

Evolut Clinical Guideline ~~2004031~~ for Abdomen Magnetic Resonance Imaging (MRI), Magnetic Resonance Cholangiopancreatography (MRCP), ~~MRE (Magnetic Resonance Enterography)~~, and ~~MRU (Magnetic Resonance Urography)~~

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| Guideline or Policy Number: Evolut_CG_ 2004031 | <u>Applicable Codes</u> | |
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TABLE OF CONTENTS

| | |
|---|-----------|
| STATEMENT | 3 |
| GENERAL INFORMATION | 3 |
| PURPOSE | 3 |
| SPECIAL NOTE | 3 |
| INDICATIONS | 3 |
| ORGAN SPECIFIC IMAGING | 3 |
| Adrenal | 3 |
| Liver | 4 |
| Pancreas | 5 |
| Renal | 6 |
| Spleen | 7 |
| Endocrine Disorders | 7 |
| INFLAMMATORY BOWEL DISEASE | 8 |
| EVALUATION OF INFECTION AND INFLAMMATION | 8 |
| Fistula | 8 |
| Infection and Inflammation | 8 |
| HERNIA | 9 |
| OTHER INDICATIONS | 9 |
| INDICATIONS FOR MRCP | 11 |
| KNOWN MALIGNANCY | 12 |
| Initial Staging or Recurrence | 12 |
| Restaging | 12 |
| Surveillance | 13 |
| PREOPERATIVE OR POSTOPERATIVE ASSESSMENT | 13 |

| | |
|--|-----------|
| FURTHER EVALUATION OF INDETERMINATE FINDINGS | 14 |
| IMAGING IN KNOWN GENETIC CONDITIONS | 14 |
| SURVEILLANCE SCREENING | 14 |
| SCREENING BASED ON KNOWN GENETIC SYNDROME IN COMBINATION WITH FAMILY HISTORY | 15 |
| SURVEILLANCE SCREENING BASED ON FAMILY HISTORY | 16 |
| COMBINATION STUDIES FOR KNOWN GENETIC CONDITIONS | 17 |
| <i>Abdomen MRI and MR Elastography (MRE)</i> | 17 |
| <i>Abdomen/Whole Body MRI</i> | 17 |
| <i>Brain/Cervical/Thoracic/Lumbar/Abdomen MRI</i> | 17 |
| <i>Chest CT and Brain/Abdomen/Pelvis MRI</i> | 17 |
| OTHER COMBINATION STUDIES WITH ABDOMEN MRI | 17 |
| ABDOMEN MRA AND ABDOMEN MRI | 17 |
| SINUS/FACE/NECK/CHEST/ABDOMEN MRI | 18 |
| ABDOMEN MRI AND ABDOMEN MRA AND PET | 18 |
| ABDOMEN MRI AND MRCP | 18 |
| ABDOMEN MRI AND MR ELASTOGRAPHY | 18 |
| ABDOMEN/PELVIS MRI | 19 |
| COMBINATION STUDIES FOR MALIGNANCY FOR INITIAL STAGING OR RESTAGING | 19 |
| CODING AND STANDARDS | 19 |
| CODES | 19 |
| APPLICABLE LINES OF BUSINESS | 19 |
| BACKGROUND | 20 |
| CONTRAINDICATIONS AND PREFERRED STUDIES | 23 |
| SUMMARY OF EVIDENCE | 23 |
| ANALYSIS OF EVIDENCE | 24 |
| POLICY HISTORY | 25 |
| LEGAL AND COMPLIANCE | 27 |
| GUIDELINE APPROVAL | 27 |
| <i>Committee</i> | 27 |
| DISCLAIMER | 27 |
| REFERENCES | 28 |

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

Abdominal 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

A single authorization for CPT codes 74181, 74182, 74183, S8037 covers imaging of the biliary tree and its attached organs, i.e., the liver, gallbladder (GB), and pancreas. [These same codes also cover MRI abdomen, Magnetic Resonance Enterography, and Magnetic Resonance Urography.](#) These same codes also cover MRI abdomen, Magnetic Resonance Enterography (MRE), and Magnetic Resonance Urography (MRU). Multiple authorizations are not typically required. When both Magnetic Resonance Cholangiopancreatography (MRCP) and MRI abdomen are requested, documentation requires a medical reason clearly indicating why both are needed, i.e., that meets guidelines for imaging of bowel, kidneys, or areas other than liver, pancreas, GB, and biliary tree as well.

Note: There ~~is not an are no~~ MRI Abdomen ~~and~~ Pelvis MRI combo (comparable to a ~~CT~~ Abdomen ~~and~~ Pelvis ~~CT~~). ~~I such that~~ if imaging of both the abdomen and pelvis are indicated, two separate exams (and authorizations) are required (i.e., MRI Abdomen and MRI Pelvis).

INDICATIONS ~~FOR ABDOMEN MRI~~

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~~
- ~~For further evaluation of suspected adrenal tumors and/or endocrine disorders when there is clinical and laboratory evidence to suggest an adrenal source; see **Background** for specific laboratory testing that is needed based on suspected diagnosis.~~⁽²⁾
- 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 ≥ 4 cm and no diagnosis of cancer, can approve 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 **eEndocrine dDisorders** for additional indications
- See **Imaging in Known Genetic Conditions** for additional screening indications
- ~~For follow up of known adrenal mass when a change in tumor is suspected by either imaging, laboratory evaluation and/or symptoms~~
- ~~For further evaluation of suspected adrenal tumors and/or endocrine disorders when there is clinical and laboratory evidence to suggest an adrenal source; see **Background** for specific laboratory testing that is needed based on suspected diagnosis.~~⁽²⁾
- See **Genetic Syndromes and Rare Diseases** for additional screening indications

Liver

- Indeterminate liver lesion seen on prior imaging⁽³⁾
- ~~Elevated or Rising-rising AFP (requires a ≥7 ng/mL increased in AFP per month) in patients at high risk for **Hepatocellular Carcinoma (HCC)** (known cirrhosis and/or chronic hepatitis B, **Asian males Hepatitis B carriers ≥ 40 y, Asian female Hepatitis B carriers ≥50 y, Hepatitis B carriers with + family history of HCC and African and/or North American blacks with hepatitis B**)-see **Background** for additional risk categories)~~⁽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 for approval; 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 \(MRE\)](#)

- 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 (MRI and MRCP preferred over CT) ⁽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 Syndromes and Rare Diseases](#) for additional screening indications

Pancreas

- Pancreatic cystic lesion found on initial imaging, approve for initial characterization of lesion ⁽⁹⁾
- Follow-up for pancreatic cyst ([including Intraductal Papillary Mucinous Neoplasm \(IPMN\)](#)) as below ^(10,11):
 - 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
- [Pancreatitis Prior to Y90 treatment](#)
- [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) ⁽¹²⁾

- See **endocrine disorders** for additional indications. ~~Localization of a functional pancreatic tumor, see **Background** (endocrine) once diagnosis is confirmed (or highly suspected)~~ ⁽⁹⁾
- See **Genetic Syndromes and Rare Diseases** for additional screening indications

Renal

- Indeterminate renal mass on other imaging ⁽¹³⁾
 - ~~Follow-up for~~ **Active surveillance for** solid renal mass(es) under 3 cm at 6 and 12 on active surveillance: once within 3-6 months, then in 6 months, then annually ⁽¹⁴⁾
- 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) ⁽¹⁵⁾:
 - 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) ⁽¹⁶⁾
 - Surveillance of known angiomyolipoma (AML) ⁽¹⁷⁻¹⁹⁾:
 - 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) ^(14,17)
 - 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) ^(20,21)
 - **Further Evaluation of the urinary tract (i.e. MR urography with Pelvis MRI)U (may also approve MR pelvis for MR urography) when further evaluation of the urinary tract is**

~~needed after indeterminate ultrasound, ultrasound is inconclusive and CT is contraindicated or cannot be performed, and CT (CTU) cannot be done or is inconclusive and MRI is recommended~~

- ~~Polycystic Kidney Disease (PKD) ⁽²¹⁾~~
 - ~~To assess total kidney volume (TKV) at diagnosis and prior to treatment~~
 - ~~To monitor total kidney volume annually if PRO-PKD score is ≥ 4 ⁽²²⁾~~
- See **Genetic Syndromes and Rare Diseases** for additional indications

Spleen

- Incidental findings of the spleen that are indeterminate on ultrasound or CT imaging ^(22,23)
- See **Imaging in Known Genetic Conditions, Syndromes and Rare Diseases** 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 ⁽²⁴⁾
 - Suspected adrenocortical carcinoma: **ONE** of the following:
 - 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
- ~~Evaluation of Iron Overload~~ ^(24,25)

~~Initial evaluation of liver iron in Hemochromatosis diagnosed in lieu of liver biopsy~~

- ~~Annual evaluation for high-risk patients: transfusion-dependent thalassemia major, sickle cell disease, and other congenital anemias~~

Inflammatory Bowel Disease ^(25,26)

- 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 ^(27,28)

Fistula

- For history of fistula in the abdomen that requires re-evaluation or is suspected to have recurred (~~MRI Preferred~~)

Known or Suspected Infection and Inflammation ^(29,30)

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, ~~OR~~
 - 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)

- 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: standard diagnostic tests are negative (see Background) 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. ⁽³⁶⁾
- Any B-symptoms of fevers more than 101° F, drenching night sweats, or unexplained weight loss of more than 10% of body weight over 6 months with documented concern for lymphoma/malignancy ⁽³⁷⁾
- 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) ⁽³⁸⁾ after initial workup (see Background 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 ⁽³⁹⁾

— Weight Loss

Unintentional weight loss is considered clinically significant if the amount of weight lost over 12 months is $\geq 5\%$. Older age and higher percentage of weight loss correlates with higher likelihood of malignancy. A targeted evaluation is recommended when there are signs or symptoms suggestive of a specific source. For example, when there is clinically significant weight loss with abdominal pain that prompts an evaluation for an abdominal source of the weight loss; CXR and labs such as TSH would not be needed prior to abdominal imaging. Conversely a smoker with a cough and weight loss would not start with abdominal imaging, a chest x-ray (CXR) would be the first test to start with. When there is no suspected diagnosis, initial evaluation includes CXR, age appropriate cancer screening (such as colonoscopy and mammography) and labs (including CBC, CMP, HbA1C, TSH, stool hemoccult, ESR/CRP, HIV, Hepatitis C). If this initial evaluation fails to identify a cause of weight loss, then the patient is monitored and if progressive weight loss is seen on subsequent visits/weights, then CT Abdomen/Pelvis is reasonable (MRI if there is a contraindication to CT such as contrast allergy or impaired renal function). Lastly, with a negative CXR, only when initial workup and abdomen/pelvis CT/MR fail to identify the cause for weight loss can Chest CT be approved. If CXR suggests a malignancy and/or source of weight loss, then Chest CT would be approved.

- - Suspected or known retroperitoneal fibrosis after complete workup and ultrasound to determine extent of disease ⁽⁴⁰⁾
 - Suspected paraneoplastic syndrome (including dermatomyositis) with high suspicion of abdominal malignancy and appropriate workup has been done (see Background for details)
 - For acute unilateral (or asymmetric) lower extremity edema with negative or inconclusive

[doppler US](#) ⁽⁴¹⁾

~~— For chronic (**greater than 3 months**) unilateral (or asymmetric) lower extremity edema and suspicion of malignant cause ⁽⁴¹⁾~~

- ~~● Diffuse, unexplained lower extremity edema with negative or inconclusive ultrasound ⁽³⁶⁾~~
- ~~● Suspected May-Thurner syndrome (CTV/MRV preferred) ⁽³⁷⁾~~
- Further evaluation of a new onset or non-reducible varicocele ⁽⁴²⁾
- Prior to Bone Marrow Transplant (BMT) ^(43,44)
- Follow-up of abnormal lymph nodes with no prior history of malignancy
 - Follow-up imaging at 3 months ⁽⁴⁵⁾

Indications for MRCP ⁽⁴⁶⁾

- To confirm choledocholithiasis in patients in the acute setting after ultrasound has been completed
- ~~● Suspected acute pancreatitis with atypical signs and symptoms, including equivocal amylase and lipase and diagnosis other than pancreatitis may be possible. (MRCP and CT/MRI may be ordered simultaneously in this setting and may be approved)~~
- ~~● Pancreatitis by history (greater than 4 weeks), (including pancreatic pseudocyst) with continued pain suspicious for worsening, or re-exacerbation. (MRCP and CT/MRI may be ordered simultaneously in this setting and may be approved) Pancreatitis: [see combination studies for indications](#)~~
- Evaluation of suspected congenital anomaly of the pancreaticobiliary tract, e.g., aberrant ducts, pancreas divisum or related complications
- 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 persistent symptoms when abnormalities are identified on other imaging (e.g., ultrasound, CT, or MRI)
- Evaluation of abnormality related to the pancreatic or biliary tree based on symptoms or laboratory findings and initial imaging has been performed or is contraindicated (e.g., renal failure prevents contrast CT or body habitus limits [ultrasonography \(US\)](#))
- Evaluation of pancreatobiliary disease in pregnant patients after ultrasound has been done
- Prior to liver transplantation, may repeat studies immediately prior to transplantation with known HCC, PSC, or cholangiocarcinoma

Follow-Up of Known Cancer Known Malignancy ⁽⁴⁷⁾

Initial Staging or Recurrence

- Abdomen MRI is indicated when there are indeterminate findings on initial staging (such as for suspected liver metastases) imaging in need further evaluation with MRI.
- For the following malignancies, Abdomen MRI is indicated for initial staging:
 - Biliary Tract Cancers ⁽⁴⁸⁾
 - Primary Liver Cancers ⁽⁴⁹⁾
 - Sarcoma in the abdomen (soft tissue or bone) ^(50,51)
 - Uveal Melanoma ⁽⁵²⁾

Restaging

- Abdomen MRI is indicated for restaging 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~~ ⁽⁵³⁾
 - ~~Breast Cancer when there are suspected or known liver metastases~~
 - ~~Colon Cancer when there are suspected or known liver metastases~~
 - Biliary Tract Cancers ⁽⁴⁸⁾
 - Primary Liver Cancers ⁽⁴⁹⁾
 - Renal Cell Carcinoma ⁽¹⁴⁾
 - ~~Neuroendocrine tumors when there are suspected or known liver metastases~~
 - ~~Pancreatic Cancer~~ Sarcoma in the abdomen (soft tissue or bone) ^(50,51)
 - Uveal Melanoma ⁽⁵²⁾
- 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 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 PET Guideline for further guidance).**
 - MRCP is indicated for restaging during active treatment (every 2-3 cycles of chemo or immunotherapy, following radiation and/or after surgery) for the following:
 - Biliary Tract Cancers (Ampullary Adenocarcinoma, Cholangiocarcinomas and Gallbladder Cancer)

Surveillance

Abdomen MRI is indicated during surveillance for the following malignancies at the intervals defined below:

- Any malignancy with a history of liver metastases: every 3-6 months ⁽⁴⁹⁾
- ~~Breast Cancer every 3-6 months when there are suspected or known liver metastases~~ ⁽⁴⁵⁾
- ~~Colon Cancer every 3-6 months when there are suspected or known liver metastases~~ ⁽⁴⁶⁾
- Hepatocellular Carcinoma every 3-6 months for 2 years then every 6 months indefinitely ⁽⁴⁹⁾
- Melanoma: Uveal every 6-12 months for 10 years then as clinically indicated ⁽⁵²⁾
- Renal Cell Carcinoma ⁽¹⁴⁾:
 - 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
- ~~Pancreatic Cancer every 3-6 months for 2 years then every 6-12 months as clinically indicated~~
- ~~Uveal Melanoma every 6-12 months for 10 years then as clinically indicated~~ ⁽⁴⁸⁾
- 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 EVALUATION

When not otherwise ~~addressed-specified~~ in the guideline:

Preoperative Evaluation:

- Imaging of the area requested is needed to develop a ~~For abdominal surgical ery or procedure plan~~

Postoperative Evaluation:

- Follow-up of known or suspected post-operative complication (within 6 months) involving only the abdomen ⁽²⁹⁾
- 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 ⁽²⁹⁾
- 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 ~~ON PRIOR IMAGING~~

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 SYNDROMES AND RARE DISEASES

Surveillance Screening ~~Abdomen MRI for the following KNOWN Genetic Syndromes:~~

- ADPKD (Autosomal Dominant Polycystic Kidney Disease): annually (including at diagnosis) OR To assess total kidney volume (TKV) at diagnosis AND prior to treatment AND to monitor total kidney volume annually if PRO-PKD score is ≥ 4 ⁽⁵⁴⁾
- Alpha-1 Anti-Trypsin Deficiency (AATD): every 6 months⁽⁵⁵⁾
- ATM: Annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier)⁽⁵⁶⁾
- BAP1-TPDS (BAP-1 tumor predisposition syndrome) every 2 years starting at age 30^(14,57)
- Beckwith-Wiedemann syndrome: when ultrasound is abnormal, or AFP is rising⁽⁵⁸⁾
- Beta-Thalassemia: annually⁽⁵⁹⁾
Evaluation of Iron Overload^{(24,25);}
- Annual evaluation for high-risk patients: transfusion-dependent thalassemia major, sickle cell disease, and other congenital anemia BHDS (Birt-Hogg-Dube): annually every 3 years starting at age 20 (or earlier with family history of renal tumors diagnosed before age 30)^(14,60)
- BRCA2: annually starting at age 50 (or 10 years younger than the earliest pancreatic

cancer diagnosis in the family, whichever is earlier ^(56,61)

- CDKN2A ~~variant~~: annually starting at age 40 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) ⁽⁵⁶⁾
- FAP (Familial Adenomatous Polyposis); ~~annually screening of abdomen and pelvis with MRI or CT for one or more of the following: personal history of desmoid tumor, family history of desmoid tumor or abdominal symptoms suggestive of desmoid tumor~~ ^{(52) (62)}
- Gaucher Disease: annually (including at initial diagnosis) ~~and then annually~~ ⁽⁶³⁾
- Hemochromatosis: at diagnosis ⁽⁶⁴⁾ ~~Initial evaluation of liver iron in Hemochromatosis diagnosed in lieu of liver biopsy~~
- HLRCC (hereditary leiomyomatosis and renal cell cancer) annually starting at age 8 ^(14,65)
- HPRCC (hereditary papillary renal carcinoma); annually starting at age 30 ⁽¹⁴⁾
- Multiple Endocrine Neoplasia type 1 (MEN1): annually starting at age 8 ^(66,67)
- Multiple Endocrine Neoplasia type 2 (MEN2): with abnormal biochemical results suggestive of adrenal tumor ⁽⁶⁸⁾
- Hereditary PGL/PCC Syndromes (including SDHx mutations): every 2 years including at diagnosis ~~IF whole body MRI (unlisted MRI CPT 76498) not available~~ ^(50,56) ~~(see Evolent Clinical Guideline 2061 for Unlisted Studies)~~ ^(14,69)
- 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 ⁽⁵⁶⁾
- 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) ⁽⁷⁰⁾
- Sickle Cell Disease: annually ⁽⁷¹⁾
- SKT11 ~~variant~~ (including Peutz-Jeghers): at diagnosis, annually starting at age ~~830~~ ~~(or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier)~~ ^(56,72)
- ~~Tuberous sclerosis complex: annually (including at diagnosis)~~ ^(14,17)
- ~~TSC without known AML: every 3 years starting at age 12~~
- ~~TSC with known AML: annually~~
- Von Hippel-Lindau (VHL): annually (including at diagnosis) every 2 years starting at age ~~115~~ ⁽⁷³⁾
- 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:

- ~~BRCA1: annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) when ≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant AND known mutation in other pancreatic susceptibility genes (BRCA1, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53). (ncen-genetic/familial-bopp-v3.2025, petrucelli-2025)~~
- ~~BRCA2: annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier). (ncen-genetics/familial-bopp-v2.2025, pancreatic-cancer-v2.2025)~~
- ~~Li-Fraumeni (TP53): annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) ≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant AND known mutation in other pancreatic susceptibility genes (ATM, BRCA1, BRCA2, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53). (ncen-genetics/familial-bopp-v2.2025)~~
- ~~Lynch Syndrome: annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) when ≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant AND known mutation in other pancreatic susceptibility genes (ATM, BRCA1, BRCA2, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53). (ncen-genetics/familial-bopp-v2.2025)~~
- ~~PALB2: annually starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) when ≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant AND known mutation in other pancreatic susceptibility genes (ATM, BRCA1, BRCA2, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53). (ncen-genetics/familial-bopp-v2.2025)~~
- 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)
- ~~Other variants AND family history of pancreatic cancer as detailed below: Starting at age 50 (or 10 years younger than the earliest pancreatic cancer diagnosis in the family, whichever is earlier) for the following:~~
 - ~~≥ 1 first- or second-degree relative with history of pancreatic cancer from the same side of the family as the identified variant AND known mutation in other pancreatic susceptibility genes (ATM, BRCA1, MLH1 (Lynch), MSH2, MSH6, EPCAM, PALB2, TP53): Annually~~

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 ⁽⁵⁵⁾

Abdomen/Whole Body MRI

- Hereditary PGL/PCC Syndromes (including SDHx mutations): every 2 years (including at diagnosis) ^(14,69)

Brain/Cervical/Thoracic/Lumbar/Abdomen MRI

- Von Hippel Lindau (VHL): ~~annually (including at diagnosis) every 2 years starting at age 115~~ ⁽⁷³⁾

Chest CT and Brain/Abdomen/Pelvis MRI

- Multiple Endocrine Neoplasia Syndrome Type 1 (MEN-1) ^{(66,67):}
 - ~~Chest/Abdomen/Pelvis~~ Annually starting at age 8
 - ~~Brain/Chest/Abdomen/Pelvis~~ 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 ~~or~~ CT

- When needed for clarification of vascular invasion-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 ⁽⁷⁴⁾:
 - 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 ~~(or CT)~~ and Abdomen MRA ~~(or CTA)~~ and PET

- Prior to Y90 treatment ⁽⁷⁵⁾

Abdomen MRI and MRCP

- Prior to Y90 treatment ⁽⁷⁵⁾
- Prior to liver transplantation; may repeat studies immediately prior to transplantation with known HCC, primary sclerosing cholangitis (PSC), or cholangiocarcinoma
- Pancreatitis: Suspected and Known ⁽⁴⁶⁾
 - Initial imaging for suspected acute pancreatitis due to epigastric pain with elevated amylase and/or lipase
 - For mild presentation when symptom improvement is not seen after 72 hours of treatment and any ONE of the following:
 - Ultrasound has been performed and did not show an abnormality such as gallstones, dilated bile duct
 - Ultrasound suggests complications (such as fluid collection)
- For severe pancreatitis presentation (such as fever, elevated WBC, jaundice, tachycardia)
- For a decline in clinical status and/or suspected complication (such as infection/abscess, hypovolemia, organ failure, pancreas necrosis)
- History of pancreatitis (including pancreatic pseudocyst) with abdominal pain suspicious for worsening or re-exacerbation
- Known prior necrotizing pancreatitis requiring follow-up ⁽⁴⁶⁾

Abdomen MRI and MR Elastography

- MRI Abdomen can be used for HCC Screening and MR Elastography can be used to stage hepatic fibrosis. ~~When~~ ~~the~~ each indication requires an insufficient ultrasound, that ultrasound needs to be insufficient for only one of the two indications to meet medical necessity for both studies.
 - 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.

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).

~~● Neck/Abdomen/Pelvis MRI and Chest C~~

~~PGL/PCC (Hereditary Paraganglioma/Pheochromocytoma syndromes or SDHx mutations): every 2 years IF whole body MRI (unlisted MRI CPT 76498) NOT available^(50,56) (see Evolent Clinical Guideline 2061 for Unlisted Studies)~~

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

Coding

~~CPT Codes~~

74181, 74182, 74183, S8037, +0698T, +0724T

Applicable Lines of Business

| | |
|---|--|
| ☒ | CHIP (Children’s Health Insurance Program) |
| ☒ | Commercial |
| ☒ | Exchange/Marketplace |
| ☒ | Medicaid |



BACKGROUND

Adrenal and Neuroendocrine

Biochemical Evaluation

Laboratory evaluation prior to imaging when neuroendocrine and hormonally active tumors are suspected, the required laboratory evaluation prior to advanced imaging is dependent on the tumor type that is suspected. The following list describes suspected syndrome/tumor and typical laboratory evaluation in parenthesis:

~~GI Carcinoid (24-hour urine or plasma 5-HIAA), Lung/Thymus Carcinoid (24-hour urine or plasma 5-HIAA and one of the following: overnight dexamethasone suppression test, 2-3 midnight salivary cortisols, 24-hour urinary free cortisol), PPoma (serum pancreatic polypeptide), Insulinoma (serum insulin, pro-insulin and C-peptide all drawn during a period of hypoglycemia (i.e. 72 hour fast)), VIPoma (serum VIP), glucagonoma (serum glucagon), gastrinoma (serum gastrin), somatostatinoma (serum somatostatin), pheochromocytoma/paraganglioma (plasma free or 24-hour urine fractionated metanephrines and normetanephrines +/- serum or urine catecholamines), pituitary tumor (serum IGF-1, prolactin, LH/FSH, alpha subunits, TSH and one of the following: overnight dexamethasone suppression test, 2-3 midnight salivary cortisols, 24-hour urinary free cortisol), primary hyperaldosteronism (suppressed renin/renin activity in association with elevated plasma aldosterone (>10 ng/dL) and confirmatory testing if positive), adrenocortical carcinoma (testosterone, DHEA-S and complete evaluation for hypercortisolemia or primary aldosteronism)~~⁽⁵⁴⁾

~~If Cushing's (hypercortisolemia) is suspected, typical labs include a plasma ACTH and one or more of the following: overnight dexamethasone suppression test, 2-3 midnight salivary cortisols, or 24-hour urinary free cortisol. The results of the suppression test then indicate whether brain imaging is needed (pituitary source) or chest and abdominal imaging is needed (CXR + Adrenal CT/MRI). ACTH > 20 after suppression > 20 is suggestive of Cushing's Disease and Pituitary MRI +/- CXR is indicated. ACTH after suppression < 5 is suggestive of Cushing's Syndrome and CXR + Adrenal CT/MRI is indicated.~~⁽⁵⁸⁾ ~~If indeterminate, a CRH or desmopressin test is then done. If there is no ACTH suppression with CRH/desmopressin, then adrenal imaging is indicated.~~⁽⁵⁹⁾

Liver

MRI of the Liver

~~The liver is a common site of metastatic spread. Patients with a history of known or suspected malignancy, especially tumors from the colon, lung, pancreas, and stomach, are at risk for developing hepatocellular carcinoma. Patients with chronic liver disease are also at risk for developing liver cancer and undergo periodic liver screening for focal liver lesion detection,~~

usually with ultrasonography (US). Liver-specific contrast agents (gadobenate dimeglumine (Gd-BOPTA, MultiHance) and gadoxetate disodium (Eovist) are taken up by functionally intact hepatocytes, allowing increased visualization of both tumors and liver metastases. As metastatic liver lesions do not take up these contrast agents, a dedicated liver MRI can help identify tumors as it allows more contrast differentiation between the tumor and normal liver tissue. In patients undergoing PET scans for active malignancies and there are either known liver metastases in need of restaging or indeterminate liver lesions on other imaging (such as PET or CT), 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 PET Guideline for further guidance).

Screening for Hepatocellular Carcinoma (HCC)

AASLD (American Association for the Study of Liver Diseases) recommends screening for HCC with ultrasound every 6 months for patients with hepatitis C and B. Advanced imaging is recommended when the AFP is rising, regardless of ultrasound results. The main risk factors for HCC are cirrhosis and Hepatitis B. Additional populations for which there is a benefit to surveillance for HCC include: Asian males Hepatitis B carriers ≥ 40 y, Asian female Hepatitis B carriers ≥50 y, Hepatitis B carriers with + family history of HCC and African and/or North American blacks with hepatitis B.^(4,7)

Kidney

PRO-PKD Score ^(22,60)

The PRO-PKD score is to assess prognosis in ADPKD, risk scoring system is on the basis of PKD mutation and clinical parameters.

| Risk Category | Points |
|--|--------|
| Being Male | 1 |
| Hypertension before 35 years of age | 2 |
| First Urological event (macroscopic hematuria, flank pain or cyst infection) before 35 years of age | 2 |
| PKD2 mutation | 0 |
| Non-truncating PKD1 mutation | 2 |
| Truncating PKD1 mutation | 4 |
| A score of > 6 predicts rapid disease progression with ESRD onset before the age of 60 years with a positive predictive value of 90.0% | |
| For those with an intermediate score (4-6 points), the prognosis is unclear | |

Fever of Unknown Origin

Initial work up prior to CT/MRI would include a comprehensive history, repeated physical exam, complete blood count with differential, three sets of blood cultures, chest x-ray, complete metabolic panel, urinalysis, ESR, ANA, RA, CMV IgM antibodies, virus detection in blood, heterophile antibody test, tuberculin test, and HIV antibody test.⁽⁶⁴⁾ Lastly, with a negative CXR, only when initial workup and abdomen/pelvis CT/MR fail to identify the cause for fever can Chest CT be approved. If CXR suggests a malignancy and/or source of fever, then Chest CT would be approved.

Paraneoplastic Syndromes

Suspected paraneoplastic syndromes with no established cancer diagnosis: laboratory evaluation and imaging

The laboratory evaluation for paraneoplastic syndrome is complex. If the appropriate lab test results are suspicious for malignancy, imaging is indicated.

For SIADH (hyponatremia + increased urine osmolality), there is a high association with small cell lung cancer, therefore imaging typically starts with chest CT. If other symptoms suggest a different diagnosis other than small cell lung cancer, different imaging studies may be reasonable.

For hypercalcemia (high serum calcium, low-normal PTH, high PTHrP) it is reasonable to start with bone imaging followed by a more directed evaluation such as mammogram, chest, abdomen, and pelvis imaging as appropriate.

For Cushing syndrome (hypokalemia, normal-high midnight serum ACTH not suppressed with dexamethasone) abdominal and chest imaging is reasonable. If dexamethasone suppression test does suppress ACTH, pituitary MRI is reasonable.

For hypoglycemia, labs drawn during a period of hypoglycemia (glucose < 55, typically a 72 hour fast) (insulin level, C-peptide, and IGF-2:IGF-1 ratio) should be done to evaluate for an insulinoma. An elevated insulin level, elevated C-peptide and/or normal IGF-2:IGF-1 ratio warrants CT or MRI abdomen to look for insulinoma. A low insulin, low C-peptide and/or elevated IGF-2:IGF-1 ratio warrants chest and abdominal imaging.

When a paraneoplastic neurologic syndrome is suspected, nuclear and cytoplasmic antibody panels are often ordered to further identify specific tumor types. Results are needed prior to imaging. Because these tests are highly specific, if an antibody highly associated with a specific cancer is positive, then further imaging for that cancer is reasonable. For example, anti-Hu has a high association with SCLC and chest CT would be reasonable. Anti-MA2 has a high association with testicular cancer and testicular ultrasound would be a reasonable next step.

Weight Loss

Unintentional weight loss is considered clinically significant if the amount of weight lost over 12 months is $\geq 5\%$. Older age and higher percentage of weight loss correlates with higher likelihood of malignancy. A targeted evaluation is recommended when there are signs or

symptoms suggestive of a specific source. For example, when there is clinically significant weight loss with abdominal pain that prompts an evaluation for an abdominal source of the weight loss; CXR and labs such as TSH would not be needed prior to abdominal imaging. Conversely a smoker with a cough and weight loss would not start with abdominal imaging, a chest x-ray (CXR) would be the first test to start with. When there is no suspected diagnosis, initial evaluation includes CXR, age-appropriate cancer screening (such as colonoscopy and mammography) and labs (including CBC, CMP, HbA1C, TSH, stool hemoccult, ESR/CRP, HIV, Hepatitis C). If this initial evaluation fails to identify a cause of weight loss, then the patient is monitored and if progressive weight loss is seen on subsequent visits/weights, then CT Abdomen/Pelvis is reasonable (MRI if there is a contraindication to CT such as contrast allergy or impaired renal function). Lastly, with a negative CXR, only when initial workup and abdomen/pelvis CT/MR fail to identify the cause for weight loss can Chest CT be approved. If CXR suggests a malignancy and/or source of weight loss, then Chest CT would be approved.

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 ⁽¹¹⁾

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 ⁽¹³⁾

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 ⁽³¹⁾

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 ^(1,6,11,13,31):

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 |
|------------------|--|
| <u>July 2025</u> | <ul style="list-style-type: none"> ● <u>Added a Summary of Evidence and Analysis of Evidence</u> ● <u>Removed, “One of the following” from Suspected adrenocortical carcinoma in the Endocrine Disorders</u> |
| <u>June 2025</u> | <ul style="list-style-type: none"> ● <u>This guideline replaces Evolent Clinical Guideline 031 for Abdomen MRI, MRCP, MRE, and MRU</u> ● <u>Added in general information statement regarding guideline criteria development by reputable sources, standard of care, and best practices</u> ● <u>Hernia section reorganized and revised</u> ● <u>Genetic and cancer sections updated</u> ● <u>Updated language in the preoperative/postoperative section</u> ● <u>Segment added to combinations studies about if the required use of conscious sedation is needed the entire combination is indicated</u> ● <u>Applicable Line of Business adjusted – Medicare checked</u> ● <u>Background shortened and relevant information moved to indications</u> ● <u>References updated</u> |

| | |
|------------------|---|
| <p>June 2024</p> | <ul style="list-style-type: none"> ● Revised the purpose ● Genetics section and Malignancy was reorganized ● 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 |
| <p>May 2023</p> | <ul style="list-style-type: none"> ● IBD: eliminated indications for abdomen alone or pelvis imaging alone, resubmission as abdomen and pelvis CT required unless limited indication ● Adrenal: additional guidance provided for imaging intervals and background given for functional tumors ● Liver: clarified guidance for HCC surveillance imaging, follow up of specific conditions such as hepatic steatosis and focal nodular hyperplasia ● Pancreas: updated pancreatic cystic lesion guidance, specified guidance for increased lifetime risk for pancreatic cancer and pancreatitis ● Renal: specified guidance for increased lifetime risk of renal cancer ● Hernia: Added indications for lower esophageal and deep intraabdominal hernias ● Aneurysm: eliminated indications for abdomen alone or pelvis imaging alone, resubmission as abdomen and pelvis CT required unless limited indication ● Transplant: added section |

| | |
|--|---|
| | <ul style="list-style-type: none"> ● Background: deleted some sections, added information to assist with adjudication/application of guideline statement ● Aligned sections across body imaging guidelines ● General Information moved to beginning of guideline with added statement on clinical indications not addressed in this guideline ● Added statement regarding further evaluation of indeterminate findings on prior imaging |
|--|---|

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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