04-70450-22

Original Effective Date: 09/15/09

Reviewed: 07/25/24

Revised: 08/15/24

Subject: Computed Tomography (CT) Abdomen and Pelvis

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

DESCRIPTION:

Computed tomography (CT) is a radiologic modality that provides clinical information in the detection, differentiation and demarcation of disease. CT is a form of medical imaging that involves the exposure of members to ionizing radiation. CT should only be performed under the supervision of a physician with training in radiation protection to optimize examination safety. Radiation exposure should be taken into account when considering the use of this technology. This guideline addresses the use of CT of the abdomen and pelvis for evaluation, diagnosis and management of abdomen and pelvis related conditions in the outpatient setting.

Summary and Analysis of Evidence: Computed tomography (CT) is a radiologic modality that utilizes ionizing radiation to obtain cross-sectional images. Indications for abdominal CT and/or pelvic CT examinations include, but are not limited to: evaluation of the following: abdominal, flank, or pelvic pain, including evaluation of suspected or known urinary calculi and appendicitis, Computed tomography (CT) is a radiologic modality that utilizes ionizing radiation to obtain cross-sectional images. Indications for abdominal CT and/or pelvic CT examinations include, but are not limited to: evaluation of the following: abdominal, flank, or pelvic pain, including evaluation of suspected or known urinary calculi and appendicitis, renal and adrenal masses, known or suspected abdominal or pelvic masses or fluid collections, primary or metastatic malignancies (staging and treatment planning), diffuse liver disease disease of the biliary system, abdominal or pelvic inflammatory disease, known or suspected congenital abnormalities, and bowel obstruction or gastrointestinal bleeding. Surveillance following locoregional therapies in abdominal malignancies (ACR-SABI-SAR, 2021).

POSITION STATEMENT:

Computed tomography (CT) of the abdomen, pelvis and abdomen and pelvis **meets the definition of medical necessity** for the diagnosis and evaluation of the following:

Abdomen CT

Indications for Abdomen CT

Abdominal pain for unknown etiology

- After initial workup is inconclusive and must include results of the following:
  - Initial imaging, such as ultrasound, endoscopy study or x-ray; **AND**
  - Appropriate laboratory testing
- Acute abdominal pain in a member over the age of 65.

Evaluation of suspicious known mass/tumors (unconfirmed diagnosis of cancer) for further evaluation of indeterminate or questionable findings

- Initial evaluation of palpable abdominal or abdominal wall suspicious mass/tumor found by physical exam or imaging study
- Surveillance: One follow-up exam to ensure no suspicious change has occurred in a tumor in the abdomen. No further surveillance CT unless tumor(s) are specified as highly suspicious, or change was found on exam or last follow-up CT (new, changing sign, symptoms or abnormal lab values)
- Abnormal incidental abdominal lymph nodes when follow-up is recommended based on prior imaging.

Follow-up of known cancer (surveillance)

- Follow-up of known cancer of member undergoing active treatment within the past year
- Known cancer with suspected abdominal metastasis.

Evaluation of suspected infection or inflammatory disease based on exam or discovered on previous imaging

- Right upper quadrant pain for suspected biliary disease with negative or equivocal ultrasound
- Epigastric or left upper quadrant pain if labs or other imaging are inconclusive.

Evaluation of suspected infection or for follow-up known infection limited to the abdomen

- Known infection that is clinically suspected to have created an abscess limited to the abdomen. (If location unclear or unknown, CT abdomen/pelvis)

- History of fistula limited to the abdomen that requires re-evaluation or is suspected to have recurred
- Abnormal fluid collection limited to the abdomen seen on prior imaging that needs follow-up evaluation.

Evaluation of inflammatory disease or follow-up limited to the abdomen

- Suspected inflammatory bowel disease (Crohn's disease or ulcerative colitis) with abdominal pain and one of the following:
  - Chronic diarrhea
  - Bloody diarrhea
- High clinical suspicion after complete work up including physical exam, labs, endoscopy with biopsy
- Known inflammatory bowel disease, (Crohn's or ulcerative colitis) with recurrence or worsening signs/symptoms requiring re-evaluation.

Evaluation of an organ or abnormality seen on previous imaging

Adrenal

- To locate a pheochromocytoma once there is clear biochemical evidence (may require abdomen and pelvis imaging)
- Suspected adrenal secreting tumor after full clinical and biochemical work-up
- Suspected adrenal mass ≥ 1 cm incidentally discovered with no history of malignancy
- Adrenal mass ≥ 4 cm and no diagnosis of cancer, for preoperative planning (surgery to rule out adrenal cortical carcinoma)
- Adrenal mass < 4 cm with history of malignancy
- Yearly surveillance for members with multiple endocrine neoplasia type 1 (MEN1)
- Members with Von Hippel Lindau, surveillance at least every other year

Liver

- Indeterminate liver lesion > 1 cm seen on ultrasound
- Indeterminate liver lesion < 1cm on initial imaging with known chronic liver disease or a history of extrahepatic malignancy
- Hepatitis/hepatoma screening after ultrasound is abnormal, equivocal, or non-diagnostic (may be limited in members who are obese, those with underlying hepatic steatosis, as well as nodular livers).
- Jaundice or abnormal liver function tests after equivocal or abnormal ultrasound.
- Follow up of suspected adenoma every 6-12 months.

- To confirm diagnosis of focal nodular hyperplasia seen on other imaging.
- Follow-up of focal nodular hyperplasia (FNH) annually if ultrasound (US) is inconclusive
- Pre-procedure for transjugular intrahepatic portosystemic shunt (TIPS)
- Members with Beckwith-Wiedemann syndrome and abnormal ultrasound or rising alpha fetoprotein (AFP) and MRI is contraindicated
- Surveillance of hepatocellular carcinoma (HCC) in members who have received liver-directed therapy, surgical resection, medical treatment or transplant (MRI or CT).

Evaluation of iron overload

- Initial evaluation of liver iron in hemochromatosis diagnosed in lieu of liver biopsy
- Annual evaluation for high-risk members: transfusion-dependent thalassemia major, sickle cell disease and other congenital anemias.

Pancreas

- Pancreatic cystic lesion found on initial imaging
- Follow-up of intraductal papillary mucinous neoplasm (IPMN) and mucinous cystic neoplasm (MCN) require surveillance imaging as follows (if MRI/MRCP is contraindicated) if indeterminate on initial imaging and duct communication is present and there are no high-risk charcheristics (jaundice secondary to the cyst, acute pancreatitis secondary to the cyst, elevated serum CA 19-9 and no benign cause present, an enhancing mural nodule or solid component within the cyst or pancreas, main pancreatic duct of > 5mm, change in duct caliber with upstream atrophy, size over 3 cm, high grade dysplasia or cancer on cytology):
    - Incidental and asymptomatic cysts < 5mm, follow-up at three years
    - Cysts 5mm-1cm every 2 years for 4 years (if stable may lengthen intervals)
    - Cysts 1-2 cm every year for 3 years and if stable (every 2 years for 4 years and may lengthen intervals)
    - Cysts that are 2-3 cm every 6-12 months for 3 years and if stable then yearly for 4 years and if stable may lengthen intervals (can also use endoscopic ultrasound (EUS))
    - Lesions ≥ 30 mm MRI/CT or EUS every 6 months for 3 years, then imaging alternating with EUS every year for 4 years and consider lengthening interval if stable
- Annual surveillance for members determined to have an increased lifetime risk of developing pancreatic cancer, based on genetic predisposition or family history
    - Starting at age 50, or 10 years younger than the earliest age of cancer affected first degree relative (except with Peutz-Jeghers start at age 30-35)
    - Von Hippel Lindau starting at age 16 at least every other year
    - Hereditary pancreatitis starting at age 40 or 20 years before first attack

- Other genetic syndromes that increase lifetime risks (e.g., Peutz-Jeghers, hereditary pancreatitis, familial atypical multiple melanoma and mole syndrome, familial pancreatic cancer with a first-degree family member with pancreatic cancer)

- Annual surveillance for members with MEN1 for primary neuroectodermal tumors (pNET) starting at age 10
- Localization of an insulinoma, once diagnosis is confirmed.

Renal

- An indeterminate renal mass on other imaging.
- Active surveillance for indeterminate cystic renal mass, not a simple renal cyst
- Active surveillance for members with tuberous sclerosis and known angiomyolipomas (AML)
- Surveillance of members with Von Hippel Lindau at least every other year to assess for clear cell renal cell carcinoma to begin at age 16
- Follow-up for solid renal masses under 1 cm
- Active surveillance for renal cell carcinoma in patients with Birt-Hogg syndrome.

Spleen

- Incidental findings of the spleen that are indeterminate on other imaging.

Evaluation of a suspected or known hernia

- Abdominal/pelvic pain suspected to be due to hernia when physical exam and prior imaging is non-diagnostic or equivocal or if requested as a preoperative study and limited to the abdomen
- Hernia with suspected complications (e.g., bowel obstruction or strangulation, or non-reducible)
- Confirming the diagnosis of a recurrent hernia when ultrasound is negative or non-diagnostic
- Complex ventral hernia that is ≥ 10 cm for pre-operative planning.

Evaluation of known or suspected vascular disease (e.g., aneurysms, hematomas)

- Evidence of vascular abnormality identified on imaging studies and limited to the abdomen.

Pre-operative evaluation

- For abdominal surgery or procedure.

Post-operative/procedural evaluation

- Follow-up of known or suspected post-operative complication involving only the abdomen

- A follow-up study to evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed.

Pelvic CT

Indications for Pelvic CT

Pelvic pain for unknown etiology

- CT after initial workup is inconclusive and must include results of the following;
  - Initial imaging, such as ultrasound, endoscopy study or x-ray; **AND**
  - Appropriate laboratory testing.
- Acute pelvic pain in a member over the age of 65.

Initial staging of prostate cancer

- High Risk and above (T3a or higher, PSA >20, Gleason 8-10)
- Intermediate Risk (T2b-T2c or PSA 10-20 or Gleason 7) when Nomogram predicts >10% probability of lymph node involvement.

Known prostate cancer for workup of recurrence and response to treatment when there is a contraindication for MRI

- Initial treatment by radical prostatectomy:
  - Failure of PSA to fall to undetectable levels or PSA detectable and rising on at least 2 subsequent determinations
- Initial treatment radiation therapy:
  - Post radiation therapy rising PSA or positive digital exam and is candidate for local therapy.

Evaluation of suspicious known mass/tumors

- Initial evaluation of suspicious pelvic masses/tumors found only in the pelvis by physical exam and ultrasound has been performed or for further evaluation of abnormality seen on ultrasound (US) or when US would be inconclusive
- Evaluation of abnormality seen on ultrasound (US) or when US would be inconclusive
- Surveillance: One follow-up exam to ensure no suspicious change has occurred in a tumor in the pelvis. No further surveillance CT unless tumor(s) are specified as highly suspicious, or change was found on exam or last follow-up imaging
- Initial staging of known cancer
- Follow-up of known cancer (surveillance)

- Follow-up of known cancer of member undergoing active treatment within the past year.
- Known cancer with suspected pelvis metastasis.

Evaluation of suspected infection or inflammatory disease

- Suspected perianal fistula or occult anorectal abscess
- Suspected infection in the pelvis
- CT cystourethrography (CTCUG) in the preoperative setting
- Suspected urethral stricture or periurethral pathology.

Evaluation of known infection or inflammatory disease follow-up

- Known infection that is clinically suspected to have created an abscess in the pelvis that requires re-evaluation
- History of fistula limited to the pelvis that requires re-evaluation or is suspected to have recurred
- Members with recurrent fistula in anal or perianal Crohn's disease
- Abnormal fluid collection seen on prior imaging that needs follow-up evaluation and limited to the pelvis.

Evaluation of suspected inflammatory bowel disease or follow-up (includes CT enterography (CTE), abdomen CT/CTE)

- Suspected inflammatory bowel disease (Crohn's disease or ulcerative colitis) with abdominal pain and one of the following:
  - Chronic diarrhea
  - Bloody diarrhea
- High clinical suspicion after complete work up including endoscopy with biopsy
- CT enterography (CTE) if CT or MRI of the abdomen and pelvis are inconclusive
- Known inflammatory bowel disease (Crohn's or ulcerative colitis) with signs/symptoms (e.g., abdominal pain, diarrhea, or hematochezia) requiring re-evaluation or for monitoring therapy.

Suspected or known hernia

- Pelvic pain due to a suspected hernia when physical exam and prior imaging are non-diagnostic or equivocal or if requested as a preoperative study
- Confirming the diagnosis of a recurrent hernia when ultrasound is negative or non-diagnostic
- Hernia with suspected complications (e.g., bowel obstruction or strangulation, or non-reducible).

Evaluation of known or suspected vascular disease (e.g., aneurysms, hematomas)

- Evidence of vascular abnormality identified on imaging studies and limited to the pelvis
- Evaluating pelvic extent of aortic aneurysm
- Evaluation of suspected or known aneurysms limited to the pelvis
    - Suspected or known iliac artery aneurysm >2.5 cm and equivocal or indeterminate ultrasound results
    - Prior imaging (e.g. ultrasound) demonstrating iliac artery aneurysm > 2.5cm in diameter
    - Suspected complications of known aneurysm as evidenced by clinical findings such as new onset of pelvic pain
    - Follow up of iliac artery aneurysm: Every three (3) years for diameter 2.0-2.9 cm and annually for 3.0-3.4. If >3.5cm, < six (6) month follow up (and consider intervention).
- Scheduled follow-up evaluation of aortoiliac endograft or stent
    - Routine, baseline study (post-op/intervention) is warranted within 1-3 months
    - Asymptomatic at six (6) month intervals, for one (1) year, then annually
    - Symptomatic/complications related to stent graft-more frequent imaging may be needed.

Musculoskeletal indications

- Known or suspected aseptic/avascular necrosis of hip(s)
- Sacroiliitis (infectious or inflammatory) after completion of initial x-ray
- Sacroiliac joint dysfunction and there is:
    - Persistent back and/or sacral pain unresponsive to four (4) weeks of conservative treatment, received within the past six (6) months, including physical therapy or physician supervised home exercise program (HEP).

Evaluation of trauma

- Evaluation of trauma with lab or physical findings of pelvic bleeding
- Evaluation of physical or radiological evidence of complex or occult pelvis fracture or for pre-operative planning of complex pelvic fractures.

Other indications for pelvic CT

- Assessment of pelvic congestion syndrome when findings on ultrasound are indeterminate
- Diffuse, unexplained lower extremity edema with negative or inconclusive ultrasound
- Evaluation of suspected May-Thurner syndrome
- Evaluation of an isolated right varicocele with additional signs and symptoms (e.g., jaundice, lymphadenopathy, night sweats or weight loss) that suggest malignancy or suspicious prior imaging

- To provide an alternative to initial or follow-up of an indeterminate or inconclusive finding on ultrasound and MRI cannot be performed
- To locate an intrauterine device after ultrasound and plain x-ray are equivocal or non-diagnostic (imaging of the abdomen may also be indicated)
- Diagnosis or to guide treatment of urachal anomalies when ultrasound is non-diagnostic.

Pre-operative evaluation

- Diagnostic purposes prior to pelvic surgery or procedure.

Post-operative/procedural evaluation

- Follow-up of known or suspected post-operative complication involving the hips or the pelvis
- A follow-up study to evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed.

Abdomen/Pelvic CT

Indications for Abdomen/Pelvic CT

Abdominal and pelvis pain for unknown etiology

- CT after initial workup is inconclusive and must include results of the following;
  - Initial imaging, such as ultrasound, endoscopy study or x-ray; **AND**
  - Appropriate laboratory testing.
- Acute pelvic pain in a member over the age of 65.

Evaluation of suspicious or known mass/tumors (Unconfirmed diagnosis of cancer) for further evaluation of indeterminate or questionable findings

- Initial evaluation of suspicious masses/tumors found by physical exam or imaging study
- No evidence of an unknown primary
- Surveillance: One follow-up exam to ensure no suspicious change has occurred in a tumor in the abdomen and pelvis. No further surveillance CT unless tumor(s) are specified as highly suspicious or a change was found on the last follow-up CT, new/changing sign/symptoms or abnormal lab values
- Abnormal incidental abdominopelvic lymph nodes when follow-up is recommended based on prior imaging
- Follow-up of mesenteric panniculitis or lymphadenitis when another diagnosis is suspected after initial imaging or there is a failure of symptom resolution.

Evaluation of known cancer (surveillance)

- Initial staging of known cancer
    - Follow-up of known cancer of member undergoing active treatment within the past year
    - Known cancer with suspected abdominal/pelvic metastasis

Prostate cancer (imaging is indicated for the following scenarios (Pelvis CT +/- Abdomen))

Initial staging

- High risk and above (T3a or higher, PSA >20‡ , Gleason 8-10)
- Intermediate Risk (T2b-T2c or PSA 10-20‡ or Gleason 7) when Nomogram predicts >10% probability of lymph node involvement.

Workup of recurrence and/or response to treatment

- Initial treatment by radical prostatectomy with failure of PSA to fall to undetectable levels or PSA detectable and rising on at least 2 subsequent determinations
- Initial treatment radiation therapy with post-RT rising PSA or positive digital exam and is candidate for local therapy.

Evaluation of suspected infection or inflammatory disease

- Suspected diverticulitis or acute appendicitis for initial imaging along with one of the following:
    - Elevated WBC; **OR**
    - Fever; **OR**
    - Anorexia; **OR**
    - Nausea and vomiting.
- Suspected appendicitis in child (< age 18) when ultrasound is inconclusive or cannot be completed due to body habitus or inability to cooperate
- Ultrasound or MRI in pregnant women with suspected appendicitis
- Acute non-localized abdominal pain and fever, no recent surgery
- Suspected retroperitoneal fibrosis after labs and inconclusive ultrasound.

Follow-up evaluation of known infection or inflammatory disease involving the abdomen and pelvis

- Complications of diverticulitis with severe abdominal/pelvic pain or severe tenderness or mass not responding to antibiotic treatment (prior imaging study is not required for diverticulitis diagnosis)
- Pancreatitis by history (including pancreatic pseudocyst) with continued abdominal pain, early satiety, nausea, vomiting or signs of infection greater than 4 weeks from initial presentation when there is reason to suspect extensive disease extending into the pelvis (otherwise CT abdomen)
- Known inflammatory bowel disease, (Crohn’s or ulcerative colitis) with recurrence or worsening signs/symptoms requiring re-evaluation or for monitoring therapy

- Known infection that is clinically suspected to have created an abscess in the abdomen or pelvis
- History of fistula that requires re-evaluation or is suspected to have recurred in the abdomen or pelvis
- Abnormal fluid collection seen on prior imaging that needs follow-up evaluation
- Follow-up for peritonitis (from any cause) if abdominal/pelvic pain and tenderness to palpation is present, and at least one of the following:
    - Rebound, guarding or rigid abdomen; **OR**
    - Severe tenderness to palpation present over entire abdomen
- Known retroperitoneal fibrosis to determine extent of disease.

Suspected peritonitis (from any cause) if abdominal pain and tenderness to palpation is present, and at least one of the following:

- Rebound, guarding (not voluntary) or rigid abdomen; **OR**
- Severe tenderness to palpation present over entire abdomen.

Suspected or known acute pancreatitis when there is a reason to suspect extension beyond abdomen, into pelvis

- Suspected acute pancreatitis with pain and abnormal amylase and lipase and < 48-72 hours, when ultrasound is inconclusive
- Suspected acute pancreatitis with atypical signs and symptoms, and when a diagnosis other than pancreatitis may be possible
- Severe acute pancreatitis, 72-96 hours after onset of symptoms
- Pancreatitis by history, (including pancreatic pseudocyst) with abdominal pain suspicious for worsening, or re-exacerbation
- Known necrotizing pancreatitis requiring follow-up.

Suspected inflammatory bowel disease (includes CT enterography)

- Suspected inflammatory bowel disease (Crohn's disease or ulcerative colitis) with abdominal pain and one of the following:
    - Chronic diarrhea
    - Bloody diarrhea
- High clinical suspicion after complete work up including endoscopy with biopsy.

Evaluation of hematuria when stone is not suspected (includes CT urography (CTU))

- Painless, microscopic hematuria (should be documented by greater than 3 red blood cells (RBC) per high-power field on urinalysis and not based on a dipstick test)

- Non-infectious macroscopic or gross hematuria (urinalysis (UA) must be negative for infection, however, UA can be negative for blood, if hematuria is witnessed by member or provider).

Evaluation of known or suspected kidney or ureteral stone in a member with acute flank pain

- CT is indicated if one or more of the following is present:
  - Atypical presentation (i.e. fever or WBC >15,000)
  - Inadequate analgesia
  - Abnormal or indeterminate ultrasound (with findings needing further evaluation with CT)
- Ultrasound (US) should be performed prior to CT in the following situations (CT is needed only if US is inconclusive or has findings that need further imaging):
  - Pediatric and pregnant members (magnetic resonance urography (MRU) preferred if further imaging indicated)
  - Typical presentation without signs/symptoms of infection in a member < 65
- CT for acute abdominal pain for members > 65.

Preoperative stone planning

- CT is indicated when no imaging has been done in the last 30 days, or if passage or movement of stones will change management.

Postoperative stone follow-up CT

- Symptomatic members following:
  - Ureteroscopic extraction of an intact stone
  - Ureteroscopy with lithotripsy/fragmentation of a radiolucent stone
- Further evaluation of hydronephrosis seen on post-operative ultrasound (following ureteroscopy or ESWL).

Evaluation of pyelonephritis for the following

- When other imaging such as ultrasound is abnormal
- For a member who remains febrile after 72 hours of treatment or symptoms resolve and then recur within 2 weeks
- For a complicated member with history of diabetes, stone disease, prior urinary tract surgery, or who is immunocompromised and is not responding to treatment.

Evaluation of complicated urinary tract infection (UTI) (see above section for pyelonephritis)

- Women: UTI is considered complicated (and therefore imaging (ultrasound and/or CT) is warranted) in any of the following:
    - Immunocompromised host
    - Persistence of bacteria or symptoms after culture specific treatment
    - Rapid recurrence with same bacteria after treatment
    - Multidrug resistant bacteria
    - When there is suspicion of renal calculi or obstruction
- Men: Any UTI is considered complicated due to high likelihood of anatomic abnormalities, therefore imaging (ultrasound and/or CT) is warranted.

Suspected small bowel obstruction (when there is a clinical suspicion)

Suspected colonic or mesenteric ischemia

Suspected small bowel bleeding when endoscopy and capsule endoscopy are inconclusive or negative

Known or suspected abdominal aneurysm

- Known or suspected aneurysm > 2.5 cm and equivocal or indeterminate ultrasound results
- Suspected complications of known aneurysm as evidenced by signs/symptoms such as new onset of abdominal or pelvic pain
- Scheduled follow-up evaluation of aortoiliac endograft or stent
- Evaluation of endovascular/interventional abdominal vascular procedures for luminal patency versus restenosis due to conditions such as atherosclerosis, thromboembolism and intimal hyperplasia
- Evaluation of post-operative complications (e.g. pseudoaneurysms, related to surgical bypass grafts, vascular stents and stent-grafts in the peritoneal cavity)
- Follow-up for post-endovascular repair (EVAR) or open repair of abdominal aortic aneurysm (AAA) or abdominal extent of iliac artery aneurysms. Routine, baseline study (post-op/intervention) is warranted within 1-3 months
    - Asymptomatic at six (6) month intervals, for one (1) year, then annually
    - Symptomatic/complications related to stent graft- more frequent imaging may be needed.
- Follow-up study may be needed to help evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed for the type and area(s) requested.

Evaluation of trauma

Evaluation of a suspected or known hernia

- Abdominal/pelvic pain suspected to be due to hernia when physical exam and prior imaging is non-diagnostic or equivocal or if requested as a preoperative study
- Hernia with suspected complications (e.g., bowel obstruction or strangulation, or non-reducible)
- Confirming the diagnosis of a recurrent hernia when ultrasound is negative or non-diagnostic
- Complex ventral hernia that is ≥ 10 cm for pre-operative planning.

Pre-operative evaluation

- For abdominal/pelvic surgery or procedure.

Post-operative/procedural evaluation

- Follow-up of known or suspected post-operative complication
- A follow-up study to evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed.

BILLING/CODING INFORMATION:

CPT Coding:

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
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
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
76380	Computed tomography, limited or localized follow-up study

REIMBURSEMENT INFORMATION:

Reimbursement for computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) performed on the same anatomical area is limited to two (2) computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) within a 6-month period. Computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) in excess of two (2) computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) within a 6-month period are subject to medical review of documentation to support medical necessity. Documentation should include radiology reason

for study, radiology comparison study-date and time, radiology comparison study observation, radiology impression, and radiology study recommendation.

Reimbursement for computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) for an oncologic condition undergoing active treatment or active treatment completed within the previous 12 months on the same anatomical area is limited to four (4) computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) within a 12-month period. Computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) for an oncologic condition in excess of four (4) computed tomography (72192 – 72194, 74150 – 74170, and 74176 – 74178, 76380) within a 12-month period are subject to medical review of documentation to support medical necessity. Documentation should include radiology reason for study, radiology comparison study-date and time, radiology comparison study observation, radiology impression, and radiology study recommendation.

Re-imaging or additional imaging of the abdomen, pelvis and abdomen and pelvis due to poor contrast enhanced exam or technically limited exam is the responsibility of the imaging provider.

LOINC Codes:

The following information may be required documentation to support medical necessity: physician history and physical, physician progress notes, plan of treatment and reason for computed tomography (CT) of the abdomen and pelvis.

Documentation Table	LOINC Codes	LOINC Time Frame Modifier Code	LOINC Time Frame Modifier Codes Narrative
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Attending physician progress note	18741-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Plan of treatment	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology reason for study	18785-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study-date and time	18779-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study observation	18834-2	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim

Radiology-study observation	18782-3	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology-impression	19005-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology study-recommendation (narrative)	18783-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim

PROGRAM EXCEPTIONS:

Federal Employee Plan (FEP): Follow FEP guidelines.

Medicare Advantage products:

No Local Coverage Determination (LCD) were found at the time of the last guideline reviewed date.

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Computed Tomography, (220.1) located at cms.gov.

DEFINITIONS:

Diverticulitis: inflammation of a diverticulum, especially inflammation related to colonic diverticula, which may undergo perforation with abscess formation.

Hematoma: a localized collection of blood, usually clotted, in an organ, space, or tissue, usually due to a break in the wall of a blood vessel.

Pancreatitis (acute): pancreatitis with sudden onset, fever, abdominal pain, nausea, vomiting, tachycardia, and often increased blood levels of pancreatic enzymes. It may be accompanied by complications such as hemorrhaging or necrosis.

Pancreatic pseudocyst: a cystic collection of fluid and necrotic debris whose walls are formed by the pancreas and nearby organs. It occurs as a complication of acute pancreatitis and may subside spontaneously or become secondarily infected and develops into an abscess.

RELATED GUIDELINES:

Computed Tomography to Detect Coronary Artery Calcification, 04-70450-02
Computed Tomographic Angiography (CTA), 04-70450-03
Computerized Axial Tomography (CT), Head/Brain 04-70450-18
Computerized Axial Tomography (CT), Temporal Bone/Mastoid & Maxillofacial 04-70450-19
Computerized Axial Tomography (CT), of the Neck for Soft Tissue Evaluation 04-70450-20
Computerized Axial Tomography (CT), Thorax (Chest) 04-70450-21
Computerized Axial Tomography (CT), Spine (Cervical, Thoracic, Lumbar) 04-70450-23
Computerized Axial Tomography (CT), Extremity (Upper & Lower) 04-70450-24
Whole Body Computed Tomography (CT) Scanning, 04-70450-25

OTHER:

Other name used to report computed tomography (CT):

CAT scanning

Pediatric Examinations

The use of CT in pediatric examinations requires assessment of the risks, benefits and use of the studies. The lowest possible radiation dose consistent with acceptable diagnostic image quality should be used in pediatric examinations. Radiation doses should be determined periodically based on a reasonable sample of pediatric examinations. Technical factors should be appropriate for the size and the age of the child and should be determined with consideration of parameters (e.g., characteristics of the imaging system, organs in the radiation field, lead shielding).

REFERENCES:

1. American College of Radiology (ACR) Appropriateness Criteria® Chronic Hip Pain, Revised 2016.
2. American College of Radiology (ACR) Appropriateness Criteria® Stress/Insufficiency Fracture, Including Sacrum, Excluding Other Vertebrae, Revised 2016.
3. ACR-SABI-SAR Practice Guideline for the Performance of Computed Tomography (CT) of the Abdomen and Computed Tomography (CT) of the Pelvis, Revised 2021.
4. Armerding MD, Rubin GD, Beaulieu CF et al. Aortic aneurismal disease: assessment of stent-graft treatment-CT versus conventional angiography. Radiology 2000; 215: 138-146.
5. Balthazar EJ. Acute pancreatitis: assessment of severity with clinical and CT evaluation. Radiology 2002; 223: 603-613.
6. Bookwalter CA, VanBuren WM, Neisen MJ, et al. Imaging Appearance and Nonsurgical Management of Pelvic Venous Congestion Syndrome. Radiographics. 2019 Mar-Apr;39(2):596-608.
7. Boortz HE, Margolis DJ, Ragavendra N, et al. Migration of intrauterine devices: radiologic findings and implications for patient care. Radiographics. 2012 Mar-Apr;32(2):335-52.
8. Bourgioti C, Chatoupis K, Moulopoulos LA. Current imaging strategies for the evaluation of uterine cervical cancer. World J Radiol. 2016 Apr 28;8(4):342-54.
9. Brancatelli G, Federle MP, Grazioli L et al. Focal nodular hyperplasia: CT findings with emphasis on multiphasic helical CT in 78 patients. Radiology 2001; 219: 61-68.
10. Cannistra SA. Cancer of the ovary. The New England Journal of Medicine 2004; 351: 2519-2529.
11. Cartwright SL, Knudson MP. Diagnostic imaging of acute abdominal pain in adults. Am Fam Physician. 2015 Apr 1;91(7):452-9.
12. Chaikof EL, Dalman RL, Eskandari MK et al. The Society for Vascular Surgery practice guidelines on the care of patients with an abdominal aortic aneurysm. J Vasc Surg. 2018 Jan;67(1):2-77.e2.
13. Dhatt HS, Behr SC, Miracle A, et al. Radiological Evaluation of Bowel Ischemia. Radiol Clin North Am. 2015 Nov;53(6):1241-54.
14. European Study Group on Cystic Tumours of the Pancreas. European evidence-based guidelines on pancreatic cystic neoplasms. Gut. 2018 May;67(5):789-804.

15. Expert Panel on Gastrointestinal Imaging, Bashir MR, Horowitz JM, Kamel IR et al. ACR Appropriateness Criteria® Chronic Liver Disease. J Am Coll Radiol. 2020 May;17(5S):S70-S80.
16. Goggins M, Overbeek KA, Brand R, et al. International Cancer of the Pancreas Screening (CAPS) consortium. Management of patients with increased risk for familial pancreatic cancer: updated recommendations from the International Cancer of the Pancreas Screening (CAPS) Consortium. Gut. 2020 Jan;69(1):7-17.
17. Grazioli L, Federle MP, Brancatelli G et al. Hepatic adenomas: imaging and pathologic findings. Radiographics 2001; 21: 877-892.
18. Greco FA. Cancer of unknown primary site: improved patient management with molecular and immunohistochemical diagnosis. Am Soc Clin Oncol Educ Book. 2013:175-81.
19. Halligan S, Parker SG, Plumb AAO, et al. Use of imaging for pre- and post-operative characterisation of ventral hernia: systematic review. Br J Radiol. 2018 Sep;91(1089):20170954.
20. Hopper KD, Singapuri K, Finkel A. Body CT and oncologic imaging. Radiology 2000; 215:27-40.
21. Jeong YY, Kang HK, Chung TW et al. Uterine cervical carcinoma after therapy: CT and MR imaging findings. Radiographics 2003; 23: 969-981.
22. Kamilaris CDC, Stratakis CA. Multiple Endocrine Neoplasia Type 1 (MEN1): An Update and the Significance of Early Genetic and Clinical Diagnosis. Front Endocrinol (Lausanne). 2019 Jun 11;10:339.
23. Kim T, Federle MP, Baron RL et al. Discrimination of small hepatic hemangiomas from hypervascular malignant tumors smaller than 3 cm with three-phase helical CT. Radiology 2001; 219: 699-706.
24. Kirkpatrick ID, Greenberg HM. Evaluating the CT diagnosis of Clostridium difficile colitis: should CT guide therapy? American Journal of Roentgenology 2001; 176: 635-639.
25. Leppäniemi A, Tolonen M, Tarasconi A et al. WSES guidelines for the management of severe acute pancreatitis. World J Emerg Surg. 2019 Jun 13;14:27.
26. Lichtenstein GR, Loftus EV, Isaacs KL, et al. ACG Clinical Guideline: Management of Crohn's Disease in Adults. Am J Gastroenterol. 2018 Apr;113(4):481-517.
27. Macedo TA. Stanson AW, Oderich GS et al. Infected aortic aneurysms: imaging findings. Radiology 2004; 231: 250-257.
28. NCCN Clinical Practice Guidelines in Oncology (NCCN) Prostate Cancer, Version 2.2022.
29. Paulson EK, Kalady MF, Pappas TN. Suspected appendicitis. The New England Journal of Medicine 2003; 348: 236-242.
30. Rozenblit AM, Patlas M, Rosenbaum AT. Detection of endoleaks after endovascular repair of abdominal aortic aneurysm: value of unenhanced and delayed helical CT acquisitions. Radiology 2003; 227: 426-433.
31. Teichman JMH. Acute renal colic from ureteral calculus. The New England Journal of Medicine 2004; 350: 684-693.
32. Tolia AJ, Landis R, Lamparello P et al. Type II endoleaks after endovascular repair of abdominal aortic aneurysms: natural history. Radiology 2005; 235: 683-686.

33. US Preventive Services Task Force, Owens DK, Davidson KW, Krist AH, et al. Screening for Abdominal Aortic Aneurysm: US Preventive Services Task Force Recommendation Statement. JAMA. 2019 Dec 10;322(22):2211-2218.
34. Vagvala SH, O'Connor SD. Imaging of abnormal liver function tests. Clin Liver Dis (Hoboken). 2018 Jun 5;11(5):128-134.
35. Wanhainen A, Verzini F, Van Herzeele I, et al. Editor's Choice - European Society for Vascular Surgery (ESVS) 2019 Clinical Practice Guidelines on the Management of Abdominal Aorto-iliac Artery Aneurysms. Eur J Vasc Endovasc Surg. 2019 Jan;57(1):8-93.
36. Wiesner W. Khurana B, Ji H, et al. CT of acute bowel ischemia. Radiology 2003; 226: 635-650.
37. Wollin DA, Makarov DV. Guideline of Guidelines: Imaging of Localized Prostate Cancer. BJU Int. 2015 Oct;116(4):526-30.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 07/24/24.

GUIDELINE UPDATE INFORMATION:

09/15/09	New Medical Coverage Guideline.
01/01/10	Revised BCBSF Radiology Management program exception section and updated the references.
01/01/11	Annual HCPCS coding update: added 74176, 74177 and 74178.
08/15/11	Scheduled review. Updated position statement. Added 76380. Revised limitation to two (2) within a 6-month period. Updated references.
10/01/11	Revision; formatting changes.
05/15/12	Revised and expanded position statement for: abdomen; appendicitis (added acute), diverticulitis, gastroparesis (added diabetic), infectious or inflammatory process, inflammatory bowel disease and added vascular abnormality. Revised and expanded position statement for: abdomen-other, added persistent abdominal pain, partial small bowel obstruction (complete or high-grade) and tumor evaluation. Revised and expanded position statement for: pelvis (appendicitis (added acute), and added organ enlargement and vascular abnormality. Revised and expanded position statement for: pelvic-other, added tumor evaluation. Revised and expanded position statement for abdomen and pelvis CT combination: adrenal mass, appendicitis (added acute), added organ enlargement and vascular abnormality. Revised and expanded position statement for: abdomen and pelvic CT combination-other, added tumor evaluation. Deleted but is not limited to. Updated references.
11/15/13	Scheduled review; MCG subject changed to “Computed Tomography Abdomen and Pelvis”. Added; aorta aneurysm, cholecystitis, diverticulitis, hepatitis C/hepatoma, inflammatory bowel disease (recurrence), pancreatitis, fistula, peritonitis, retroperitoneal hematoma or hemorrhage. Renal colic (add to abdomen, pelvis and abdomen/pelvis), renal mass (add to pelvis and abdomen/pelvis), prostate cancer (add

	to pelvis); add/revise indications: cancer, infection, and mass/tumor. Updated definitions, program exceptions and reference sections.
11/15/14	Scheduled review. No change to position statements.
12/15/14	Added diverticulitis (suspected or known) to abdomen and pelvis CT combination.
03/15/18	Revision; revised position statements (abdomen, pelvis, abdomen and pelvis). Updated definitions and references.
06/15/18	Added statement for Egrifta.
11/15/19	Revised position statements (abdomen, pelvis, abdomen and pelvis CT). Updated references.
04/15/20	Review/revision. Revised position statement and expand criteria for (abdomen, pelvis, abdomen and pelvis CT). Updated references.
03/15/22	Review/revision. Revised position statement and expand criteria for (abdomen, pelvis, abdomen and pelvis CT). Updated references.
05/20/22	Revision; revised for clarity abdomen/pelvic CT: evaluation of suspicious or known mass/tumors, added “un” to confirmed (unconfirmed). Revised pancreas. Updated references.
07/01/22	Revision to Program Exceptions section.
09/30/23	Review: position statements and references updated.
12/09/23	Revision; revised position statement.
08/15/24	Review; no change in position statement.