



**Cohere Medical Policy -
Computed Tomography (CT), Lower Extremity**
Clinical Policy for Medical Necessity Review

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Important Notices

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Guideline Information:

Specialty Area: Diagnostic Imaging

Policy Name: Cohere Medical Policy - Computed Tomography (CT), Lower Extremity

Type: Adult (18+ yo) | Pediatric (0-17yo)

<u>Table of Contents</u>	
Important Notices	2
Medical Necessity Criteria	4
Service: Computed Tomography (CT), Lower Extremity	4
Description	5
Medical Necessity Criteria	6
Indications	6
Non-Indications	11
Definitions	11
Disclaimer on Radiation Exposure in Pediatric Populations	12
Level of Care Criteria	12
Procedure Codes (CPT/HCPCS)	13
Medical Evidence	14
References	16
Policy Revision History/Information	19

Medical Necessity Criteria

Service: Computed Tomography (CT), Lower Extremity

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity.

Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a clinical evaluation by the treating provider, which may include a referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere Health medical policy, medical necessity will be determined based on established clinical best practices, as supported by evidence-based literature, peer-reviewed sources, professional society guidelines, and state or national recommendations, unless otherwise directed by the health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- Repeat diagnostic testing due to technical issues—such as patient motion, incomplete exams, or incorrect imaging sequences—may not be considered medically necessary, as it is the responsibility of the imaging center to deliver appropriate, high-quality studies as originally authorized. Similarly, repeat imaging requested at a different facility based solely on provider preference may not be approved for medical necessity.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
 - The medical necessity of each individual request
 - Why prior imaging or procedures were inconclusive or why additional/follow-up studies are needed

- How the results will impact patient management or treatment decisions
- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.
- Cohere Health evaluates imaging exams based on medical necessity, regardless of contrast use. If an initial non-contrast study is completed and the radiologist later determines that contrast is needed to clarify a finding, the original authorization number may be used—provided the contrast-enhanced exam is performed at the same imaging center and within the original request's validity period, unless otherwise directed by the health plan.

Description

Computed tomography (CT) is a common, noninvasive imaging modality that allows for the visualization of the lower extremities. It allows for the visualization and evaluation of the morphology and pathology of the lower limbs. CT of the lower extremity can be performed with and without contrast, depending on the indication.

Medical Necessity Criteria

Indications

Computed tomography (CT), lower extremity is considered appropriate if **ALL** of the following is **TRUE**:

- Plain radiographs or ultrasound of the area of concern are nondiagnostic or inconclusive, and have been completed during the current episode of symptoms and/or change in symptoms; **AND**
- **ANY** of the following:
 - Acute traumatic lower extremity injury (e.g., fracture, dislocation) with **ALL** of the following^{1,2}:
 - **ANY** of the following:
 - More detail is required than is available with plain radiographs; **OR**
 - MRI is contraindicated; **AND**
 - **ANY** of the following:
 - Bone injury and **ANY** of the following is **TRUE**:
 - Fracture (known) and additional detail needed; **OR**
 - Acute injury with occult fracture suspected; **OR**
 - Joint dislocation or instability; **OR**
 - Stress/insufficiency fracture (known) and follow-up imaging needed; **OR**
 - Stress/insufficiency fracture (suspected) with negative radiographs **AND** MRI cannot be performed or is contraindicated; **OR**
 - Suspected soft tissue injury (e.g., tendon injury) **AND** MRI cannot be performed or is contraindicated; **OR**
 - Neoplastic conditions (including masses and mass-like conditions) requiring evaluation (e.g., for treatment planning, treatment response, or prognostication) and **ANY** of the following is **TRUE**³⁻⁵:
 - Malignant or aggressive primary bone tumor³; **OR**
 - Malignant or aggressive primary soft tissue tumor³; **OR**
 - Metastatic lesions of the lower extremity; **OR**
 - Nonsuperficial (deep) soft tissue mass⁴; **OR**
 - Soft tissue mass **AND** magnetic resonance imaging (MRI) or ultrasound is unable to be performed or is contraindicated⁴; **OR**
 - A primary bone tumor is suspected, and radiographs indicate **ANY** of the following⁵:

- Radiograph is negative; **OR**
- Benign features (osteoid osteoma is not suspected); **OR**
- Osteoid osteoma is suspected; **OR**
- Lesion is present on plain radiographs; **OR**
- Indeterminate or aggressive appearance for malignancy; **OR**
- Incidental osseous lesion on MRI or CT scan for unrelated indication; **OR**
- Presence of a mass with **ANY** of the following⁴:
 - Absence of trauma; **OR**
 - Rapid growth; **OR**
 - Recurrence after prior surgery; **OR**
 - Nondiagnostic ultrasound or other inconclusive imaging; **OR**
- Follow-up exam to further characterize a bone or soft tissue lesion diagnosed on the initial radiologic exam, including radiograph, ultrasound, magnetic resonance (MR), and nuclear medicine studies⁵; **OR**
- Known malignancy with unexpected, localized lower extremity pain or swelling; **OR**
- Persistent palpable abnormality with nondiagnostic imaging (e.g., radiograph, ultrasound); **OR**
- Routine surveillance of known malignancy; **OR**
- Preoperative imaging prior to surgical management of congenital condition, injury, recurrent instability, malignancy, mass, infectious disorder, or vascular abnormality; **OR**
- The patient requires a CT with arthrogram, and **ALL** of the following are **TRUE**:
 - **ANY** of the following:
 - Knee meniscal tear; **OR**
 - Hip labral tear; **AND**
 - **ALL** of the following:
 - Concern for rupture or tear based on clinical history, imaging, or physical exam; **AND**
 - Joint-specific orthopedic evaluation and maneuvers suggest a tear; **OR**
- Diagnosis, surveillance, and follow-up of autoimmune, collagen vascular diseases, or inflammatory conditions (e.g., inflammatory arthritis)⁶; **OR**

- Vascular conditions, known or suspected, including **ANY** of the following:
 - Osteonecrosis, known or suspected, with negative radiographs, when MRI is contraindicated or cannot be performed⁷; **OR**
 - The patient requires evaluation for vascular malformation (with or without pain) due to **ANY** of the following findings⁸:
 - Diffuse or focal enlargement; **OR**
 - Discoloration; **OR**
 - Soft tissue mass; **OR**
 - Ulceration; **OR**
 - Vascular bruit or thrill; **OR**
- Infection or an infectious disorder, including **ANY** of the following:
 - Septic arthritis with **ANY** of the following:
 - Elevated laboratory markers (e.g., erythrocyte sedimentation rate (ESR), C-reactive protein (CRP)/CRP, white blood cell count); **OR**
 - Findings are suggestive of joint effusion or soft tissue swelling⁹; **OR**
 - Clinical history of **ANY** of the following:
 - Adjacent infection; **OR**
 - Diabetes; **OR**
 - Intravenous IV drug use; **OR**
 - Previous surgery on the suspected joint of concern (e.g., joint replacement/ligament, labral, meniscus repair); **OR**
 - Physical exam that supports suspicion of septic arthritis; **OR**
 - Positive joint aspiration; **OR**
 - Septic arthritis is suspected with normal initial radiographs⁹; **OR**
 - Osteomyelitis, suspected and MRI cannot be performed or is contraindicated^{9,10}; **OR**
 - Soft tissue infection with **ANY** of the following:
 - Normal initial radiographs or with findings suggestive of joint effusion or soft tissue swelling; **OR**
 - History of puncture wound with possible retained foreign body; **OR**
 - High clinical suspicion of necrotizing fasciitis¹¹; **OR**
- High clinical suspicion of gout in the absence of monosodium urate (MSU) crystals in synovial fluid (dual energy CT preferred); **OR**
- Postintervention evaluation when **ANY** of the following is **TRUE**:
 - Imaging after hip arthroplasty when more detail is required than is available with plain radiographs, and **ANY** of the following is **TRUE**¹²:
 - Hardware fracture; **OR**

- History of acute injury; **OR**
- Metal-on-metal prosthesis with an adverse reaction to metal debris; **OR**
- Trunionosis (corrosion or metallosis), suspected; **OR**
- Pain with **ANY** of the following (infection excluded):
 - Aseptic loosening; **OR**
 - Instability; **OR**
 - Osteolysis; **OR**
- Periprosthetic fracture; **OR**
- Imaging after knee arthroplasty when more detail is required than with plain radiographs, and **ANY** of the following are suspected (with or without pain)¹⁰:
 - Hardware fracture; **OR**
 - Infection; **OR**
 - Pain with **ANY** of the following (infection excluded):
 - Aseptic loosening; **OR**
 - Instability; **OR**
 - Osteolysis; **OR**
 - Periprosthetic fracture; **OR**
 - Concern for injury to extensor mechanism; **OR**
- Concern for rupture or tear of a tendon, ligament, or other soft tissue injury (including labrum tear) with **ALL** of the following:
 - MRI is contraindicated or could not be performed; **AND**
 - **ANY** of the following:
 - Symptoms were the direct result of a preceding acute injury, and surgery is being considered; **OR**
 - Joint-specific orthopedic evaluation and maneuvers suggest a tear; **OR**
 - **ALL** of the following:
 - Symptoms were not the direct result of a preceding acute injury (i.e., new symptoms that are not the result of a traumatic injury), surgery is being considered, and **ANY** of the following:
 - Documented failure of at least 6 weeks of conservative treatment within the past 6 months, including **ALL** of the following:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids,

- neuropathic pain medications) if not contraindicated; **AND**
 - Physical therapy or a provider-directed home exercise program (HEP)^A; **AND**
 - Worsening of symptoms during the trial of conservative treatment; **OR**
 - Radiographs are negative for osseous injury, an alignment abnormality is suspected based on physical examination, and **ALL** of the following are **TRUE**:
 - MRI and/or ultrasound are contraindicated or cannot be performed; **AND**
 - Radiographs that suggest **ANY** of the following:
 - Dislocation; **OR**
 - Syndesmotic injury; **OR**
 - Other ligamentous injury; **OR**
 - Evaluation of **ANY** of the following uncategorized/miscellaneous symptoms when MRI is contraindicated or cannot be performed, and the patient requires evaluation¹³:
 - Marrow abnormalities⁷; **OR**
 - Joint-specific orthopedic evaluation and maneuvers suggest a tear; **OR**
 - Persistent joint/muscle pain or weakness unresponsive to conservative treatment and **ALL** of the following:
 - Nondiagnostic or indeterminate imaging (e.g., radiographs, ultrasound); **AND**
 - Symptoms were not the direct result of a preceding acute injury (i.e., new symptoms but they are not the result of a traumatic injury); **AND**
 - Documented failure of at least 6 weeks of conservative treatment within the past 6 months, including **ALL** of the following:
 - Anti-inflammatory medications, nonopioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **AND**
 - Physical therapy or a provider-directed home exercise program (HEP)^A; **AND**
 - Repeat imaging (defined as a repeat request following recent imaging of the same anatomic region with the same or similar modality) will be considered reasonable and necessary if **ALL** of the following are **TRUE**:

- There are no established guidelines; **AND**
- **ANY** of the following:
 - There are new or worsening symptoms not addressed in the guidelines, such that repeat imaging would influence treatment; **OR**
 - There is need for a one-time clarifying follow-up of a prior indeterminate finding; **OR**
 - In the absence of change in symptoms, there is an established need for monitoring which would influence management.

Non-Indications

Computed tomography (CT), lower extremity is not considered appropriate if **ANY** of the following is **TRUE**¹⁴:

- The patient has undergone advanced imaging of the same body part within 3 months without undergoing treatment or developing new or worsening symptoms.¹⁵

*NOTE: The referring professional and radiologist should discuss the risks and benefits of contrast media administration, including possible prophylaxis, in patients with chronic or worsening kidney disease or severe renal failure.

**NOTE: CT in pregnant patients should be requested at the discretion of the ordering provider and obstetric care provider.

***NOTE: CT in patients with claustrophobia should be requested at the discretion of the ordering provider.

Definitions

^A**Provider-directed home exercise programs (HEP)** should include¹⁶:

- Patient education of prescribed exercises with written instructions,
- Documentation of patient compliance with the HEP.

Disclaimer on Radiation Exposure in Pediatric Populations

Due to the heightened sensitivity of pediatric patients to ionizing radiation, minimizing exposure is paramount. At Cohere, we are dedicated to ensuring that every patient, including the pediatric population, has access to appropriate imaging following accepted guidelines. Radiation risk is dependent mainly on the patient's age at exposure, the organs exposed, and the patient's sex, though there are other variables. The following technical guidelines are provided to ensure safe and effective imaging practices:

Radiation Dose Optimization: Adhere to the lowest effective dose principle for pediatric imaging. Ensure that imaging protocols are specifically tailored for pediatric patients to limit radiation exposure. [17.18](#)

Alternative Modalities: Prioritize non-ionizing imaging options such as ultrasound or MRI when clinically feasible, as they are less likely to expose the patient to ionizing radiation. For instance, MRI or ultrasound should be considered if they are more likely to provide an accurate diagnosis than CT, fluoroscopy, or radiography. [17.18](#)

Cumulative Dose Monitoring: Implement systems to track cumulative radiation exposure in pediatric patients, particularly for those requiring multiple imaging studies. Regularly reassess the necessity of repeat imaging based on clinical evaluation. [17.18](#)

CT Imaging Considerations: When CT is deemed the best method for achieving a correct diagnosis, use the lowest possible radiation dose that still yields reliable diagnostic images. [17.18](#)

Cohere Imaging Gently Guideline

The purpose of this guideline is to act as a potential override when clinically indicated to adhere to Imaging Gently and Imaging Wisely guidelines and As Low As Reasonably Possible (ALARA) principles.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description/Definition
73700	Computed tomography (CT), lower extremity; without contrast material
73701	Computed tomography (CT), lower extremity; with contrast material
73702	Computed tomography (CT), lower extremity; without contrast material, followed by contrast material(s) and further sections
76380	Computed tomography, limited or localized follow-up study

Medical Evidence

Drezin et al. (2022) reviewed the role of computed tomography (CT) and computed tomography angiography (CTA) in trauma and salvaging a threatened or mangled extremity. When reviewing CT scans to assess complications around the amputation site, attention should focus on signs such as surgical wound opening, ulceration, infection, post-surgical blood collections, lingering bone fragments, abnormal bone growth, excessive scarring, and the maintenance of vascular function. Damage control techniques involve swift actions to manage bleeding and restore blood circulation. Early implementation of fasciotomies may be required, along with immediate temporary realignment and stabilization using splints, traction, or external fixation. The measures aim to safeguard the repaired blood vessels and ensure a smooth connection without tension.¹⁹

Allen et al. (2020) performed an observational study to evaluate the incidence of fractures and ligament injuries among patients presenting with an acute ankle injury and normal findings on radiographic examination while also exploring optimal examination protocols. A total of 100 patients were enrolled in the study: 19 were diagnosed with major fractures, and 42 had small avulsion fractures. 42 patients exhibited ankle effusions, alongside a notable occurrence of soft tissue injuries. CT scans and ultrasound can identify fractures and soft tissue injuries yet may be utilized less frequently in standard clinical practice. The authors also discussed advances in imaging techniques. Research indicates that cone beam CT surpasses ultrasound examination and the traditional combination of clinical assessment and radiography in fracture detection sensitivity. Despite this heightened sensitivity, cone beam CT maintains a radiation exposure level comparable to conventional radiography, suggesting it is a safer and more precise imaging alternative.²⁰

Kellock et al. (2019) conducted a meta-analysis on the diagnostic accuracy of CT to identify occult proximal femoral fractures. The authors reported 13 studies of varied reporting quality that included 1248 patients (496 with hip fractures, 752 without) with MRI or clinical follow-up serving as the reference standard. Fifty false-negative examinations were identified. The pooled sensitivity estimate was 94%, with specificity reaching 100%. The authors

concluded that when clinical suspicion arises for occult proximal femoral fracture, and MRI is either contraindicated or inaccessible, CT represents a viable option. In cases where clinical concern persists despite normal CT results, MRI may be indicated.²¹

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Policy Revision History/Information

Original Date: April 29, 2022		
Review History		
Version 2	09/05/2024	Annual review and policy restructure.
Version 3	10/30/2024	Edited repeat imaging criteria language.
Version 4	02/20/2025	Replaced conservative care requirement with current standard language. Provided avenue for approval for preoperative imaging. Loosened requirement for injury evaluation - no longer requires suspicion of "high-grade" tear.
Version 5	09/11/2025	<p>Annual review</p> <p>Updated content layout to align with revised template, including repeat imaging criteria.</p> <p>Removed relative contraindications (contrast allergy, renal insufficiency).</p> <p>Added additional clarification around expectation for preceding acute injuries in acute and chronic soft tissue pain</p> <p>Aligned overall indications and flow with CT Upper Extremity policy</p>