

MAGNETIC RESONANCE IMAGING (MRI) AND COMPUTED TOMOGRAPHY (CT) SCAN – SITE OF CARE

Guideline Number: URG-13.02

Effective Date: April 1, 2019

[Instructions for Use](#) ⓘ

Table of Contents	Page
COVERAGE RATIONALE	1
APPLICABLE CODES	1
CLINICAL EVIDENCE	6
REFERENCES	7
GUIDELINE HISTORY/REVISION INFORMATION	7
INSTRUCTIONS FOR USE	7

Related Commercial Policies
<ul style="list-style-type: none"> Breast Imaging For Screening And Diagnosing Cancer Computed Tomographic Colonography

COVERAGE RATIONALE

An advanced radiologic imaging procedure in the hospital outpatient department is considered medically necessary for individuals who meet ANY of the following criteria:

- Less than 19 years of age
- Require obstetrical observation
- Require perinatology services
- Have a known contrast allergy
- Have a known chronic disease with prior radiology imaging procedures for the diagnosis, management or surveillance of the disease at the hospital outpatient department
- Have pre-procedure imaging where the surgery or procedure is being performed at the hospital

An advanced radiologic imaging procedure in the hospital outpatient department is considered medically necessary when there are no geographically accessible appropriate alternative sites for the individual to undergo the procedure, including but not limited to the following:

- Moderate or deep sedation or general anesthesia is required for the procedure; or
- The equipment for the size of the individual is not available; or
- Open magnetic resonance imaging is required because the member has a documented diagnosis of claustrophobia and/or severe anxiety

An advanced radiologic imaging procedure in the hospital outpatient department is considered medically necessary when imaging in a physician’s office or freestanding imaging center would reasonably be expected to delay care and adversely impact health outcome.

All other advanced radiologic imaging procedures in the hospital outpatient department are considered not medically necessary.

APPLICABLE CODES

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
Computed Tomography	
70450	Computed tomography, head or brain; without contrast material
70460	Computed tomography, head or brain; with contrast material(s)

CPT Code	Description
Computed Tomography	
70470	Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections
70480	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material
70481	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; with contrast material(s)
70482	Computed tomography, orbit, sella, or posterior fossa or outer, middle, or inner ear; without contrast material, followed by contrast material(s) and further sections
70486	Computed tomography, maxillofacial area; without contrast material
70487	Computed tomography, maxillofacial area; with contrast material(s)
70488	Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections
70490	Computed tomography, soft tissue neck; without contrast material
70491	Computed tomography, soft tissue neck; with contrast material(s)
70492	Computed tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections
70496	Computed tomographic angiography, head, with contrast material(s), including noncontrast images, if performed, and image postprocessing
70498	Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image postprocessing
71250	Computed tomography, thorax; without contrast material
71260	Computed tomography, thorax; with contrast material(s)
71270	Computed tomography, thorax; without contrast material, followed by contrast material(s) and further sections
71275	Computed tomographic angiography, chest (noncoronary), with contrast material(s), including noncontrast images, if performed, and image postprocessing
72125	Computed tomography, cervical spine; without contrast material
72126	Computed tomography, cervical spine; with contrast material
72127	Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections
72128	Computed tomography, thoracic spine; without contrast material
72129	Computed tomography, thoracic spine; with contrast material
72130	Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections
72131	Computed tomography, lumbar spine; without contrast material
72132	Computed tomography, lumbar spine; with contrast material
72133	Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections
72191	Computed tomographic angiography, pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing
72192	Computed tomography, pelvis; without contrast material
72193	Computed tomography, pelvis; with contrast material(s)
72194	Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections
73200	Computed tomography, upper extremity; without contrast material
73201	Computed tomography, upper extremity; with contrast material(s)
73202	Computed tomography, upper extremity; without contrast material, followed by contrast material(s) and further sections
73206	Computed tomographic angiography, upper extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing

CPT Code	Description
Computed Tomography	
73700	Computed tomography, lower extremity; without contrast material
73701	Computed tomography, lower extremity; with contrast material(s)
73702	Computed tomography, lower extremity; without contrast material, followed by contrast material(s) and further sections
73706	Computed tomographic angiography, lower extremity, with contrast material(s), including noncontrast images, if performed, and image postprocessing
74150	Computed tomography, abdomen; without contrast material
74160	Computed tomography, abdomen; with contrast material(s)
74170	Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections
74174	Computed tomographic angiography, abdomen and pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing
74175	Computed tomographic angiography, abdomen, with contrast material(s), including noncontrast images, if performed, and image postprocessing
74176	Computed tomography, abdomen and pelvis; without contrast material
74177	Computed tomography, abdomen and pelvis; with contrast material(s)
74178	Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions
74261	Computed tomographic (CT) colonography, diagnostic, including image postprocessing; without contrast material
74262	Computed tomographic (CT) colonography, diagnostic, including image postprocessing; with contrast material(s) including non-contrast images, if performed
74263	Computed tomographic (CT) colonography, screening, including image postprocessing
75571	Computed tomography, heart, without contrast material, with quantitative evaluation of coronary calcium
75572	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology (including 3D image postprocessing, assessment of cardiac function, and evaluation of venous structures, if performed)
75573	Computed tomography, heart, with contrast material, for evaluation of cardiac structure and morphology in the setting of congenital heart disease (including 3D image postprocessing, assessment of LV cardiac function, RV structure and function and evaluation of venous structures, if performed)
75574	Computed tomographic angiography, heart, coronary arteries and bypass grafts (when present), with contrast material, including 3D image postprocessing (including evaluation of cardiac structure and morphology, assessment of cardiac function, and evaluation of venous structures, if performed)
75635	Computed tomographic angiography, abdominal aorta and bilateral iliofemoral lower extremity runoff, with contrast material(s), including noncontrast images, if performed, and image postprocessing
76380	Computed tomography, limited or localized follow-up study
76497	Unlisted computed tomography procedure (e.g., diagnostic, interventional)
Magnetic Resonance Imaging	
70336	Magnetic resonance (e.g., proton) imaging, temporomandibular joint(s)
70540	Magnetic resonance (e.g., proton) imaging, orbit, face, and/or neck; without contrast material(s)
70542	Magnetic resonance (e.g., proton) imaging, orbit, face, and/or neck; with contrast material(s)
70543	Magnetic resonance (e.g., proton) imaging, orbit, face, and/or neck; without contrast material(s), followed by contrast material(s) and further sequences
70544	Magnetic resonance angiography, head; without contrast material(s)

CPT Code	Description
Magnetic Resonance Imaging	
70545	Magnetic resonance angiography, head; with contrast material(s)
70546	Magnetic resonance angiography, head; without contrast material(s), followed by contrast material(s) and further sequences
70547	Magnetic resonance angiography, neck; without contrast material(s)
70548	Magnetic resonance angiography, neck; with contrast material(s)
70549	Magnetic resonance angiography, neck; without contrast material(s), followed by contrast material(s) and further sequences
70551	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material
70552	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); with contrast material(s)
70553	Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material, followed by contrast material(s) and further sequences
70554	Magnetic resonance imaging, brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, not requiring physician or psychologist administration
70555	Magnetic resonance imaging, brain, functional MRI; requiring physician or psychologist administration of entire neurofunctional testing
71550	Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s)
71551	Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); with contrast material(s)
71552	Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s), followed by contrast material(s) and further sequences
72141	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; without contrast material
72142	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; with contrast material(s)
72146	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, thoracic; without contrast material
72147	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, thoracic; with contrast material(s)
72148	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; without contrast material
72149	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; with contrast material(s)
72156	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; cervical
72157	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; thoracic
72158	Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar
72195	Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s)
72196	Magnetic resonance (e.g., proton) imaging, pelvis; with contrast material(s)
72197	Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences
73218	Magnetic resonance (e.g., proton) imaging, upper extremity, other than joint; without contrast material(s)
73219	Magnetic resonance (e.g., proton) imaging, upper extremity, other than joint; with contrast material(s)

CPT Code	Description
Magnetic Resonance Imaging	
73220	Magnetic resonance (e.g., proton) imaging, upper extremity, other than joint; without contrast material(s), followed by contrast material(s) and further sequences
73221	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; without contrast material(s)
73222	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; with contrast material(s)
73223	Magnetic resonance (e.g., proton) imaging, any joint of upper extremity; without contrast material(s), followed by contrast material(s) and further sequences
73718	Magnetic resonance (e.g., proton) imaging, lower extremity other than joint; without contrast material(s)
73719	Magnetic resonance (e.g., proton) imaging, lower extremity other than joint; with contrast material(s)
73720	Magnetic resonance (e.g., proton) imaging, lower extremity other than joint; without contrast material(s), followed by contrast material(s) and further sequences
73721	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; without contrast material
73722	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; with contrast material(s)
73723	Magnetic resonance (e.g., proton) imaging, any joint of lower extremity; without contrast material(s), followed by contrast material(s) and further sequences
74181	Magnetic resonance (e.g., proton) imaging, abdomen; without contrast material(s)
74182	Magnetic resonance (e.g., proton) imaging, abdomen; with contrast material(s)
74712	Magnetic resonance (e.g., proton) imaging, fetal, including placental and maternal pelvic imaging when performed; single or first gestation
74713	Magnetic resonance (e.g., proton) imaging, fetal, including placental and maternal pelvic imaging when performed; each additional gestation (List separately in addition to code for primary procedure)
75557	Cardiac magnetic resonance imaging for morphology and function without contrast material
75559	Cardiac magnetic resonance imaging for morphology and function without contrast material; with stress imaging
75561	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences;
75563	Cardiac magnetic resonance imaging for morphology and function without contrast material(s), followed by contrast material(s) and further sequences; with stress imaging
76498	Unlisted magnetic resonance procedure (e.g., diagnostic, interventional)
77021	Magnetic resonance imaging guidance for needle placement (e.g., for biopsy, needle aspiration, injection, or placement of localization device) radiological supervision and interpretation
77046	Magnetic resonance imaging, breast, without contrast material; unilateral
77047	Magnetic resonance imaging, breast, without contrast material; bilateral
77084	Magnetic resonance (e.g., proton) imaging, bone marrow blood supply
71555	Magnetic resonance angiography, chest (excluding myocardium), with or without contrast material(s)
72159	Magnetic resonance angiography, spinal canal and contents, with or without contrast material(s)
72198	Magnetic resonance angiography, pelvis, with or without contrast material(s)
73225	Magnetic resonance angiography, upper extremity, with or without contrast material(s)
73725	Magnetic resonance angiography, lower extremity, with or without contrast material(s)

CPT Code	Description
Magnetic Resonance Imaging	
74183	Magnetic resonance (e.g., proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences
74185	Magnetic resonance angiography, abdomen, with or without contrast material(s)

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HCPCS Code	Description
Computed Tomography	
G0297	Low dose CT scan (LDCT) for lung cancer screening
S8092	Electron beam computed tomography (also known as ultrafast CT, cine CT)

Magnetic Resonance Imaging	
C8900	Magnetic resonance angiography with contrast, abdomen
C8901	Magnetic resonance angiography without contrast, abdomen
C8902	Magnetic resonance angiography without contrast followed by with contrast, abdomen
C8903	Magnetic resonance imaging with contrast, breast; unilateral
C8905	Magnetic resonance imaging without contrast followed by with contrast, breast; unilateral
C8906	Magnetic resonance imaging with contrast, breast; bilateral
C8908	Magnetic resonance imaging without contrast followed by with contrast, breast; bilateral
C8909	Magnetic resonance angiography with contrast, chest (excluding myocardium)
C8910	Magnetic resonance angiography without contrast, chest (excluding myocardium)
C8911	Magnetic resonance angiography without contrast followed by with contrast, chest (excluding myocardium)
C8912	Magnetic resonance angiography with contrast, lower extremity
C8913	Magnetic resonance angiography without contrast, lower extremity
C8914	Magnetic resonance angiography without contrast followed by with contrast, lower extremity
C8918	Magnetic resonance angiography with contrast, pelvis
C8919	Magnetic resonance angiography without contrast, pelvis
C8920	Magnetic resonance angiography without contrast followed by with contrast, pelvis
C8931	Magnetic resonance angiography with contrast, spinal canal and contents
C8932	Magnetic resonance angiography without contrast, spinal canal and contents
C8933	Magnetic resonance angiography without contrast followed by with contrast, spinal canal and contents
C8934	Magnetic resonance angiography with contrast, upper extremity
C8935	Magnetic resonance angiography without contrast, upper extremity
C8936	Magnetic resonance angiography without contrast followed by with contrast, upper extremity
S8037	Magnetic resonance cholangiopancreatography (MRCP)
S8042	Magnetic resonance imaging (MRI), low-field

CLINICAL EVIDENCE

A retrospective study was performed by Shah-Patel et al. (2009) to evaluate the frequency, types, and severity of adverse events that occur in a freestanding outpatient radiology office setting. Adverse event records were reviewed from January 2003 through December 2006. The different modalities included computed tomography, magnetic resonance imaging, positron emission tomography/computed tomography, and interventional radiology. Adverse reactions and events were reviewed, including what treatment was provided in the office, how the patient responded, whether the patient was discharged home, and whether emergency medical services were called. A total of 106,800 patients were evaluated over 4 years, among whom 59 experienced (0.06%) adverse events. Seventy-six percent of

the patients were treated in the office and were discharged home or returned to work. Thirty-one percent of the patients required assistance from emergency medical services. The authors concluded that the outpatient radiology office setting is a safe place for patients to undergo imaging studies and selected interventional procedures because personnel can adequately identify adverse events and manage patients effectively.

Professional Societies

The American College of Obstetricians and Gynecologists' Committee (ACOG)

A 2017 guideline made the following recommendations regarding diagnostic imaging procedures during pregnancy and lactation:

- Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, but they should be used prudently and only when use is expected to answer a relevant clinical question or otherwise provide medical benefit to the patient.
- With few exceptions, radiation exposure through radiography, computed tomography (CT) scan, or nuclear medicine imaging techniques is at a dose much lower than the exposure associated with fetal harm. If these techniques are necessary in addition to ultrasonography or MRI or are more readily available for the diagnosis in question, they should not be withheld from a pregnant patient.
- The use of gadolinium contrast with MRI should be limited; it may be used as a contrast agent in a pregnant woman only if it significantly improves diagnostic performance and is expected to improve fetal or maternal outcome.
- Breastfeeding should not be interrupted after gadolinium administration (ACOG, 2017).

REFERENCES

American College of Obstetricians and Gynecologists. Committee opinion 723: Guidelines for diagnostic imaging during pregnancy and lactation. October 2017.

American Society of Anesthesiologists. Practice Advisory on anesthetic care for magnetic resonance imaging. *Anesthesiology*. V 122; No 3. March 2015.

American Society of Anesthesiologists. Statement on nonoperating room anesthetizing locations. October 16, 2013.

American Society of Anesthesiologists. Statement on practice recommendations for pediatric anesthesia. October 26, 2016.

Centers for Medicare & Medicaid Services: Place of Service Code Set. http://www.cms.gov/Medicare/Coding/place-of-service-codes/Place_of_Service_Code_Set.html.

Shah-Patel L, Piraner M, Silberzweig J. Adverse events in a freestanding radiology office. *J Am Coll Radiol* 2009;6:263-267.

GUIDELINE HISTORY/REVISION INFORMATION

Date	Action/Description
04/01/2019	<ul style="list-style-type: none"> • Reorganized policy template: <ul style="list-style-type: none"> ○ Simplified and relocated <i>Instructions for Use</i> ○ Removed <i>Benefit Considerations</i> section • Updated list of applicable CPT codes; added 77046 and 77047 • Revised coverage rationale; modified medical necessity criteria for an advanced radiologic imaging procedure in the hospital outpatient department: <ul style="list-style-type: none"> ○ Changed age criterion from "less than 10 years of age" to "less than 19 years of age" • Archived previous policy version URG-13.01

INSTRUCTIONS FOR USE

This Utilization Review Guideline provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this guideline, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Utilization Review Guideline is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. UnitedHealthcare 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.