



Evolut Clinical Guideline 2004 for Abdomen Magnetic Resonance Imaging (MRI) with or without Magnetic Resonance Cholangiopancreatography (MRCP)

Guideline Number: Evolut_CG_2004	<u>Applicable Codes</u>	
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STATEMENT

General Information

- *It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*
- *Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations.*
- *The guideline criteria in the following sections were developed utilizing evidence-based and peer-reviewed resources from medical publications and societal organization guidelines as well as from widely accepted standard of care, best practice recommendations.*

Purpose

Abdomen Magnetic Resonance Imaging (MRI) generates images of the organs and structures within the abdomen without the use of ionizing radiation. Abdominal imaging begins at the diaphragm and extends to the umbilicus or iliac crests.

Special Note

There is not an Abdomen and Pelvis MRI combo (comparable to a Abdomen and Pelvis Computed Tomography (CT)); if imaging of both the abdomen and pelvis are indicated, two separate exams (and authorizations) are required (i.e., MRI Abdomen and MRI Pelvis).

Note: Magnetic Resonance Elastography (CPT 76391) for evaluation of hepatic fibrosis is not covered by this guideline; if this CPT code is managed for the health plan by Evolent, see Evolent Clinical Guideline 2038 for MR Elastography.

INDICATIONS

Organ Specific Imaging

Adrenal ⁽¹⁾

- Indeterminate adrenal lesion seen on prior imaging
- For follow up of known adrenal mass when a change in tumor is suspected by either imaging, laboratory evaluation and/or symptoms
- Adrenal mass < 4 cm incidentally discovered with benign characteristics (homogenous, regular borders, HU < 10), one follow-up at 6 months then annually x 2 years (no further

imaging if stable) ⁽²⁾

- Adrenal mass \geq 4 cm and no diagnosis of cancer, indicated for either pre-operative planning **OR** if surgery is not done, can repeat imaging in 6-12 months then as clinically indicated (if there is known malignancy, biopsy is typically the next step rather than surveillance imaging) ⁽²⁾
- See **Endocrine Disorders** for additional indications
- See **Imaging in Known Genetic Conditions** for additional screening indications

Liver

- Indeterminate liver lesion seen on prior imaging ⁽³⁾
- Elevated or rising AFP in patients at high risk for Hepatocellular Carcinoma (HCC) (high risk includes known cirrhosis and/or chronic hepatitis B, Asian males Hepatitis B carriers \geq 40 y, Asian female Hepatitis B carriers \geq 50 y, Hepatitis B carriers with positive family history of HCC and African and/or North American blacks with hepatitis B) ⁽⁴⁾
- Screening in patients at high risk for HCC (see above) every 6 months when prior ultrasound is insufficient to evaluate the liver due to steatosis/fatty liver or nodular liver
 - The finding of steatosis/fatty liver and/or nodular liver alone on an ultrasound report is insufficient; the report must specify that those findings prevent adequate visualization of the liver by ultrasound
 - **NOTE:** Magnetic Resonance Elastography (CPT 76391) for evaluation of hepatic fibrosis is not covered by this guideline; if this CPT code is managed for the health plan by Evolent, see Evolent Clinical Guideline 2038 for Magnetic Resonance Elastography (MRE)
- Prior to Y90 treatment
- Jaundice or abnormal liver function tests after equivocal or abnormal ultrasound ⁽⁵⁾
- Follow-up of suspected hepatocellular adenomas every 6-12 months for 2 years, then annually (sooner if change was noted on last imaging study) ^(6,7)
- Surveillance of patients with primary sclerosing cholangitis, every 6-12 months after the age of 20 ⁽⁸⁾
- Follow-up of focal nodular hyperplasia (FNH), repeat imaging in 6-12 months to ensure stability. Additional imaging beyond that is needed only if atypical features or diagnosis is still in question ⁽⁷⁾
- See **Imaging in Known Genetic Conditions** for additional screening indications

Biliary Tree ^(9,10)

- To confirm choledocholithiasis in patients in the acute setting after ultrasound has been completed

- Suspected choledochal cyst after ultrasound has been done
- Long-term postoperative surveillance for patients with history of choledochal cyst
- Post-surgical biliary anatomy and complications when Endoscopic Retrograde Cholangiopancreatography (ERCP) is not possible or contraindicated
- Assessment of benign or malignant biliary strictures
- Evaluation of biliary abnormalities (such as dilated bile duct) identified on prior imaging (e.g. ultrasound, CT or MRI) when there are symptoms and/or clinical concern for pancreaticobiliary disease
- Evaluation of pancreaticobiliary disease in pregnant patients after ultrasound has been done
- Jaundice or abnormal liver function tests after equivocal or abnormal ultrasound
- Evaluation of suspected congenital anomaly of the pancreaticobiliary tract, e.g., aberrant ducts, pancreas divisum or related complications

Pancreas

- Pancreatic cystic lesion found on initial imaging, approve for initial characterization of lesion ⁽¹¹⁾
- Follow-up for pancreatic cyst (including Intraductal Papillary Mucinous Neoplasm (IPMN)) as below ^(12,13):
 - Incidental and asymptomatic cysts <1.5 cm, **AND**:
 - Age < 65, image annually x 5 years, then every 2 years if stable
 - Age 65-79, imaging every 2 years x 5, then stop if stable
 - Cysts 1.5-1.9 cm with main pancreatic duct communication (MPD), image annually x 5 years, then every 2 years x 2, stop if stable at year 9
 - Cysts 2.0-2.5 cm with MPD communication, image every 6 months x 4, then annually x 2, then every 2 years x 3, stop if stable at year 10
 - Cysts 1.5-2.5 cm with **NO** MPD communication (or cannot be determined), image every 6 mos. x 4, then annually x 2 then every 2 years x 3, stop if stable at year 10
 - Cyst > 2.5 cm on surveillance (i.e., intervention has not been chosen), image every 6 mos. x 4, then annually x 2 years, then every 2 years x 3. Stop if stable at year 10
 - Patients > 80 years of age at presentation are imaged less frequently: image every 2 years x 2, stop if stable at year 4 (intervals are the same regardless of size if surveillance chosen)
 - Growth or suspicious change on a surveillance imaging scan may warrant more frequent surveillance
- Suspected new onset acute pancreatitis and **ALL** of the following:
 - Epigastric or upper abdominal pain

- Amylase and/or lipase is elevated or equivocal
- Ultrasound has been performed after symptom onset
- History of known pancreatitis with any **ONE** of the following:
 - Worsening abdominal pain
 - Sign/symptoms of infection (e.g. fever, elevated WBC)
 - Decline in clinical status (e.g. hypovolemia, organ failure, tachycardia, fever)
 - Severe presentation (e.g. fever, jaundice, elevated WBC, tachycardia)
- After confirmed diagnosis of exocrine pancreatic insufficiency (EPI), one-time imaging to exclude a secondary cause for EPI. (Imaging is not indicated for workup of suspected pancreatic insufficiency; fecal elastase level < 100 µg/g is consistent with EPI) ⁽¹⁴⁾
- See **Endocrine Disorders** for additional indications ⁽¹¹⁾
- See **Imaging in Known Genetic Conditions** for additional screening indications

Renal

- Indeterminate renal mass on other imaging ⁽¹⁵⁾
- Active surveillance for solid renal mass(es) at 6 and 12 months, then annually ⁽¹⁶⁾
NOTE: more frequent imaging may be indicated if a change in the mass was seen
- Active surveillance for follow-up of a Bosniak IIF, III and IV complex cystic renal lesion(s) ⁽¹⁷⁾:
 - Every 6 months for the first year then
 - Annually for 5 years if no progression
 - If progression or change is seen, then follow-up imaging may be indicated prior to the above intervals.
 - **NOTE:** Bosniak I and II cysts need no further follow-up. (Bosniak I cysts are simple non-enhancing cysts with thin walls, no septa, calcifications or solid components, Bosniak II cysts may contain thin septa, small or fine calcification, minimal enhancement and/or hyperdense and < 3 cm) ⁽¹⁸⁾
- Surveillance of known angiomyolipoma (AML) ^(19–21):
 - Size > 4 cm: Annually
 - Size 3-4 cm: Every 2 years
 - **NOTE:** if < 3 cm monitoring with advanced imaging (CT/MRI) is not needed unless the pt has known Tuberous Sclerosis
 - AML (any size) in an individual with known tuberous sclerosis (TSC): Annually (including at diagnosis) ^(16,19)
 - Post-embolization imaging for AML:

- One study within the first 6 months, then
- At one-year post-embolization
 - If stable, further imaging reverts to the above imaging frequency for monitoring (based on size and/or presence of known TSC) ^(22,23)
- Further evaluation of the urinary tract (i.e. MR urography with Pelvis MRI) after indeterminate ultrasound and CT is contraindicated or cannot be performed
- See **Imaging in Known Genetic Conditions** for additional indications

Spleen

- Incidental findings of the spleen that are indeterminate on ultrasound or CT imaging ^(24,25)
- See **Imaging in Known Genetic Conditions** for additional indications

Endocrine Disorders ⁽²⁾

- For further evaluation of suspected adrenal tumors and/or endocrine disorders when there is clinical and laboratory evidence to suggest an abdominal source ⁽²⁶⁾
 - Suspected adrenocortical carcinoma
 - Elevated adrenal androgens (DHEA-S, androstenedione, testosterone, 17-hydroxyprogesterone)
 - Cushing's Syndrome:
 - ACTH < 5 following dexamethasone suppression
 - ACTH 5-20 (i.e. indeterminate) with CRH/desmopressin stimulation test and ACTH < 5 (post-stimulation)
 - Hyperaldosteronism: Aldosterone > 20 (or Aldosterone: Renin ratio > 20) and Low Plasma Renin Activity
 - Gastrinoma: Elevated serum gastrin
 - GI Carcinoid: Elevated 24-hour urine 5-HIAA or elevated plasma 5-HIAA
 - Glucagonoma: Elevated serum glucagon
 - Hypoglycemia: One of the following:
 - Elevated serum insulin, pro-insulin and c-peptide ALL drawn during a period of hypoglycemia (72 hour fast) (i.e. concern for insulinoma)
 - Low serum insulin, low C-peptide and/or elevated IGF-2:IGF-1 ratio
 - Hypercalcemia: Elevated serum calcium, low-normal PTH, high PTHrP **AND** bone imaging (bone scan) does not reveal a source
 - Insulinoma: Elevated serum insulin, pro-insulin and c-peptide **ALL** drawn during a period of hypoglycemia (72 hour fast)
 - Pheochromocytoma/Paraganglioma: Elevated plasma or urine metanephrines and/or

normetanephrines

- PPoma: Elevated serum pancreatic polypeptide
- Somatostatinoma: Elevated serum somatostatin
- VIPoma: Elevated serum VIP

Inflammatory Bowel Disease (27,28)

- For evaluation of Inflammatory Bowel Disease (IBD) such as Crohn's or Ulcerative Colitis (includes MR Enterography)
 - For suspected inflammatory bowel disease after complete work up including physical exam, labs, and recent colonoscopy
 - Known inflammatory bowel disease with recurrence or worsening signs/symptoms requiring re-evaluation or for monitoring therapy

Evaluation of Infection and Inflammation (29,30)

Fistula

- For history of fistula in the abdomen that requires re-evaluation or is suspected to have recurred

Infection and Inflammation (31,32)

When CT is contraindicated or cannot be performed:

- Any known infection that is clinically suspected to have created an abscess in the abdomen
- Abnormal fluid collection limited to the abdomen seen on prior imaging that needs follow-up evaluation
- Suspected peritonitis when abdominal pain and tenderness to palpation are present, and at **LEAST** one of the following:
 - Rebound, guarding or rigid abdomen
 - Severe tenderness to palpation over the entire abdomen
- Complications of diverticulitis (diagnosed either clinically or by imaging) with severe abdominal pain or severe tenderness or mass, not responding to antibiotic treatment)

Hernia (33)

- Suspected hernia and CT is inconclusive, contraindicated or cannot be performed:
 - Occult, incisional, recurrent or epigastric hernia when physical exam **AND** prior ultrasound is non-diagnostic or equivocal
- Known or suspected hernia with suspected complications based on one or more of the following:

- Symptoms such as severe pain, vomiting, diarrhea or blood in stool
- Exam findings such as inability to reduce hernia, severe tenderness, guarding, rebound
- Complication is suggested on prior imaging ⁽³⁴⁾
- Known abdominal hernia, imaging is needed for surgical planning and clinical reason MRI is being requested rather than CT

Other Indications ⁽³⁵⁾

For any of the following:

- To locate a pheochromocytoma once there is clear biochemical evidence ⁽³⁶⁾
- Prior to liver transplantation; may repeat studies immediately prior to transplantation with known HCC, primary sclerosing cholangitis (PSC), or cholangiocarcinoma
- Prior to solid organ transplantation
- Suspected pelvic congestion syndrome (including May-Thurner and nutcracker syndromes) when ultrasound is indeterminate (no contraindication to CT is needed) ⁽³⁷⁾

For any of the following:

When CT is contraindicated or cannot be performed:

- Persistent abdominal/pelvic pain not explained by previous imaging (i.e. ultrasound or scope) and laboratory evaluation
- Acute abdominal pain and age > 65
- For fever of unknown origin (temperature of ≥ 101 degrees for a minimum of 3 weeks) after **ALL** of the following have been completed and a source is not identified: complete blood count with differential, three sets of blood cultures, chest x-ray, complete metabolic panel, urinalysis, ESR, ANA, RA, serologic testing (EBV, EMV, HIV and hepatitis), tuberculin test. ⁽³⁸⁾
- Any B-symptoms of fevers more than 101 degrees, drenching night sweats, or unexplained weight loss of more than 10% of body weight over 6 months with documented concern for lymphoma/malignancy ⁽³⁹⁾
- Weight loss, **ONE** of the following:
 - Clinically significant unintentional weight loss i.e., $\geq 5\%$ of body weight in less than 12 months (or $\geq 2\%$ in one month), with signs or symptoms suggestive of an abdominal cause (see Background) **OR**
 - Ongoing unexplained clinically significant weight loss i.e., $\geq 5\%$ of body weight in less than 12 months (or $\geq 2\%$ in one month) ⁽⁴⁰⁾ after initial workup (Chest x-ray, age appropriate cancer screening (such as colonoscopy and mammography) and labs (including CBC, CMP, HbA1C, TSH, stool hemoccult, ESR/CRP, HIV, Hepatitis C)) has been completed, no cause identified, and second visit documenting further decline in weight ⁽⁴¹⁾

- Suspected or known retroperitoneal fibrosis after complete workup and ultrasound to determine extent of disease ⁽⁴²⁾
- Suspected paraneoplastic syndrome (including dermatomyositis) with high suspicion of abdominal malignancy and appropriate workup has been done
- For acute unilateral (or asymmetric) lower extremity edema with negative or inconclusive doppler US ⁽⁴³⁾
- For chronic (greater than 3 months) unilateral (or asymmetric) lower extremity edema and suspicion of malignant cause ⁽⁴³⁾
- Further evaluation of a new onset or non-reducible varicocele ⁽⁴⁴⁾
- Prior to Bone Marrow Transplant (BMT) ^(45,46)
- Follow-up of abnormal lymph nodes with no prior history of malignancy
 - Follow-up imaging at 3 months ⁽⁴⁷⁾

Known Malignancy ⁽⁴⁸⁾

Initial Staging or Recurrence

- Indicated for further evaluation of indeterminate findings (including for suspected liver metastases) identified on other imaging
- Indicated for initial staging for the following malignancies:
 - Biliary Tract Cancers ⁽⁴⁹⁾
 - Primary Liver Cancers ⁽⁵⁰⁾
 - Sarcoma in the abdomen (soft tissue or bone) ^(51,52)
 - Uveal Melanoma ⁽⁵³⁾

Restaging

- Indicated during active treatment (every 2-3 cycles of chemo or immunotherapy, following radiation and/or after surgery) for the following malignancies:
 - Any malignancy with known or suspected liver metastases ⁽⁵⁴⁾
 - Biliary Tract Cancers ⁽⁴⁹⁾
 - Primary Liver Cancers ⁽⁵⁰⁾
 - Renal Cell Carcinoma ⁽¹⁶⁾
 - Sarcoma in the abdomen (soft tissue or bone) ^(51,52)
 - Uveal Melanoma ⁽⁵³⁾
- For further evaluation of known liver metastases including prior to liver directed therapy or to assess treatment response

- **NOTE:** In patients undergoing other imaging (such as Positron Emission Tomography (PET) or CT) for active malignancies and there are either known liver metastases in need of restaging or indeterminate liver lesions on other imaging, a dedicated liver MRI is considered complimentary **NOT** overlapping and can be approved in addition to PET if the patient otherwise meets criteria for PET approval (see Evolent Clinical Guideline 2046 for Positron Emission Tomography (PET) Scan, PET Scan with CT for Attenuation Guideline for further guidance).

Surveillance

Indicated for the following malignancies at the intervals defined below:

- Any malignancy with a history of liver metastases: every 3-6 months ⁽⁵⁰⁾
- Hepatocellular Carcinoma every 3-6 months for 2 years then every 6 months indefinitely ⁽⁵⁰⁾
- Melanoma: Uveal every 6-12 months for 10 years then as clinically indicated ⁽⁵³⁾
- Renal Cell Carcinoma ⁽¹⁶⁾:
 - Stage I - 1-3 months after treatment, then at 6 months and 12 months following treatment then annually
 - Stage II and higher - every 3-6 months for 3 years, then annually for 2 years, then as clinically indicated
- When CT is contraindicated or cannot be performed **AND** the medical necessity criteria have been met (see Evolent Clinical Guideline 2000 for Abdomen and Pelvis CT) for that malignancy, Abdomen MRI can be used during surveillance instead of CT

PREOPERATIVE OR POSTOPERATIVE ASSESSMENT

When not otherwise specified in the guideline:

Preoperative Evaluation:

- Imaging of the area requested is needed to develop a surgical plan

Postoperative Evaluation:

- Follow-up of known or suspected post-operative complication (within 6 months) involving only the abdomen ⁽³¹⁾
- A follow-up study to help evaluate a patient's progress after treatment, procedure, intervention, or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed ⁽³¹⁾
- Known or suspected complications
- A clinical reason is provided how imaging may change management

NOTE: This section applies only within the first few months following surgery

FURTHER EVALUATION OF INDETERMINATE FINDINGS

Unless follow-up is otherwise specified within the guideline:

- For initial evaluation of an inconclusive finding on a prior imaging report that requires further clarification
- One follow-up exam of a prior indeterminate MR/CT finding to ensure no suspicious interval change has occurred. (No further surveillance unless specified as highly suspicious or change was found on last follow-up exam)

IMAGING IN KNOWN GENETIC CONDITIONS

Surveillance Screening:

- ADPKD (Autosomal Dominant Polycystic Kidney Disease): annually (including at diagnosis) OR prior to treatment ⁽⁵⁵⁾
- Alpha-1 Anti-Trypsin Deficiency (AATD): every 6 months ⁽⁵⁶⁾
- ATM: Annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) ⁽⁵⁷⁾
- BAP1-TPDS (BAP-1 tumor predisposition syndrome) every 2 years starting at age 30 ^(16,58)
- Beckwith-Wiedemann syndrome: when ultrasound is abnormal, or AFP is rising ⁽⁵⁹⁾
- Beta-Thalassemia: annually ⁽⁶⁰⁾
- BHDS (Birt-Hogg-Dube): annually starting at age 20 (or earlier with family history of renal tumors diagnosed before age 30 ^(16,61)
- BRCA2: annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) ^(57,62)
- CDKN2A: annually starting at age 40 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) ⁽⁵⁷⁾
- FAP (Familial Adenomatous Polyposis) annually ⁽⁶³⁾
- Gaucher Disease: annually (including at initial diagnosis) ⁽⁶⁴⁾
- Hemochromatosis: at diagnosis ⁽⁶⁵⁾
- HLRCC (hereditary leiomyomatosis and renal cell cancer) annually starting at age 8 ^(16,66)

- HPRC (hereditary papillary renal carcinoma): annually starting at age 30 ⁽¹⁶⁾
- Multiple Endocrine Neoplasia type 1 (MEN1): annually starting at age 8 ^(67,68)
- Multiple Endocrine Neoplasia type 2 (MEN2): with abnormal biochemical results suggestive of adrenal tumor ⁽⁶⁹⁾
- Hereditary PGL/PCC Syndromes (including SDHx mutations): every 2 years including at diagnosis ^(16,70)
- PRSS1 (Hereditary Pancreatitis; including PRSS1, SPINK1 and other hereditary pancreatitis genes): annually starting 20 years after onset of pancreatitis, or at age 40 years, whichever is earlier ⁽⁵⁷⁾
- PTEN: every 2 years (including at diagnosis) starting at age 40 (or 10 years younger than the earliest renal cell cancer diagnosis in the family, whichever is earlier) ⁽⁷¹⁾
- Sickle Cell Disease: annually ⁽⁷²⁾
- SKT11 (including Peutz-Jeghers): at diagnosis, annually starting at age 8 ^(57,73)
- Tuberous sclerosis: annually (including at diagnosis) ^(16,19)
- Von Hippel-Lindau (VHL): annually (including at diagnosis) starting at age 11 ⁽⁷⁴⁾
- For other syndromes and rare diseases not otherwise addressed in the guideline, coverage is based on a case-by-case basis using societal guidance

Screening Based on Known Genetic Syndrome in combination with Family History:

- Known mutation in other pancreatic susceptibility genes (BRCA1, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53 (Li-Fraumeni) **AND** ≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant: Annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier)

Surveillance Screening Based on Family History

- To Screen for Pancreatic Cancer in patients with no identified mutation listed above **AND** the following family history:
 - ≥ 2 first-degree relatives with a history of pancreatic cancer from the same side of the family: Annually
 - ≥ 3 first- and/or second-degree relatives with a history of pancreatic cancer from the same side of the family: Annually

Combination Studies for known genetic conditions

NOTE: When medical necessity is met for an individual study **AND** conscious sedation is required (such as for young pediatric patients or patients with significant developmental delay), the entire combination is indicated)

Abdomen MRI and MR Elastography (MRE)

- Alpha-1 Anti-Trypsin Deficiency (AATD): every 6 months ⁽⁵⁶⁾

Abdomen/Whole Body MRI

- Hereditary PGL/PCC Syndromes (including SDHx mutations): every 2 years (including at diagnosis) ^(16,70)

Brain/Cervical/Thoracic/Lumbar/Abdomen MRI

- Von Hippel Lindau (VHL): annually (including at diagnosis) starting at age 11 ⁽⁷⁴⁾

Chest CT and Brain/Abdomen/Pelvis MRI

- Multiple Endocrine Neoplasia Syndrome Type 1 (MEN-1) ^(67,68):
 - Annually starting at age 8
 - Note: every 3 years include Brain MRI

OTHER COMBINATION STUDIES WITH ABDOMEN MRI

NOTE: When medical necessity is met for an individual study **AND** conscious sedation is required (such as for young pediatric patients or patients with significant developmental delay), the entire combination is indicated)

Abdomen MRA and Abdomen MRI

- When needed for clarification of vascular involvement from tumor (including suspected renal vein thrombosis)

Sinus/Face/Neck/Chest/Abdomen MRI

- Advanced imaging for Granulomatosis with Polyangiitis (GPA) (Formally Wegener's Granulomatosis) is indicated with any ONE of the following ⁽⁷⁵⁾:
 - Suspected GPA based on clinical findings (such as biopsy results, lab testing including antineutrophil cytoplasmic antibodies (ANCA))
 - Known GPA when imaging results of a specific anatomic area is needed to guide systemic therapy decisions

Abdomen MRI and Abdomen MRA and PET

- Prior to Y90 treatment ⁽⁷⁶⁾

Abdomen/Pelvis MRI

- As a dedicated CPT code does not exist for Abdomen and Pelvis MRI (unlike CT), when a disease process is reasonably expected to involve both the abdomen and pelvis AND the guideline criteria have been met, two separate authorizations are required: Abdomen MRI (CPT 74181, 74182, 74183) and Pelvis MRI (CPT 72195, 72196, 72197).

Combination Studies for Malignancy for Initial Staging or Restaging

Unless otherwise specified in this guideline, indication for combination studies for malignancy for initial staging or restaging:

- Concurrent studies to include CT or MRI of any of the following areas as appropriate depending on the cancer: Abdomen, Brain, Chest, Neck, Pelvis, Cervical Spine, Thoracic Spine or Lumbar Spine

CODING AND STANDARDS

Codes

74181, 74182, 74183, +0698T, +0724T

Applicable Lines of Business

<input checked="" type="checkbox"/>	CHIP (Children's Health Insurance Program)
<input checked="" type="checkbox"/>	Commercial
<input checked="" type="checkbox"/>	Exchange/Marketplace
<input checked="" type="checkbox"/>	Medicaid
<input checked="" type="checkbox"/>	Medicare Advantage

BACKGROUND

Contraindications and Preferred Studies

- Contraindications and reasons why a CT/CTA cannot be performed may include: impaired renal function, significant allergy to IV contrast, pregnancy (depending on trimester)
- Contraindications and reasons why an MRI/MRA cannot be performed may include:

impaired renal function, claustrophobia, non-MRI compatible devices (such as non-compatible defibrillator or pacemaker), metallic fragments in a high-risk location, patient exceeds weight limit/dimensions of MRI machine

SUMMARY OF EVIDENCE

Diseases of the Abdomen and Pelvis 2018-2021 ⁽¹⁾

Study Design: This chapter provides an overview of adrenal imaging, focusing on the evaluation and management of adrenal masses in various clinical scenarios.

Target Population: Patients with adrenal masses, including those with known biochemical abnormalities, underlying malignancies, or incidental findings.

Key Factors: The document discusses different imaging techniques to differentiate benign from malignant adrenal masses and provides recommended imaging algorithms for the workup of incidental adrenal masses.

Diagnosis, Staging, and Management of Hepatocellular Carcinoma: 2018 Practice Guidance by the American Association for the Study of Liver Diseases ⁽⁶⁾

Study Design: This practice guidance document provides a data-supported approach to the diagnosis, staging, and treatment of hepatocellular carcinoma (HCC), developed by a panel of experts.

Target Population: Patients diagnosed with HCC.

Key Factors: The document covers various aspects of HCC management, including surveillance, diagnosis, and treatment. It emphasizes the importance of imaging and biopsy in the diagnosis and staging of HCC and provides recommendations for different treatment options based on the stage of the disease.

American gastroenterological association institute guideline on the diagnosis and management of asymptomatic neoplastic pancreatic cysts ⁽¹³⁾

Study Design: This guideline by the American Gastroenterological Association (AGA) provides recommendations for the management of asymptomatic neoplastic pancreatic cysts.

Target Population: Adult patients with asymptomatic pancreatic cysts identified by radiology.

Key Factors: The guideline emphasizes the importance of identifying cysts with early invasive cancer or high-grade dysplasia. It recommends MRI for surveillance and endoscopic ultrasonography with fine-needle aspiration (EUS-FNA) for cysts with high-risk features.

ACR Appropriateness Criteria® Indeterminate Renal Mass ⁽¹⁵⁾

Study Design: This document outlines guidelines for the evaluation of indeterminate renal masses, developed by a multidisciplinary expert panel and reviewed annually.

Target Population: Patients with indeterminate renal masses detected incidentally.

Key Factors: The guidelines recommend CT and MRI with intravenous contrast as the mainstays of evaluation. Contrast-enhanced ultrasound is also suggested as an alternative for patients with contraindications to CT or MRI contrast.

ACR Appropriateness Criteria® Hernia ⁽³³⁾

Study Design: This document provides evidence-based guidelines for the initial imaging of adult patients with suspected abdominopelvic hernias. The guidelines are developed by a multidisciplinary expert panel and are reviewed annually.

Target Population: Adult patients with signs or symptoms prompting suspicion of abdominopelvic hernia.

Key Factors: The document emphasizes the importance of imaging in the diagnosis and management of hernias, recommending CT and ultrasound as first-line modalities. MRI protocols may also be useful, especially in patients with orthopedic instrumentation.

ANALYSIS OF EVIDENCE

Analysis ^(1,6,13,15,33):

In summary, while the articles share common conclusions about the utility and effectiveness of MRI in abdominal imaging, they differ in their specific indications, protocols, and clinical scenarios. Each article provides valuable insights into the role of MRI in diagnosing and managing various abdominal conditions, highlighting its importance in modern medical practice.

Shared Conclusions

- **Utility of MRI:** All articles agree on the utility of MRI in diagnosing and managing various abdominal conditions. MRI is highlighted for its non-invasive nature, lack of ionizing radiation, and high-resolution imaging capabilities.
- **Contrast-Enhanced MRI:** The use of contrast-enhanced MRI is a common theme. It is emphasized for its ability to provide detailed images and enhance the visibility of certain structures and abnormalities.
- **Specificity and Sensitivity:** MRI is noted for its high specificity and sensitivity in detecting and characterizing lesions, whether they are renal masses, hepatic tumors, or adrenal abnormalities.

POLICY HISTORY

Date	Summary
December 2025	<ul style="list-style-type: none"> ● Codes within the Coding Section were edited to reflect changes for Evolent prior authorization scope <ul style="list-style-type: none"> ○ Deleted: S8037
September 2025	<ul style="list-style-type: none"> ● This guideline name changed from Evolent Clinical Guideline 2004 for Abdomen Magnetic Resonance Imaging (MRI), Magnetic Resonance Cholangiopancreatography (MRCP) to Evolent Clinical Guideline 2004 for Abdomen Magnetic Resonance (MRI) with or without (MRCP) to Evolent Clinical Guideline 2004 for Abdomen Magnetic ● MRCP indications integrated into the guideline as biliary tree, pancreas, and liver indications
July 2025	<ul style="list-style-type: none"> ● Added a Summary of Evidence and Analysis of Evidence ● Removed, “One of the following” from Suspected adrenocortical carcinoma in the Endocrine Disorders
June 2025	<ul style="list-style-type: none"> ● This guideline replaces Evolent Clinical Guideline 031 for Abdomen MRI, MRCP, MRE, and MRU ● Added in general information statement regarding guideline criteria development by reputable sources, standard of care, and best practices ● Hernia section reorganized and revised ● Genetic and cancer sections updated ● Updated language in the preoperative/postoperative section ● Segment added to combinations studies about if the required use of conscious sedation is needed the entire combination is indicated ● Applicable Line of Business adjusted – Medicare checked ● Background shortened and relevant information moved to indications ● References updated
June 2024	<ul style="list-style-type: none"> ● Revised the purpose ● Genetics section and Malignancy was reorganized

Date	Summary
	<ul style="list-style-type: none"> ● Organ section was reorganized ● Fixed typo in pancreas section for mm to be cm ● Renal Bosniak section was adjusted to incorporate background into this section for further clarification ● Polycystic Kidney Disease was updated ● Known Malignancy section was adjusted to indicate initial staging, restaging, and surveillance to be consistent with new cancer bundles coming out ● Background cut ● Added in post-embolization imaging ● Added CPT code +0722T ● Added Contraindications and Preferred Studies statement to Background ● Adjusted Combination Studies

LEGAL AND COMPLIANCE

Guideline Approval

Committee

Reviewed / Approved by Evolent Specialty Services Clinical Guideline Review Committee

Disclaimer

Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolent Clinical Guidelines. Evolent clinical guidelines contain guidance that requires prior authorization and service limitations. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.



Evolent Clinical Guidelines are comprehensive and inclusive of various procedural applications for each service type. Our guidelines may be used to supplement Medicare criteria when such criteria is not fully established. When Medicare criteria is determined to not be fully established, we only reference the relevant portion of the corresponding Evolent Clinical Guideline that is applicable to the specific service or item requested in order to determine medical necessity.

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