evaluated for surgical intervention and have tumor markers (i.e. CA-125) measured.
- Some women for whom the usual management of a pelvic mass would include surgery may be at increased risk for perioperative morbidity and mortality. In such cases, repeat imaging may be a safer alternative than immediate surgery, although the frequency of follow-up imaging has not been determined.
- An ovarian mass suspicious for metastatic disease (e.g. from breast, uterine, colorectal or gastric cancer) should be evaluated based on the appropriate Oncology Imaging Guidelines.

### **Screening for Ovarian Cancer/Suspected Ovary Cancer (PV-5.4)**

- See **Ovarian Cancer (ONC-21)** in the Oncology Imaging Guidelines

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## Endometriosis (PV-6)

### Endometriosis (PV-6.1)

- TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76856 or CPT® 76857) is the first line diagnostic exam for suspected endometriosis.
- MRI Pelvis without contrast (CPT® 72195) or without and with contrast (CPT® 72197):
  - ◆ Prior to planned surgery for suspected deep pelvic endometriosis such as rectovaginal endometriosis, deeply infiltrative bladder endometriosis, and cul-de-sac obliteration
  - ◆ To characterize complex adnexal masses as endometrioma if ultrasound equivocal see **Complex Adnexal Masses (PV-5.3)**

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## Pelvic Inflammatory Disease (PID) (PV-7)

### Pelvic Inflammatory Disease (PV-7.1)

- Clinical examination alone is usually sufficient for confirming the diagnosis of pelvic inflammatory disease. See **Pelvic Pain/Dyspareunia, Female (PV-11.1)** if other causes of pelvic pain are suspected.
- Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) is the initial study for imaging of suspected pelvic inflammatory disease (PID) if diagnosis is uncertain following bimanual pelvic examination and laboratory testing (such as WBC, CRP and ESR, microscopy of the vaginal secretions, and testing for Neisseria gonorrhoeae and Chlamydia trachomatis) OR for suspected Tubo-Ovarian Abscess (TOA).
- CT Pelvis with contrast (CPT® 72193) or MRI Pelvis with and without contrast (CPT® 72197):
  - ◆ If diagnosis is uncertain following examination, laboratory testing and ultrasound
  - ◆ Ultrasound shows extensive abscess formation and further imaging is needed for treatment planning
  - ◆ Suspected TOA with inconclusive ultrasound
- If suspected abdominal abscess see **Abdominal Sepsis (Suspected Abdominal Abscess) (AB-3.1)**

#### ***Background and Supporting Information***

PID may be clinically suspected based on findings of abdominal and/or pelvic pain, cervical or vaginal mucopurulent discharge, dyspareunia, inter-menstrual and/or post coital bleeding, fever, low back pain, nausea/vomiting, urinary frequency, cervical motion tenderness, uterine and/or adnexal tenderness on exam.

Laboratory findings may include elevated erythrocyte sedimentation rate, elevated C-reactive protein, lab documentation of cervical infection with N. gonorrhoeae or C. trachomatis, WBC on saline microscopy of vaginal fluid, and/or endometrial biopsy with endometritis.

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## Polycystic Ovary Syndrome (PV-8)

### Polycystic Ovary Syndrome (PCOS) (PV-8.1)

- Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) is indicated when history, exam, and/or laboratory findings are suspicious for PCOS
- Laboratory testing to be done prior to advanced imaging: Virilizing hormone levels (Testosterone and DHEAS). Disorders that mimic the clinical features of Polycystic ovary syndrome (PCOS) should be excluded by measuring: TSH, Prolactin, and 17-OHP (hydroxyprogesterone) levels. Others to consider based on the clinical presentation: Cortisol levels, ACTH, dexamethasone suppression testing, IGF-1, FSH, LH, estradiol.
- If elevated serum levels of androgens are found and an adrenal etiology is suspected see **Adrenal Cortical Lesions (AB-16.1)** in the Abdominal Imaging Guidelines

### *Background and Supporting Information*

- Polycystic ovary syndrome is the most common hormonal disorder among women of reproductive age and is one of the leading causes of infertility.
- Diagnostic criteria of polycystic ovary syndrome (Two of the following three criteria are required):
  - ◆ Oligo/anovulation
  - ◆ Hyperandrogenism
    - Clinical (hirsutism or less commonly male pattern alopecia) or
    - Biochemical (raised FAI (free androgen index) or free testosterone)
  - ◆ Polycystic ovaries on ultrasound
    - Defined as an ovary containing 12 or more follicles (or 25 or more follicles using new ultrasound technology) measuring 2 to 9 mm in diameter or an ovary that has a volume of greater than 10 mL on ultrasonography. A single ovary meeting either or both of these definitions is sufficient for diagnosis of polycystic ovaries.
- Clinical Features of PCOS
  - ◆ Hirsutism and male pattern balding consistent with hyperandrogenism
  - ◆ Irregular or absent menstrual cycles
  - ◆ Subfertility or infertility
  - ◆ Psychological symptoms – anxiety, depression, psychosexual dysfunction, eating disorders
  - ◆ Metabolic features – obesity, dyslipidaemia, diabetes

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## Initial Infertility Evaluation, Female (PV-9)

### Initial Infertility Evaluation, Female (PV-9.1)

This guideline is not intended for fertility treatment follow-up and management. See individual fertility coverage policy for imaging during active fertility treatment.

- A one-time Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) for initial infertility workup.<sup>1</sup>
  - ◆ Repeat ultrasounds or serial ultrasounds are not indicated for initial infertility workup
- To evaluate for tubal patency:
  - ◆ Hysterosalpingography (HSG) (CPT® 74740) **or** Sonohysterosalpingography (CPT® 76831)
- If ultrasound is indeterminate or there is clinical suspicion for intra-cavitary lesion (such as polyp or fibroid), hydrosalpinx, uterine synechia, adenomyosis or uterine anomalies:
  - ◆ 3D US imaging (add-on CPT® 76376 or CPT® 76377)
  - ◆ US Color Doppler (CPT® 93975 or CPT® 93976)

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**Intrauterine Device (IUD) and Tubal Occlusion (PV-10)**

**Intrauterine Device (PV-10.1)**

**Hysteroscopically Placed Tubal Occlusion Device (PV-10.2)**

## Intrauterine Device (PV-10.1)

- Imaging to evaluate position prior to, immediately after and, for example, 6 weeks after IUD insertion is not indicated.
- Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) if:
  - ◆ Abnormal pelvic exam prior to IUD insertion, such as pelvic mass, irregularly shaped uterus, or enlarged uterus.
  - ◆ Suspected IUD complication:
    - Abnormal IUD position
    - Uterine perforation
    - Severe pain
    - Excessive bleeding
    - Suspected infection
- “Lost” IUD inability to palpate IUD string on pelvic exam, and/or see IUD on speculum exam:
  - ◆ TV ultrasound (CPT® 76830) with or without 3-D Rendering (CPT® 76377 or CPT® 76376)
    - If TV ultrasound is negative or non-diagnostic, Pelvic ultrasound (CPT® 76856 or CPT® 76857):
      - If Pelvic ultrasound is negative or non-diagnostic, plain x-ray should be performed if pregnancy test is negative.
      - CT Pelvis without contrast (CPT® 72192) or CT Abdomen and Pelvis without contrast (CPT® 74176) or MRI Pelvis without contrast (CPT® 72195) can be considered when both ultrasound and plain x-ray are negative or non-diagnostic.
- Removal of IUD
  - ◆ If unable to palpate, see, or retrieve IUD string on pelvic exam and/or speculum exam:
    - TV ultrasound (CPT® 76830); 3-D Rendering (CPT® 76377 or CPT® 76376) may be an add-on:
      - If Pelvic ultrasound is negative or non-diagnostic, plain x-ray should be performed if pregnancy test is negative
      - CT Pelvis without contrast (CPT® 72192) or CT Abdomen and Pelvis without contrast (CPT® 74176) or MRI Pelvis without contrast (CPT® 72195) can be considered when both ultrasound and plain x-ray are equivocal or non-diagnostic
- If pregnancy test is positive:
  - ◆ The use of gynecology CPT codes for pregnant women is not supported. Therefore, transvaginal ultrasound (CPT® 76830) and pelvic ultrasound (CPT® 76856 and CPT® 76857) are not supported for those with a positive pregnancy test or known pregnancy. If a pregnancy test is positive, then obstetrical CPT codes are indicated (**General Guidelines (PV-1.0)**).

## **Hysteroscopically Placed Tubal Occlusion Device (PV-10.2)**

- TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76856 or CPT® 76857) if:
  - ◆ Suspected complication of hysteroscopically placed tubal occlusion device:
    - Abnormal tubal occlusion device position
    - Uterine perforation
    - Severe pain
    - Excessive bleeding

### ***Background and Supporting Information***

- As of 2019, neither the Essure nor the Adiana tubal occlusion device is in production.

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## Pelvic Pain/Dyspareunia, Female (PV-11)

### Pelvic Pain/Dyspareunia, Female (PV-11.1)

- Often, the history, physical examination, and laboratory data can guide subsequent workup in individuals presenting with pelvic pain. When possible, use the more specific guideline, depending on clinical presentation and the differential diagnosis. (i.e. endometriosis **Endometriosis (PV-6.1)**, adnexal mass **Adnexal Mass/Ovarian Cysts (PV-5)**, etc.).
- If there is clinical concern that a non-gynecological condition is the cause of pelvic pain, such as a vascular, urological or gastrointestinal etiology, see the applicable guideline section(s).
- Premenopausal pelvic pain - Pregnancy test should be done prior to imaging.
  - ◆ If pregnancy test is positive, see the applicable obstetrical imaging policy.
- If pregnancy test is negative or postmenopausal:
  - ◆ Ultrasound – transvaginal (CPT® 76830) and/or pelvic (CPT® 76856 or CPT® 76857)
  - ◆ Duplex Doppler (CPT® 93975 or CPT® 93976) can be added if there is an ovarian mass and/or suspicion of ovarian torsion on the initial ultrasound
  - ◆ Duplex Doppler (CPT® 93975 or CPT® 93976) for chronic pelvic pain (pelvic pain for 6 months or greater)
- Further imaging as per appropriate section of guidelines (i.e. ovarian mass/torsion **Adnexal Mass/Ovarian Cysts (PV-5)**, PID **Pelvic Inflammatory Disease (PV-7.1)**, etc.).
- If initial ultrasound is normal, further evaluation depending on the clinical suspicion may include urological work-up, gastroenterology work-up, laparoscopic evaluation(s) and/or screening for psychosocial factors (such as depression, anxiety). For pelvic pain with dyspareunia, referral for pelvic floor PT, sex therapy or cognitive behavioral therapy can be considered.
- If the initial ultrasound is equivocal for unexplained chronic pelvic pain (pelvic pain for 6 months or greater) and/or above evaluations are non-diagnostic then the following can be considered:
  - ◆ CT Pelvis with contrast (CPT® 72193) OR
  - ◆ MRI Pelvis without contrast or with and without contrast (CPT® 72195 or CPT® 72197)
- Pelvic Pain/Hip Pain - Rule Out Piriformis Syndrome
  - ◆ See **Focal Neuropathy (PN-2.1)** in the Peripheral Nerve Disorders Imaging Guidelines
  - ◆ See **Hip (MS-24)** in the Musculoskeletal Imaging Guidelines

- Work-up of interstitial cystitis/bladder pain syndrome (IC/BPS) should include history, physical exam, laboratory exam (urinalysis and urine culture), cystoscopy, and measurement of post void residual urine by bladder catheterization.
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830)
    - CT Pelvis with contrast (CPT® 72193) if ultrasound is equivocal for complicated interstitial cystitis/bladder pain syndrome (when ordered by specialist or any provider in consultation with a specialist).
- Proctalgia Syndromes
  - ◆ Prior to advanced imaging, the evaluation of rectal/perineal pain should include:
    - Digital rectal examination (assess for mass, fissures, hemorrhoids, etc.)
    - Pelvic examination in females to exclude PID
    - Recent flexible sigmoidoscopy or colonoscopy subsequent to the start of reported symptoms to exclude inflammatory conditions or malignancy
    - Endoanal ultrasound (CPT® 76872), MRI Pelvis with and without contrast (CPT® 72197), or CT Pelvis with contrast (CPT® 72193) are appropriate after the above studies have been performed or if laboratory or clinical information suggest infection, abscess, or inflammation.

### ***Background and Supporting Information***

- Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS) has an unpleasant sensation (pain, pressure, discomfort), perceived to be related to the urinary bladder. It is associated with lower urinary tract symptoms of more than six weeks duration, in the absence of infection or other identifiable causes.
- Proctalgia syndromes are characterized by recurrent episodes of rectal/perineal pain, and may be due to sustained contractions of the pelvic floor musculature.

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## Leiomyoma/Uterine Fibroids (PV-12)

### Leiomyoma/Uterine Fibroids (PV-12.1)

Leiomyoma are also known as “fibroids.”

The uterus, tubes and ovaries arise out of the pelvis and are considered pelvic organs. If the uterus rises out of the pelvic cavity, the imaging field can be determined on scout films. Imaging of the abdomen is not supported for problems suspected to arise from the pelvis.

- Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) can be performed for the following:
  - ◆ Suspected leiomyoma with symptoms of pelvic pain, suspected ureteral obstruction secondary to inability to void urine, pelvic pressure and/or abnormal uterine bleeding and/or an enlarged uterus found on physical exam with a negative pregnancy test (if pre-menopausal).
  - ◆ Pre-operative prior to myomectomy
  - ◆ Recurrent symptoms such as abnormal bleeding, pain, or pelvic pressure
  - ◆ 3-D Rendering (CPT® 76377 or CPT® 76376) and/or Duplex (Doppler) scan (CPT® 93975 complete; CPT® 93976 limited) if ultrasound is equivocal and intracavitary lesion is suspected, or for surgical planning for myomectomy
  - ◆ There is no current evidence to support 3-D Rendering (CPT® 76377 or CPT® 76376) for planning for uterine artery embolization.
- MRI Pelvis and/or Abdomen to determine surgical approach for hysterectomy is not supported.
- MRI Pelvis without and with contrast (CPT® 72197), or without contrast (CPT® 72195) can be used in the evaluation of leiomyomas for the following:
  - ◆ Guide the treatment of leiomyoma/fibroid in an enlarged uterus with multiple leiomyoma/fibroid following indeterminate ultrasound when myomectomy is planned.
  - ◆ Equivocal sonohysterography or panoramic hysteroscopy with suspected submucous leiomyoma and imaging is needed to plan for myomectomy.
  - ◆ Leiomyoma necrosis is suspected
  - ◆ Uterine artery embolization is being considered:
    - If MRI is equivocal, MRA Pelvis (CPT® 72198) or CTA Pelvis (CPT® 72191) can be considered if requested by or in consultation with the interventional radiologist planning the uterine artery embolization
    - There is no evidence to support interval MRI after embolization unless persistent or recurrent symptoms
- If malignancy is suspected, See Oncology Imaging Guidelines.
- CT is generally not warranted for evaluating pelvic anatomy because it is limited due to soft tissue contrast resolution.



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## **Periurethral Cysts and Urethral Diverticula (PV-13)**

**Periurethral cysts, Skene duct cyst and Gartner's duct cyst (PV-13.1)**

**Urethral Diverticula (PV-13.2)**

## **Periurethral cysts, Skene duct cyst and Gartner's duct cyst (PV-13.1)**

- Initial evaluation includes any of the following:
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or Transvaginal ultrasound (CPT® 76830) and/or Transperineal ultrasound (CPT® 76872)
    - MRI Pelvis without and with contrast (CPT® 72197) can be performed for surgical planning when ultrasound equivocal.

## **Urethral Diverticula (PV-13.2)**

- Initial evaluation includes Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or Transvaginal ultrasound (CPT® 76830) and/or Transperineal ultrasound (CPT® 76872).
- Urethrography, or CT Urethrography (CT Pelvis without and with contrast CPT® 72194 or CT Pelvis with contrast CPT® 72193) can be performed to evaluate any urethral abnormalities.
- MRI Pelvis without and with contrast (CPT® 72197) can be performed for surgical planning when ultrasound equivocal for urethral abnormalities.

### ***Background and Supporting Information***

Symptomatic infection of congenital periurethral glands can result in urethral diverticula. Symptoms include pain, urinary urgency, frequency of urination, recurrent urinary tract infection, dribbling after urination, or incontinence.

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## Uterine Anomalies (PV-14)

### Uterine Anomalies (PV-14.1)

- Pelvic ultrasound (CPT® 76856 or CPT® 76857) and/or TV ultrasound (CPT® 76830) indicated for initial evaluation. 3-D Rendering (CPT® 76377 or CPT® 76376) may be an add-on if uterine anomaly is suspected on ultrasound.
- If ultrasound is indeterminate:
  - ◆ Sonohysterosalpingography (CPT® 76831)
- Retroperitoneal ultrasound (CPT® 76770 or CPT® 76775) is indicated to evaluate for possible coexisting renal anomalies.
  - ◆ MRI Abdomen without contrast or without and with contrast (CPT® 74181 or CPT® 74183) or CT urography (CT Abdomen and Pelvis without and with contrast CPT® 74178) for indeterminate renal anomaly<sup>8</sup> on ultrasound.
- An arcuate uterus is considered a normal variant. Therefore, advanced imaging of a known arcuate uterus is not supported.
- MRI Pelvis without and with contrast (CPT® 72197):
  - ◆ Ultrasound is indeterminate for a complex uterine anomaly, or
  - ◆ Requested for surgical planning

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<b>Fetal MRI and Other Pregnancy Imaging (PV-15)</b>
<b>Fetal MRI (PV-15.1)</b>
<b>Placenta Accreta/Placenta Accreta Spectrum/ Placenta Percreta (PV-15.2)</b>
<b>C-section or Cornual (interstitial) Ectopic Pregnancy (PV-15.3)</b>
<b>Pelvimetry (PV-15.4)</b>

## **Fetal MRI (PV-15.1)**

<b>CPT® Code Guidance</b>
➤ Fetal MRI (CPT® 74712) [plus CPT® 74713 for each additional fetus]
➤ Do not report CPT® 74712 and CPT® 74713 in conjunction with CPT® 72195, CPT® 72196, CPT® 72197
➤ If only placenta or maternal pelvis is imaged without fetal imaging, use MRI Pelvis (CPT® 72195)

### **Indications for Fetal MRI**

- Fetal MRI (CPT® 74712) [plus CPT® 74713 for each additional fetus] after 18 to 22 weeks gestation, for assessment of known or suspected fetal abnormalities for counseling, surgical, or delivery planning.
- 3D-4D (CPT® 76376 or CPT® 76377) rendering can be added for surgical planning with diagnosis of complex CHD in the fetus or for surgical planning of other complex fetal malformations.
- Repeat fetal MRI (CPT® 74712) [plus CPT® 74713 for each additional fetus] later in pregnancy for:
  - ◆ Delivery or perinatal surgical planning
- Fetal MRI include but not be limited to the following:
  - ◆ Brain
    - Congenital anomalies
      - Ventriculomegaly
      - Agenesis of the corpus callosum
      - Abnormalities of the cavum septum pellucidum
      - Holoprosencephaly
      - Posterior fossa anomalies
      - Malformations of cerebral cortical development
      - Microcephaly
      - Solid or cystic masses
      - Cephalocele
    - Screening fetuses with a family risk for brain anomalies
      - Tuberous sclerosis
      - Corpus callosal dysgenesis
      - Malformations of cerebral cortical development
    - Vascular abnormalities
      - Vascular malformations
      - Hydranencephaly
      - Intra-uterine cerebrovascular accident (CVA)
  - ◆ Spine
    - Congenital anomalies
      - Neural tube defects
      - Sacrococcygeal teratomas
      - Caudal regression/sacral agenesis
      - Syringomyelia
      - Vertebral anomalies

- ◆ Skull, face, and neck
  - Masses of the face and neck
    - Vascular or lymphatic malformations
    - Hemangiomas
    - Goiter
    - Teratomas
    - Facial clefts
  - Airway obstruction
    - Conditions that may impact parental counseling, prenatal management, delivery planning, and postnatal therapy
- ◆ Thorax
  - Masses
    - Congenital pulmonary airway malformations (congenital cystic adenomatoid malformation; sequestration, and congenital lobar emphysema);
    - Congenital diaphragmatic hernia
    - Effusion
    - Mediastinal masses
    - Assessment for esophageal atresia
  - Volumetric assessment of lung
    - Cases at risk for pulmonary hypoplasia secondary to oligohydramnios, chest mass, or skeletal dysplasias
- ◆ Abdomen, retroperitoneal and pelvis
  - Bowel anomalies such as anorectal malformations, or complex bowel obstructions such as with megacystis microcolon hypoperistalsis syndrome
  - Abdominal wall defect
  - Mass
    - Abdominal–pelvic cyst
    - Tumors (e.g. hemangiomas, neuroblastomas, sacrococcygeal teratomas, and suprarenal or renal masses)
  - Complex genitourinary anomalies (e.g. cloaca, prune belly syndrome)
- ◆ Congenital Heart Disease (CHD)
- ◆ Skeletal dysplasia
- ◆ Multiple malformations
- ◆ Complications of monozygotic twins/TTTS (e.g. Laser treatment of twins, demise of one twin, conjoined twins)
- ◆ Any suspected fetal anomaly associated with severe oligohydramnios or anhydramnios

## **Placenta Accreta/Placenta Accreta Spectrum/ Placenta Percreta (PV-15.2)**

- Obstetrical Ultrasound is the initial imaging modality, Color Doppler CPT® 93975 Duplex scan (complete) or CPT® 93976 Duplex scan (limited) may be added to evaluate vascularity for suspected or confirmed placenta accreta spectrum.
- MRI Pelvis without contrast (CPT® 72195) if the ultrasound is indeterminate or advanced imaging is needed for surgical planning.
- MRI Pelvis without contrast (CPT® 72195) is the appropriate code if only placenta or maternal pelvis is imaged without fetal imaging.
  - ◆ Abdominal imaging is not indicated to evaluate a pelvic organ such as uterus, tubes, or ovaries.

## **C-section or Cornual (interstitial) Ectopic Pregnancy (PV-15.3)**

- If a cornual (interstitial) ectopic or C-section scar ectopic pregnancy is suspected on ultrasound:<sup>9,10</sup>
  - ◆ 3D rendering (CPT® 76376 or CPT® 76377), and/or Color Doppler (CPT® 93976) can be performed with ultrasound
  - ◆ MRI Pelvis without contrast (CPT® 72195) if ultrasound is inconclusive.

## **Pelvimetry (PV-15.4)**

- Pelvimetry (CT or MRI Pelvimetry) lacks sufficient evidence to be clinically useful. Current recommendations are that further randomized control studies be performed before it is adapted into routine clinical practice.<sup>11,12</sup>



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## Molar Pregnancy and Gestational Trophoblastic Neoplasia (GTN) (PV-16)

### Molar Pregnancy and GTN (PV-16.1)

- Molar pregnancy – once diagnosed on an Obstetrical Ultrasound individuals should undergo chest x-ray pre- and post-evacuation.
- Individuals with a molar pregnancy and rising hCG levels post evacuation and/or Gestational trophoblastic neoplasia should undergo the following for metastatic work-up.
  - ◆ CT Chest (CPT® 71260) and CT Abdomen and Pelvis (CPT® 74177) with contrast
  - ◆ MRI Brain without and with contrast (CPT® 70553) if pulmonary metastasis

### *Background and Supporting Information*

Gestational trophoblastic neoplasia (GTN) cells are malignant and can metastasize to other organs such as lungs, brain, bone, and vagina. Treatment is usually methotrexate with or without hysterectomy. Weekly hCG tests are performed until they fall to zero.

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## Impotence/Erectile Dysfunction (PV-17)

### Impotence/Erectile Dysfunction (PV-17.1)

- Imaging depends on the suspected disease:
  - ◆ Penile Doppler ultrasound (CPT® 93980) if erectile dysfunction suspected.<sup>2</sup>
  - ◆ CTA Pelvis with contrast (CPT® 72191) if large vessel vascular insufficiency is suspected following ultrasound.
  - ◆ Duplex ultrasound (CPT® 93980) to assess penile vasculature in Peyronie disease.<sup>1</sup>
  - ◆ If male hypogonadism is suspected, See **Pituitary (HD-19)** in the Head Imaging Guidelines.
- Functional MRI or PET studies are considered investigational for this indication.

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## Penis–Soft Tissue Mass (PV-18)

### Penis-Soft Tissue Mass (PV-18.1)

- Penile ultrasound (CPT® 76857) for initial evaluation soft-tissue lesions of the penis, Duplex (Doppler) scan CPT® 93975 complete; CPT® 93976 limited) may be approved as an add-on.
- If primary penile cancer is suspected, biopsy is indicated
  - ◆ For further workup of biopsy confirmed penile cancer see **Cancers of External Genitalia – Initial Work-up/Staging (ONC-24.6)** in the Oncology Imaging Guidelines.
- Peyronie Disease
  - ◆ Ultrasound (CPT® 76857) recommended
  - ◆ MRI Pelvis without and with contrast (CPT® 72197) if ultrasound is equivocal and surgery or injection therapy is being contemplated

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## Male Pelvic Disorders (PV-19)

### Male Pelvic Disorders (PV-19.1)

- Prostate
  - ◆ Prostate Disorders
    - Suspected Benign Prostatic Hypertrophy with obstructive voiding symptoms can undergo:
      - Transrectal ultrasound (CPT® 76872) or Pelvis transabdominal ultrasound (bladder and prostate [CPT® 76856 or CPT® 76857]).
    - Prostatitis with urinary retention or suspected abscess can undergo any of the following imaging studies:
      - Transrectal ultrasound (CPT® 76872) or Pelvis transabdominal ultrasound (bladder and prostate [CPT® 76856 or CPT® 76857]).
      - CT Pelvis with contrast (CPT® 72193) or MRI Pelvis without contrast (CPT® 72195) or with and without contrast (CPT® 72197) if ultrasound is equivocal for abscess or mass.
  - ◆ Prostate Artery Embolization (PAE)
    - Pre-procedure imaging for prostate artery embolization is not supported, because PAE for the treatment of (Lower Urinary Tract Symptoms) LUTS secondary to BPH is not supported by current data and trial designs, and benefit over risk remains unclear. Therefore, PAE is not recommended outside the context of clinical trials.
- Testicular
  - ◆ Hematospermia, transrectal ultrasound (TRUS) (CPT® 76872) can be the initial imaging study in all cases.
    - MRI Pelvis without contrast (CPT® 72195) can be considered to evaluate:
      - Suspected hemorrhage within the seminal vesicles
      - Radiation injury, neoplasia
      - Failure of conservative treatment for 2 weeks
      - Abnormal findings on Transrectal ultrasound.
- Rectal
  - ◆ Proctalgia Syndromes
    - Prior to advanced imaging, the evaluation of rectal/perineal pain should include:
      - Digital rectal examination (assess for mass, prostate, fissures, hemorrhoids, etc.)
      - Recent flexible sigmoidoscopy or colonoscopy subsequent to the start of reported symptoms to exclude inflammatory conditions or malignancy
    - Endoanal ultrasound (CPT® 76872), MRI Pelvis without and with contrast (CPT® 72197), or CT Pelvis with contrast (CPT® 72193) are appropriate after the above studies have been performed or if laboratory or clinical information suggest infection, abscess, or inflammation.

➤ Bladder

- ◆ Work-up of interstitial cystitis/bladder pain syndrome (IC/BPS) may include history, physical exam, laboratory exam (urinalysis and urine culture), cystoscopy, and measurement of post void residual urine by bladder catheterization.
  - Pelvic ultrasound (CPT® 76856 or CPT® 76857).
    - CT Pelvis with contrast (CPT® 72193) if ultrasound is equivocal for complicated interstitial cystitis/bladder pain syndrome (when ordered by specialist or any provider in consultation with the specialist)

**Background and Supporting Information**

- The proctalgia syndromes are characterized by recurrent episodes of rectal/perineal pain, and may be due to sustained contractions of the pelvic floor musculature.

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<b>Scrotal Pathology (PV-20)</b>
<b>Scrotal Pathology (PV-20.1)</b>
<b>Para testicular and spermatic cord masses (PV-20.2)</b>
<b>Testicular Microlithiasis (PV-20.3)</b>

### **Scrotal Pathology (PV-20.1)**

- Scrotal ultrasound (CPT® 76870) and/or Duplex (Doppler) ultrasound (CPT® 93975 or CPT® 93976) of the scrotum for initial evaluation of scrotal pain or mass
  - ◆ MRI Pelvis without and with contrast (CPT® 72197) or Tc-99m scrotal scintigraphy (CPT® 78761) if ultrasound is inconclusive.<sup>1,2</sup>
- Scrotal ultrasound (CPT® 76870), MRI Pelvis without and with contrast (CPT® 72197), or CT Pelvis with contrast (CPT® 72193) for cryptorchidism/undescended testis in the adult.
- Scrotal ultrasound and/or Duplex (Doppler) ultrasound (CPT® 76870 and/or CPT® 93975 or CPT® 93976) of the scrotum with color flow mapping in supine and upright positions to assess venous reflux into plexus pampiniformis if varicocele suspected (for example, in inguinal hernia evaluation).
  - ◆ CT Abdomen and Pelvis with contrast (CPT® 74177) for right-sided varicocele, when there is suspicion for intra-abdominal pathology

#### ***Background and Supporting Information***

- The causes of scrotal pain may include torsion, epididymitis, strangulated hernia, segmental testicular infarction, trauma, testicular tumor, and idiopathic scrotal edema.<sup>1</sup>

### **Para testicular and spermatic cord masses (PV-20.2)**

- Scrotal ultrasound (CPT® 76870) is the appropriate initial imaging procedure.
  - ◆ MRI Pelvis without and with contrast (CPT® 72197), exploration and biopsy are additional considerations if ultrasound is inconclusive.

### **Testicular Microlithiasis (PV-20.3)**

- Scrotal ultrasound (CPT® 76870) for initial evaluation.
- Annual Scrotal ultrasound (CPT® 76870) follow-up, only if a risk factor is present which include:
  - ◆ Family history of germ cell tumor
  - ◆ Malescent
  - ◆ Orchidopexy
  - ◆ Testicular atrophy
- For Personal history of germ cell tumor See **Testicular, Ovarian and Extragonadal Germ Cell Tumors (ONC-20)** in the Oncology Imaging Guidelines



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## **Fistula in Ano and Perirectal Abscess (PV-21)**

**Fistula in Ano (PV-21.1)**

**Perirectal Abscess (PV-21.2)**

**Pelvic Fistula (PV-21.3)**

### **Fistula in Ano (PV-21.1)**

- MRI Pelvis without and with contrast (CPT® 72197) is the preferred study.
  - ◆ If MRI cannot be performed, endoscopic ultrasound is superior, and thus preferential, to CT imaging.
  - ◆ CT Pelvis with contrast (CPT® 72193) is an inferior study to either of the above (accuracy of endoscopic ultrasound vs. CT for perianal fistula is 82% vs. 24%) and its use should be limited only to those circumstances in which MRI and endoscopic ultrasound cannot be performed.

### **Perirectal Abscess (PV-21.2)**

- MRI Pelvis without and with contrast (CPT® 72197) is the preferred study.
  - ◆ CT Pelvis with contrast (CPT® 72193) can be approved as an alternative study if desired.
- For the evaluation of Perianal and Perirectal Disease related to Crohn's Disease, See **Perirectal/Perianal Disease (AB-23.3)** in the Abdomen Imaging Guidelines.

### **Pelvic Fistula (PV-21.3)**

- History and physical exam (to include pelvic and/or anorectal examination):
  - ◆ Rectovesicular Fistula:
    - MRI Pelvis with and without contrast (CPT® 72197) OR
    - CT Pelvis with contrast (CPT® 72193)
  - ◆ Vaginal Fistula:
    - Enterovaginal, Colovaginal, Rectovaginal or Anovaginal:
      - Anoscopy and/or proctoscopy
      - Endoanal ultrasound (rarely used)
      - MRI Pelvis with and without contrast (CPT® 72197) is the preferred initial modality for suspected enterovaginal fistula
      - CT Pelvis with contrast (CPT® 72193) can be considered if:
        - MRI contraindicated OR urgent evaluation of acute diverticulitis OR early postoperative period
    - Urinary Vaginal Fistula (Ureterovaginal, Vesicovaginal, or Urethrovaginal):
      - Cystoscopy
      - CT urography (CT Abdomen and Pelvis without and with contrast CPT® 74178) and/or CT cystography (CT Pelvis without contrast CPT® 72192) or
      - MRI Pelvis with and without contrast (CPT® 72197)

### **Background and Supporting Information**

- A vaginal fistula is an abnormal communication between the vagina and either a portion of the digestive system or the urinary tract.
  - ◆ Causes of vaginal fistula may include IBD, endometriosis, infection, tumor, radiation, obstetrical trauma and surgical injuries.
  - ◆ Symptoms of vaginal fistula-Persistent vaginitis, dyspareunia, perineal dermatitis, foul-smelling vaginal discharge, and/or urinary or fecal incontinence.
- A rectovesicular fistula is an abnormal communication between the rectum and the bladder.
  - ◆ Causes of rectovesicular fistula may include chronic infection, cancer, diverticulitis, IBD, radiation and surgical injuries.
  - ◆ Symptoms of rectovesicular fistula-Bubbles in the urine, brown or cloudy urine, blood in the urine, painful urination, recurrent urinary tract infection, and/or abdominal pain

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<b>Urinary Incontinence/Pelvic Prolapse/Fecal Incontinence (PV-22)</b>
<b>Urinary Incontinence – Initial Imaging (PV-22.1)</b>
<b>Urinary Incontinence – Further Imaging (PV-22.2)</b>
<b>Pelvic Prolapse (PV-22.3)</b>
<b>Fecal Incontinence (PV-22.4)</b>

## **Urinary Incontinence – Initial Imaging (PV-22.1)**

- Initial Imaging, associated with other evaluations, are:
  - ◆ Non-Neurogenic Incontinence
    - Measurements of post void residual urine by Bladder ultrasound (CPT® 51798) OR Bladder catheterization.
    - In addition to post void residual volume determination, screening for UTI should be considered.
    - Urodynamic studies for complex conditions or unclear case of incontinence after basic evaluation.
    - Preoperative multichannel urodynamic testing is not needed in women with stress incontinence (uncomplicated) prior to initial incontinence surgery
  - ◆ Neurogenic Incontinence
    - Ultrasound urinary tract (CPT® 76770 or CPT® 76775) and/or urodynamic studies.

### ***Background and Supporting Information***

Urinary incontinence can be “stress,” “urgency,” or mixed; neurogenic or non-neurogenic; and complicated or uncomplicated. Neurogenic incontinence can occur from cerebral, spinal or peripheral neurological diseases.

## **Urinary Incontinence – Further Imaging (PV-22.2)**

- CT Abdomen and Pelvis, contrast as requested, or CT Pelvis, contrast as requested, can be performed for the following:
  - ◆ Abnormality on ultrasound that requires further evaluation
  - ◆ Complicated incontinence
  - ◆ Suspected fistulae
  - ◆ Detecting ectopic ureters if ultrasound is non-diagnostic
  - ◆ Pre-operative planning for complicated incontinence when ordered by or in consultation with the operating physician

### ***Background and Supporting Information***

- MRI may be indicated for evaluation of the brain, spine, or other regions of the nervous system in neurogenic urinary incontinence See **Red Flag Indications (SP-1.2)** and **Myelopathy (SP-7.1)** in the Spine Imaging Guidelines and **Dementia (HD-8.1)** and **Normal Pressure Hydrocephalus (NPH) (HD-8.4)** in the Head Imaging Guidelines
- Complicated urinary incontinence includes:
  - ◆ Failed conservative treatment
  - ◆ Pain or dysuria
  - ◆ Hematuria
  - ◆ Recurrent infection
  - ◆ Previous radical pelvic surgery
  - ◆ Suspected fistula
  - ◆ Suspected mass
  - ◆ Previous pelvic or prostate irradiation

### **Pelvic Prolapse (PV-22.3)**

- Transvaginal (TV) ultrasound (CPT® 76830) is the initial study of choice.
  - ◆ Pelvic ultrasound (CPT® 76856 or CPT® 76857) can be performed if requested as a complimentary study to the TV ultrasound.
    - Transperineal ultrasound (CPT® 76872) can also be performed
- Urodynamic testing may be helpful if there is incontinence with a stage II or greater prolapse or voiding dysfunction.
- MRI Pelvis (CPT® 72195 or CPT® 72197) for the following:
  - ◆ Pelvic floor anatomy and pelvic organ prolapse evaluations if exam and TV ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76856 or CPT® 76857) are equivocal; or
  - ◆ Pre-operative planning for complex organ prolapse when ordered by or in consultation with the operating physician; or
  - ◆ Persistent incontinence following surgery
- Mesh and Graft complications
  - ◆ Diagnostic evaluation for mesh and graft complications may include colonoscopy, cystoscopy, and/or urodynamics.
  - ◆ Transvaginal (TV) ultrasound (CPT® 76830) and/or Pelvic ultrasound (CPT® 76856 or CPT® 76857), CT Abdomen and/or Pelvis, contrast as requested, MRI Pelvis without contrast or without and with contrast (CPT® 72195 or CPT® 72197) depending on the mesh and graft complication.
- Sacral osteomyelitis may be a complication of sacrocolpopexy. MRI Pelvis with and without contrast (CPT® 72197) is indicated for lower back pain and/or suspected sacral osteomyelitis after this procedure.

### **Fecal Incontinence (PV-22.4)**

The evaluation of fecal incontinence generally proceeds as follows:

- Determine the severity of the incontinence (Bristol Stool Scale, Fecal Incontinence Severity Index, etc.)
- History and Physical to include digital rectal examination and perianal pinprick (to assess for neurogenic causes).
- Trial of conservative management

- Diagnostic Testing if symptoms persist to include:
  - ◆ Ano-rectal Manometry
  - ◆ Balloon Expulsion Test
  - ◆ Endoanal ultrasound (CPT® 76872) to confirm sphincter defects in individuals with suspected sphincter injury (e.g. history of vaginal delivery or anorectal surgery)
  - ◆ MRI Pelvis (CPT® 72197) can be considered if:
    - Ano-rectal manometry suggests weak sphincter pressures AND/OR there is an abnormal balloon expulsion test
    - AND
    - There has been a failure of a recent trial of conservative management
    - AND
    - Surgery is being considered
  - ◆ MRI (MRI Pelvis without contrast CPT® 72195) for Defecography is considered investigational/experimental by UHC.

### ***Background and Supporting Information***

With regards to fecal incontinence ACG Guidelines note that “the internal sphincter is visualized more clearly by endoanal ultrasound, whereas MRI is superior for discriminating between an external anal sphincter tear and a scar and for identifying external sphincter atrophy.”

However, guidelines adopted by the American Society of Colon and Rectal Surgeons note that, “Endoanal ultrasound is a useful and sensitive tool in the evaluation of patients with FI (fecal incontinence), especially when there is a history of vaginal delivery or anorectal surgery. Ultrasound can reliably identify internal and external sphincter defects that may be associated with sphincter dysfunction.” In addition, the guidelines note, “Other modalities (e.g., MRI) have shown substantial interobserver variability and, at this point, are likely inferior to ultrasound imaging, but they may provide additional information where endoanal ultrasound is unavailable.”



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## Patent Urachus (PV-23)

### Patent Urachus (PV-23.1)

- Drainage from the umbilicus, redness around umbilicus, abdominal pain, or urinary tract infection from persistent fetal connection between the bladder and the umbilicus can be evaluated by:
  - ◆ Ultrasound (CPT® 76856 or CPT® 76857 and/or CPT® 76700 or CPT® 76705) or voiding cystourethrography (VCUG) (CPT® 74455) for suspected patent urachus
  - ◆ CT Pelvis with contrast (CPT® 72193) or MRI Pelvis without contrast (CPT® 72195) or with and without contrast (CPT® 72197) if the ultrasound is equivocal or if additional imaging is needed for surgical planning if there is a suspected urachal carcinoma or other urachal abnormality.

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## Bladder Mass (PV-24)

### Bladder Mass (PV-24.1)

- Bladder masses incidentally found on other imaging (ultrasound, cystoscopy or KUB) can be evaluated by:
  - ◆ CT Pelvis without contrast (CPT® 72192) for suspected bladder stone if initial imaging is equivocal or if surgery is planned
  - ◆ CT Pelvis with and without contrast (CPT® 72194) if suspected bladder diverticuli
- See **Oncology Imaging Guidelines** for biopsy confirmed or suspected malignancy

### ***Background and Supporting Information***

Symptoms of bladder mass may include hematuria, urgency, frequency, chronic urinary infection, obstruction, or urinary retention.

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## Ureteral and/or Bladder Trauma or Injury (PV-25)

### Ureteral and/or Bladder Trauma or Injury (PV-25.1)

- Abdominal and/or Pelvic ultrasound (CPT® 76700 and/or CPT® 76856) can be approved if requested.
- CT cystography (CT Pelvis without contrast CPT® 72192) can be done for suspected bladder injury.
- CT Abdomen and Pelvis with OR with and without contrast (CPT® 74177 or CPT® 74178) if:
  - ◆ Suspected iatrogenic/operative injury OR
  - ◆ Blunt trauma and suspected bladder or ureteral injury with one or more of the following (See **Blunt Abdominal Trauma (AB-10.1)** in the Abdomen Imaging Guidelines):
    - Abdominal pain or tenderness
    - Pelvic or femur fracture
    - Hematocrit <30%
    - Hematuria
    - Non-examinable individual (intoxicated, less than fully conscious, Glasgow Coma Scale Score >13, etc.)
    - Evidence of abdominal wall trauma or seat-belt sign
    - Rapid deceleration injury

#### Background and Supporting Information

Bladder trauma: CT cystography- CT Pelvis without contrast allowing the radiologist or Urologist to instill contrast to r/o bladder injury and/or perforation.

Ureteral injury: *“Iatrogenic ureteral injuries can occur during gynecologic, obstetric, urologic, colorectal, general, or vascular surgery; gynecologic surgery accounts for more than half of all iatrogenic injuries.”*<sup>2</sup>

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## Gender Affirmation Surgery; Pelvic (PV-26)

### Gender Affirmation Surgery; Pelvic (PV-26.1)

- Preoperative imaging is supported as outlined below if the individual has a health plan benefit covering pelvic gender affirmation surgery. Preoperative imaging is not supported if pelvic gender affirmation surgery is not a health plan covered benefit.
- Preoperative imaging:
  - ◆ Metoidioplasty
    - Preoperative imaging is not supported
  - ◆ Phalloplasty
    - Muscular flaps used for neophallus creation are generally obtained from anterior lateral thigh (pedicled flap) or forearm (radial free flap)
      - For planned radial free flap, upper extremity CT angiography (CPT® 73206) of anticipated donor site (unilateral) for evaluation of perforator anatomy.
      - For planned anterior lateral thigh flap, bilateral lower extremity CT angiogram (CPT® 73706)
      - If iodinated contrast allergy, MRA (contrast as requested)
  - ◆ Vaginoplasty
    - Preoperative imaging is not supported
- Postoperative complications:
  - ◆ Limited Pelvic ultrasound (CPT® 76857) and Doppler ultrasound (CPT® 93975 complete or CPT® 93976 limited)
    - Monitoring of flap perfusion after phalloplasty for suspected vascular insufficiency
  - ◆ CT Abdomen and Pelvis OR CT Pelvis (contrast as requested - CPT® 74176, CPT® 74177, CPT® 74178, CPT® 72192, CPT® 72193, or CPT® 72194) for suspected postoperative complications
    - Complications after surgery may include hematoma, seroma, abscesses, fistula, urinary tract injury, etc. (See **Ureteral and/or Bladder Trauma or Injury (PV-25.1)** for ureteral and/or bladder injury).
  - ◆ MRI Pelvis with and without contrast (CPT® 72197)
    - Surgical planning for repair of suspected fistula
    - Non diagnostic CT scan AND further imaging is needed for treatment planning

### ***Background and Supporting Information***

- Metoidioplasty-Metoidioplasty is a procedure using clitoral hypertrophy and clitoral release to form masculine-appearing external genitalia.
- Phalloplasty-Phalloplasty includes the creation of a neophallus using muscular flaps.
- Vaginoplasty-Vaginoplasty refers to the surgical creation of a vulva and vaginal canal.

### References

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3. Doo FX, Khorsandi A, Avanesian B, Bowers M, Somwaru AS. Gender Affirmation Surgery: A Primer on Imaging Correlates for the Radiologist. *American Journal of Roentgenology*. 2019;213(6):1194-1203. doi:10.2214/ajr.19.21686.
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# Policy History and Instructions for Use

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## Guideline

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### Policy History and Instructions for Use

# Policy History and Instructions for Use

## Policy History and Instructions for Use V1.0.2023

### 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
XX/XX/202X	
XX/XX/202X	

Policy History and Instructions for Use