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2025 Magnetic Resonance Imaging (MRI) Abdomen/MRCP

Diagnostic Imaging

MRI-Abdomen-HH

Last Review Date: 05/21/2025
Previous Review Date: 10/28/2024
Guideline Initiated: 06/30/2019

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Magnetic Resonance Imaging (MRI) Abdomen

MRI Abdomen Related National Coverage Determination (NCD)/Local Coverage Determination (LCD)

Please refer to https://www.cms.gov/medicare-coverage-database/search.aspx if applicable to the individual's health plan membership.

Type/ID Number	Title
LCD 35391	Multiple Imaging in Oncology

Clinical Judgment

These medical policies are designed to provide clinical guidance and do not supplant a provider's independent professional judgment. Physicians retain full and independent authority to determine appropriate care based on each patient's individual clinical circumstances. Although services may be subject to documentation requirements, medical necessity review, or coverage limitations, nothing in this policy is intended to restrict or interfere with a physician's independent medical judgment.

MRI General Contraindications

MRI is contraindicated for **ANY** of the following:

- Safety, related to clinical status (body mass index exceeds MRI capability, intravascular stents within recent 6 weeks)
- Safety, related to implanted devices (aneurysm clips, cochlear implant, implantable cardio-defibrillators, insulin pump, permanent pace maker, spinal cord stimulator)[1]
  References: [26] [10] [19]

Preamble: Pediatric Diagnostic Imaging

HealthHelp's clinical guidelines for the Diagnostic Imaging program, are intended to apply to both adults and pediatrics (21 years of age or younger), unless otherwise specified within the criteria.

MRI Abdomen Guideline

Magnetic resonance imaging (MRI) of the abdomen is considered medically appropriate when the documentation demonstrates **ANY** of the following:

[1]Some implanted devices that were once absolute contraindications to a MRI may now be accepted, including if the specific MRI is able to accommodate the device or the device itself is deemed safe for MRI.

(*__NOTE__: *Aneurysm for diagnosis and monitoring is completed with CT angiography [CTA] or magnetic resonance angiography [MRA]. See CTA or MRA Abdomen and Pelvis guidelines*)
References: [11] [15]

1. Cancer, limited to the abdomen, is known and **EITHER** of the following:
    a. Initial diagnosis for staging and metastasis evaluation
    b. Surveillance (*Follow the NCCN surveillance. See **Surveillance** section below*)

    References: [16] [23] [14]
2. Infection or inflammatory disease, limited to the abdomen, is suspected or known, CT is **contraindicated or unavailable** and **ANY** of the following:
    a. Biliary disease, Crohn's disease, pancreatitis, pyelonephritis or ulcerative colitis complication evaluation and symptoms are persistent (eg, cramping, diarrhea, pain).
    b. Inflammatory disease or peritonitis is suspected, for diagnosis.

    References: [17] [24] [29]
3. Pain in the abdomen is known, with unknown diagnosis/etiology, and **ANY** of the following:
    a. CT is **contraindicated or unavailable** and **ANY** of the following:
        i. Age is over 65 years old **AND** abdominal pain is acute.
        ii. Initial workup is non-diagnostic or indeterminate. (***NOTE:** *initial workup must include: imaging [eg, ultrasound], laboratory testing [eg, CBC, chemistry, urinalysis, amylase/lipase if pancreatitis is suspected, liver function tests if hepatic disease is suspected.])*
    b. Pediatric individual and initial workup is non-diagnostic or indeterminate. (***NOTE:** *initial workup must include: imaging [eg, ultrasound], laboratory testing [eg, CBC, chemistry, urinalysis, amylase/lipase if pancreatitis is suspected, liver function tests if hepatic disease is suspected.])*

    References: [34] [35] [45] [22] [27]
4. Post-surgical assessments for evaluation of complications or disease recurrence.
5. Prior abdominal ultrasound is non-diagnostic or indeterminate.
6. Renal pathologies (hematuria, renal colic, complicated UTI) are suspected and ultrasound is non-diagnostic or indeterminate. (*__NOTE__: *use CT urography for hematuria evaluation and kidney stone complications.*) [42]
    References: [18]
7. Trauma, blunt, to the abdomen is known, complications are suspected and CT is **contraindicated or unavailable.**

References: [38]

8. Weight loss occurred and is unintentional and unexplained (more than 10% of body weight in 2 months or more than 5% of body weight in 6 months) and CT is **contraindicated or unavailable**.
References: [30]

Combination CT and MRI for Metastases Evaluation Guideline

Combination CT/MRI studies (5 or less concurrent studies, with a CT or MRI appropriate for cancer location: abdomen, brain, cervical spine, chest, lumbar spine, neck, pelvis and/or thoracic spine) for **ANY** of the following situations:

1. Staging evaluation, for baseline pre-therapy
2. Surveillance following the National Comprehensive Cancer Network (NCCN) Guidelines recommended schedule (*See **Surveillance** section*)

Magnetic Resonance Cholangiopancreatography (MRCP)

MRCP Guideline

A magnetic resonance cholangiopancreatography (MRCP) is considered medically appropriate when the documentation demonstrates **ANY** of the following:

1. Gallbladder, biliary or pancreatic pathology is suspected or known and **ANY** of the following:
    a. Biliary strictures evaluation
    b. Choledocholithiasis (gallstones) or choledochal cyst(s) is suspected (eg, bloating, nausea, epigastric or right upper quadrant pain, vomiting) and ultrasound is completed.
    c. Congenital anomaly of the pancreatobiliary tract (eg, aberrant ducts, pancreas divisum) is suspected.
    d. Endoscopic retrograde cholangiopancreatography (ERCP) is **contraindicated or unavailable**, for post-surgical biliary anatomy and complications evaluation
    e. Pancreatic or biliary tree abnormality (eg, cholangitis, mass, stricture) is suspected, based on symptoms (eg, fever, nausea, pain) and/or laboratory findings (eg, elevated bilirubin and/or white blood cells), **AND** initial imaging (eg, ERCP, ultrasound) is complete **OR contraindicated or unavailable.**
    f. Pancreatobiliary disease during pregnancy, when ultrasound is completed. [12]

g. Symptoms (eg, nausea, pain, vomiting) are persistent (10 days or more) **AND** prior imaging (eg, ultrasound) is abnormal, non-diagnostic or indeterminate.

References: [20] [34] [9] [20] [21] [13]

2. Pancreatitis is suspected or known and **ANY** of the following:

   a. Acute (initial diagnosis, up to 4 weeks) pancreatitis is suspected with atypical signs/symptoms (eg, afebrile), including amylase and lipase that are abnormal, non-diagnostic or indeterminate (*see* ***Pancreatitis*** *definition*).

   b. Prior history of pancreatitis (greater than 4 weeks ago) **OR** pancreatic pseudocyst, abdominal pain is persistent and worsening **OR** re-exacerbation is suspected.

References: [32]

LCD 35391
See also, **LCD 35391**: Multiple Imaging in Oncology at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

Abdomen Surveillance section

Ampullary Adenocarcinoma Surveillance

Ampullary Adenocarcinoma: No imaging surveillance suggested.
References: [40]

Bone Cancer Surveillance

Bone cancer surveillance includes **ANY** of the following:

1. Chondrosarcoma surveillance for **ANY** of the following:

   a. Atypical cartilaginous tumor surveillance with cross-sectional imaging (CT + contrast, MRI ± contrast) every 6 to 12 months for 2 years, then annually as clinically indicated

   b. Low-grade, extracompartmental appendicular tumor, grade I axial tumors or high-grade (grade II or III, clear cell or extracompartmental) tumors surveillance with **ALL** of the following:

      i. Chest CT at least every 6 months for 5 years, then annually for at least 10 years, then if symptoms are new or progressing.

ii. MRI (± contrast) or CT (+ contrast) if symptoms are new or progressing.

2. Chordoma surveillance with **ALL** of the following:
   a. Chest CT imaging every 6 months, annually for 5 years, then annually thereafter, then if symptoms are new or worsening.
   b. Imaging of primary site, timing and modality (eg, MRI ± CT [both + contrast]) if symptoms are new or progressing, up to 10 years
3. Ewing Sarcoma after primary treatment completed surveillance with **ALL** of the following:
   a. Chest CT: every 3 months
   b. Primary site imaging with MRI ± CT (both + contrast), increase intervals after 24 months and after 5 years, annually, then if symptoms are new or progressing (indefinitely) (*__NOTE__: *PET/CT [head-to-toe] is appropriate*)
4. Giant cell tumor of the bone surveillance with **ALL** of the following:
   a. Chest CT or MRI imaging every 6 to 12 months for 4 years, then annually thereafter, then if symptoms are new or progressing
   b. Surgical site imaging if symptoms are new or progressing (eg, CT and/or MRI, both with contrast)
5. Osteosarcoma surveillance with primary site and chest imaging (using same imaging that was done for initial work-up) for **ANY** of the following: (*__NOTE__: *PET/CT [head-to-toe] is appropriate*.)
   a. Image every 3 months for years 1 and 2
   b. Image every 4 months for year 3
   c. Image every 6 months for years 4 and 5
   d. Image annually for year 6 and thereafter, then if symptoms are new or progressing

References: [2025 Bone Cancer Version 1.2026]

Colon Cancer Surveillance

Colon cancer surveillance includes **ANY** of the following: (*__Note__: *Routine computed tomography [CT] scanning are **NOT** recommended beyond 5 years.*)

1. Stage II or III disease surveillance includes CT chest, abdomen and pelvis every 6 to 12 months from date of surgery, for a total of 5 years. (__NOTE__: *PET/CT is **NOT** indicated*.)
2. Stage IV disease surveillance includes CT chest, abdomen and pelvis every 3 to 6 months for 2 years, then every 6 to 12 months for a total of 5 years. (__NOTE__: *PET/CT is **NOT** indicated*.)

References: [5]

Esophageal and Esophagogastric Junction Cancer Surveillance

Esophageal and esophagogastric junction cancer surveillance includes **ANY** of the following[2]:

1. Adenocarcinoma, squamous cell carcinoma; imaging studies if symptoms are new or progressing
2. Tumor classification T1b[a] (N0 on ultrasound) after endoscopic resection or ablation, imaging surveillance includes computed tomography (CT) chest and abdomen (+ contrast, unless **contraindicated**) every 6 months for the first 2 years and annually for up to 5 years
3. Tumor classification T1b or greater, any N[a] or T1a N+, imaging surveillance includes esophagectomy performed with or **WITHOUT** adjuvant therapy then surveillance includes chest and abdomen CT (+ contrast, unless **contraindicated**) every 6 months for the first 2 years and annually for up to 5 years
4. Tumor classification any T and/or any N, with neoadjuvant chemotherapy **OR** chemoradiotherapy **AND** esophagectomy, with or **WITHOUT** adjuvant treatment, imaging surveillance includes chest and abdomen CT (+ contrast, unless **contraindicated**) every 6 months for up to 2 years, then annually for up to 5 years and EGD, then if symptoms are new or progressing
5. Tumor classification (pretreatment) N0 to N+, T1b to T4, T4b, with definitive chemoradiation (**WITHOUT** esophagectomy), surveillance imaging includes chest and abdomen CT (+ contrast unless **contraindicated**) every 3 to 6 months for the first 2 years and annually for up to 5 years

References: [1]

Gastric Cancer Surveillance

Gastric cancer surveillance includes **ANY** of the following (**NOTE**: *Routine gastric cancer surveillance is **NOT** recommended beyond 5 years*):

1. Tumor type Tis (successfully treated by endoscopic resection [ER]); recurrent disease is suspected, based on symptoms (eg, abdominal pain, bloating, diarrhea); image with chest, abdomen and pelvis computed tomography (CT) (+ contrast), then if symptoms are new or progressing

[2]Routine esophageal/esophagogastric junction cancers are **NOT** recommended for cancer-specific surveillance, for more than 5 years after the end of treatment.

2. Tumor types: p stage I (T1a [treated by ER] or T1a, T1b, N0 [treated by surgical resection]) imaging surveillance includes CT chest, abdomen and pelvis (+ contrast), then if symptoms are new or progressing
3. Tumor types: p stage II/III or yp stage I to III (treated with neoadjuvant ± adjuvant therapy) surveillance imaging with chest, abdomen and pelvis CT (+ contrast), every 6 months for the first 2 years then annually up to 5 years

References: [2]

Gastrointestinal Stromal Tumors (GISTs) Surveillance

Gastrointestinal stromal tumors (GISTs) surveillance includes **ANY** of the following:

1. After treatment for progressive disease, abdominal/pelvic CT or MRI to evaluate therapeutic response (Use PET/CT if CT results are non-diagnostic or indeterminate).
2. Completely resected primary disease, image with abdomen and pelvis CT (+ contrast) MRI (± contrast) every 3 to 6 months for 5 years, then annually (*__NOTE__: *Less frequent imaging surveillance is acceptable for low-risk or very small tumors [smaller than 2 cm]. More frequent imaging surveillance is required for individuals with high-risk disease that discontinue [tyrosine kinase inhibitor] TKI therapy.*)
3. **INCOMPLETELY** resected disease or discovery of metastatic disease during surgery, image with abdomen and pelvis CT and/or MRI every 3 to 6 months.

References: [43]

Hepatocellular Carcinoma Surveillance

Hepatocellular carcinoma surveillance includes imaging with multiphasic (+ contrast) computed tomography (CT) or magnetic resonance imaging (MRI) of the abdomen and pelvis, if initial ultrasound is non-diagnostic or indeterminate; every 6 months.
References: [6]

Kidney Cancer Surveillance

Kidney cancer surveillance includes **ANY** of the following:

1. Long-term surveillance after 5 years: abdominal CT/MRI imaging follow-up with increasing intervals (due to risk of metachoronous tumors/late recurrences). (*__NOTE__: *For stages 3 or 4 of disease, use chest imaging at increasing intervals.*)
2. Relapsed, stage IV and surgically unresectable disease surveillance includes **ALL** of the following:
    a. CT or MRI chest, abdomen and pelvis at baseline pre-treatment and at start of surveillance period with follow-up every 6 to 16 weeks

b. MRI or CT of head at baseline and if symptoms are new or progressing

c. MRI of the spine if symptoms are new or progressing.

3. Stage I kidney cancer surveillance and **ANY** of the following:

a. Follow-up during active surveillance includes **ALL** of the following;

i. Abdominal computed tomography (CT) or magnetic resonance imaging (MRI) (± contrast, if **NO contraindication**) within 6 months of starting active surveillance; then CT or MRI at least annually thereafter

ii. Chest CT at baseline, then annually to assess for pulmonary metastasis as clinically indicated (if intervention is planned, use repeat chest imaging)

b. Follow-up after ablative techniques includes **ALL** of the following:

i. Abdominal CT or MRI (± contrast, unless **contraindicated**) at 1 to 3 months, 6 months and 12 months, then annually thereafter

ii. Chest CT annually for 5 years for individuals with biopsy-proven, low-risk pathologic features (**NO** sarcomatoid, low-grade [grade 1 or 2] renal cell carcinoma [RCC], non-diagnostic biopsies or **NO** prior biopsy)

c. Follow-up after partial or radical nephrectomy includes **ALL** of the following:

i. Abdominal CT or MRI within 3 to 12 months of surgery, then annually for up to 5 years or longer if clinically indicated (*__NOTE__: *More frequent imaging schedule is considered if positive margins or adverse pathologic features [such as sarcomatoid, high-grade [grade 3/4]*)

ii. Chest CT annually for at least 5 years, then if symptoms are new or progressing. (*__NOTE__: *More frequent imaging schedule is considered if positive margins or adverse pathologic features*)

4. Stage II kidney cancer surveillance, after a partial or radical nephrectomy, and **ANY** of the following:

a. Abdominal CT or MRI for baseline, every 6 months for 2 years, then annually for up to 5 years, then if symptoms are new or progressing. (*__NOTE__: *More frequent imaging schedule is considered if positive margins or adverse pathologic features (such as sarcomatoid, high-grade [grade 3/4]*)

b. Chest CT annually for 5 years, then if symptoms are new or progressing. (*__NOTE__: *More frequent imaging schedule is considered if positive margins or adverse pathologic features*)

5. Stage III kidney cancer **OR** follow-up after adjuvant therapy surveillance includes **ALL** of the following:

a. Abdominal CT or MRI for baseline and within 3 to 6 months after surgery, then CT or MRI (for category 2B for stage III) every 3 to 6 months for 3 years, then annually up to 5 years and, then if symptoms are new or progressing.

b. Chest CT for baseline and within 3 to 6 months, followed by continued imaging every 3 to 6 months for at least 3 years, annually up to 5 years, then if symptoms are new or progressing.

c. MRI of the spine if symptoms are new or progressing.

References: [28]

Mesothelioma: Peritoneal Surveillance

Mesothelioma: peritoneal surveillance includes CT chest **AND** CT or MRI abdomen and pelvis every 3 to 6 months for 5 years then annually.
References: [33]

Neuroendocrine and Adrenal Tumors Surveillance

Neuroendocrine and adrenal cancer surveillance includes **ANY** of the following:[3]

1. Adrenal gland tumors surveillance imaging includes **ANY** of the following:
   a. Localized disease: chest computed tomography (CT) (± contrast) and abdominal CT or magnetic resonance imaging (MRI) (+ contrast) every 3 to 12 months up to 5 years, then if symptoms are new or progressing.
   b. Locoregional unresectable or metastatic disease; chest CT (± contrast) and CT or MRI abdomen and pelvis (+ contrast) or FDG positron emission tomography (PET)/CT every 3 to 12 months up to 5 years, then if symptoms are new or progressing.
2. Carcinoid syndrome surveillance imaging includes **BOTH** of the following:
   a. Abdominal/pelvic multiphasic CT or MRI every 3 to 12 months and chest CT (± contrast) if symptoms are new or progressing.
   b. Echocardiogram (ECHO) every 1 to 3 years or as clinically indicated **WITHOUT** known carcinoid heart disease (CHD) and at least annually for individuals with established CHD.
3. Gastrointestinal tract (well-differentiated grade 1/2), lung and thymus imaging and **ANY** of the following:

[3]**NO** surveillance is indicated for appendiceal tumors 2 cm or smaller **WITHOUT** aggressive features (eg, high-grade cytologic atypia, infiltrative invasion lymphatic and hematogenous metastases).

a. Lung nodules, multiple or tumorlets, image with chest CT (- contrast) every 12 to 24 months if symptoms are new or progressing.

b. Rectal tumor is 1 cm to 2 cm or less: image with rectal MRI at 6 and 12 months if symptoms are new or progressing.

4. Gastrointestinal (GI) tract (jejunum/ileum/colon, duodenum, rectum), lung and/or thymus neuroendocrine tumor (NET) surveillance includes imaging post-resection with **ANY** of the following:

   a. Jejunum/ilium/colon, duodenum, rectum and thymus, surveillance imaging with abdominal ± pelvic multiphasic CT or MRI according to **ONE** of the following levels of frequency[4]:

      i. Within 3 months to 12 months post-operatively

      ii. After 12 months, image every 12 to 24 months for 10 years

      iii. After 10 years if symptoms are new or progressing.

   b. Lung/thymus tumors surveillance chest CT (± contrast) for primary tumors, (as clinically indicated for primary GI tumors) according to **ONE** of the following levels of frequency:

      i. Within 12 weeks to 12 months post-operatively

      ii. After 12 months, image every 12 to 24 months for 10 years

      iii. After 10 years if symptoms are new or progressing.

5. Grade 3, well-differentiated neuroendocrine surveillance includes chest CT (± contrast) as clinically indicated for **ANY** of the following:

   a. Locally advanced/metastatic disease with favorable biology (low Ki-67 [eg, less than 55%], positive somastatin receptor [SSTR] based PET imaging) includes abdominal/pelvic MRI (+ contrast) or abdominal/pelvic multiphasic CT for surveillance with **ANY** of the following:

      i. Resectable disease surveillance every 3 to 6 months for 2 years, then every 6 to 12 months for up to 10 years **AND** chest CT if symptoms are new or progressing.

      ii. Unresectable disease surveillance every 12 weeks to 24 weeks (depending on tumor biology) **AND** chest CT (± contrast), SSTR-PET/CT, SSTR-PET/MRI or FDG-PET/CT; if symptoms are new or progressing.

   b. Locally advanced/metastatic disease with unfavorable biology (high Ki-67 [eg 55% or higher], rapid growth rate, FDG avid tumors, negative SSTR-based PET

[4]High-grade tumors are appropriate for more frequent monitoring.

imaging), includes surveillance imaging, every 8 weeks to 12 weeks (depending on tumor biology) with **ALL** of the following:

i. Abdominal/pelvic MRI (+ contrast) or abdominal/pelvic multiphasic CT and FDG PET/CT as clinically indicated

ii. Chest CT (± contrast) if symptoms are new or progressing.

iii. FDG-PET/CT, if symptoms are new or progressing.

c. Locoregional disease (resectable) abdominal/pelvic MRI (+ contrast) or abdominal/pelvic multiphasic CT with frequency of **ONE** of the following:

i. Every 3 to 6 months for 2 years (depending on tumor biology, Ki-67) and chest CT as clinically indicated

ii. Every 6 months to 12 months for up to 10 years (depending on tumor biology, Ki-67) and chest CT as clinically indicated

d. Multiple endocrine neoplasia, type 1 (MEN1) screening surveillance for **ANY** of the following tumor types: (*__NOTE__: *For prolonged surveillance, use imaging studies without radiation.*)

i. Lung/thymic NETs: chest CT or MRI (+ contrast) every 1 to 3 years

ii. PanNET: abdominalpelvic CT or MRI (+ contrast) every 1 to 3 years

iii. Parathyroid: if calcium rises, re-image with single-photon emission computed tomography (SPECT) scan (SPECT-CT preferred) or 4D-CT

iv. Pituitary: pituitary or sella MRI (+ contrast) of the pituitary every 3 to 5 years

e. Poorly differentiated large or small cell carcinoma and/or mixed neuroendocrine/non-neuroendocrine neoplasm or unknown primary, imaging surveillance includes **ALL** of the following:

i. Locoregional unresectable or metastatic disease surveillance imaging includes **EITHER** chest CT (± contrast) with abdominal/pelvic MRI (+ contrast) **OR** chest/abdominal/pelvic multiphasic CT; every 6 weeks to 16 weeks

ii. Resectable surveillance imaging includes **EITHER** chest CT (± contrast) with abdominal/pelvic MRI (+ contrast) **OR** chest, abdomenl and pelvis multiphasic CT; every 12 weeks for the 1st year, and every 6 months thereafter

f. Post-operative from potentially curative surgery surveillance for at least 10 years (longer if high-risk)

6. Pancreatic neuroendocrine tumor surveillance imaging, post-resection, includes chest CT (± contrast) as clinically indicated and abdominal multiphasic CT or MRI with imaging frequency of **ONE** of the following[5]:
    a. Within 3 to 12 months post-operatively
    b. After 12 months, image every 6 to 12 months for 10 years
    c. After 10 years if symptoms are new or progressing.
7. Pheochromocytoma/paranganglioma surveillance imaging and **ANY** of the following:
    a. Locally unresectable disease or distant metastases, imaging every 12 weeks for 12 months, includes **ANY** of the following:
        i. Chest, abdomen and pelvis CT with contrast
        ii. Chest CT (± contrast) and abdominal/pelvic MRI (- contrast) (if risk for hypertensive episode)
        iii. FDG-PET/CT for bone dominant disease
        iv. SSTR-PET/CT or SSTR-PET/MRI (if previous SSTR-positive or concern for disease progression) prior to radionuclide therapy
    b. Resectable disease, post-resection includes chest CT (± contrast) and abdominal/ pelvic CT or MRI (+ contrast), if clinically indicated with imaging frequency of **ONE** of the following:
        i. 12 weeks to 12 months after resection
        ii. Every 6 to 12 months for the 1st 3 years
        iii. Annually from year 4 to 10.
        iv. More than 10 years, then as clinically indicated

[5]High-grade tumors are appropriate for more frequent monitoring.

TIP

NCCN recommends following the surveillance protocols from designated guidelines for the following hereditary endocrine neoplasia syndromes :

- Thyroid cancer guideline, use for: Multiple endocrine neoplasia, type 2 (MEN2) with genetic evaluation of inherited syndromes
- Kidney cancer, use for:
  - Hereditary paraganglioma/pheochromocytoma syndrome
  - Tuberous sclerosis complex (TSC1 and TSC2)
  - von Hippel Lindau syndrome (VHL)
- Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic, use for:
  - Neurofibromatosis type 1 (NF1)
  - Li-Fraumeni syndrome (TP53)
  - Lynch syndrome (MLH1, EPCAM/MSH2, MSH6, PMS2)
- Genetic/Familial High-Risk Assessment: Colorectal, use for:
  - Lynch syndrome (MLH1, EPCAM/MSH2, MSH6, PMS2)
  - Familial adenomatous polyposis (APC)

References: [2025 Neuroendocrine and Adrenal Tumors Version 3.2025]

Occult Primary Cancer Surveillance

Occult primary cancer surveillance imaging for long-term surveillance includes diagnostic tests based on symptomatology.

References: [39]

Ovarian, Fallopian Tube or Primary Peritoneal Cancers Surveillance

Ovarian, fallopian tube or primary peritoneal cancer surveillance includes **ALL** of the following:

1. Malignant germ cell/sex cord-stromal tumor surveillance for **ANY** of the following:
   a. Malignant germ cell tumors surveillance with chest/abdomen/pelvis CT every 3 months for years 1 and 2, every 6 to 12 months for year 3, then clinically as indicated.

b. Malignant sex cord-stromal tumors surveillance when symptomatic (eg, abdominal distention, pain, uterine bleeding), biomarkers are elevated or physical exam demonstrates suspicious findings.

2. Stage I through IV, primary treatment was received; follow-up imaging if symptoms are new or progressing.

References: [3]

Pancreatic Adenocarcinoma Surveillance

Pancreatic adenocarcinoma surveillance includes post-operative surveillance imaging with chest CT and abdomen and pelvis CT or MRI (+ contrast) unless **contraindicated**.
References: [41]

Soft Tissue Sarcoma Surveillance

Soft tissue sarcoma surveillance includes **ANY** of the following: (*__NOTE__: *Use contrast imaging; for long term surveillance to minimize radiation exposure,MRI may be substituted.*)

1. Desmoid tumor (aggressive fibromatosis) imaging surveillance includes computed tomography (CT) or magnetic resonance imaging (MRI) every 3 to 6 months for 3 years, then every 6 to 12 months thereafter
2. Extremity, trunk or head and neck, for long-term follow-up with **ANY** of the following:
    a. Long-term follow-up with **ALL** of the following:
        i. Chest CT imaging (- contrast) to detect asymptomatic distant recurrence
        ii. MRI for imaging of primary site
    b. Stage I tumors and **ALL** of the following:
        i. Chest CT imaging (- contrast) every 6 to 12 months
        ii. Post-operative baseline and periodic imaging of primary site with MRI or CT if MRI is **contraindicated or unavailable**.
    c. Stage II and III tumors and **ANY** of the following:
        i. Baseline and periodic imaging of primary site
        ii. Chest and other known sites of metastatic disease imaging (CT [- contrast] or X-ray) every 2 to 6 months for 2 to 3 years, then every 6 months to complete a total of 5 years, then annually.
        iii. Post-operative reimaging to assess the primary tumor site and rule out metastatic disease (MRI or CT if MRI is **contraindicated or unavailable**.

3. Retroperitoneal/intra-abdominal, after management of primary disease imaging surveillance includes chest/abdomen/pelvis CT or MRI every 3 to 6 months for 3 years, then every 6 months for the next 2 years, then annually.

References: [44]

Wilms Tumor (Nephroblastoma) Surveillance

Wilms tumor (nephroblastoma) surveillance imaging includes chest and abdominal imaging every 3 months for 2 years, then every 6 months for 2 years (*__NOTE__: *Chest X-ray and abdominal ultrasound are used in place of cross sectional imaging with chest computed tomography [CT] and abdominal CT or magnetic resonance imaging [MRI]*)
References: [4]

Blood/Bone Marrow Cancers Surveillance section

Acute Lymphoblastic Leukemia Surveillance

Acute lymphoblastic leukemia: No imaging surveillance suggested.
References: [36]

Acute Myeloid Leukemia Surveillance reuse

Blastic plasmacytoid dendritic cell neoplasm surveillance includes a repeat PET/CT for individuals with prior evidence of extramedullary disease.
References: [31]

Chronic Lymphocytic Leukemia/Small Cell Lymphocytic Lymphoma Surveillance

Chronic lymphocytic leukemia/small cell lymphocytic lymphoma: No imaging surveillance suggested.
References: [46]

Chronic Myeloid Leukemia Surveillance

Chronic Myeloid Leukemia: No imaging surveillance suggested.
References: [37]

Hairy Cell Leukemia Surveillance

Hairy cell leukemia: No imaging surveillance suggested.
References: [47]

Multiple Myeloma Surveillance

Multiple myeloma surveillance includes **ANY** of the following:

1. Multiple myeloma, surveillance imaging when recurrence is suspected with **ANY** of the following:
    a. CT scan, low dose
    b. FDG PET/CT
    c. MRI (- contrast material), whole-body
2. Smoldering myeloma, surveillance imaging annually (or more often when recurrence is suspected) with **ANY** of the following:
    a. CT scan, low dose
    b. FDG PET/CT
    c. MRI (- contrast material), whole-body

References: [25]

MRI Abdomen Summary of Changes

MRI Abdomen guideline had the following version changes from 2024 to 2025:

Table 1. 2025 MRI Abdomen Summary of Changes

Date	Type of Change	Summary
05/21/2025	Annual	• Added the following to keep in line with current evidence: ▪ "Note: Aneurysm" per ACR ▪ "Prior abdominal ultrasound is non-diagnostic or indeterminate" as less advanced imaging is appropriate prior to MRI • Removed the following to keep in line with current evidence: ▪ Combination studies as they are redundant ▪ "Edema in the lower extremity is diffuse" as this falls under the "Prior abdominal ultrasound" indication ▪ "Fever of unknown origin (FUO)" as this falls under the "Prior abdominal ultrasound" indication ▪ "Fistula is known **OR** fistula recurrence is suspected" as this falls under the "Prior abdominal ultrasound" indication ▪ "Hernia is suspected or known" as this falls under the "Prior abdominal ultrasound" indication ▪ "Iliac artery compression (May-Thurner Syndrome) is suspected" as this falls under the "Prior abdominal ultrasound" indication ▪ "Organ evaluation **OR** previous organ imaging is non-diagnostic or indeterminate and **ANY** of the following" as this falls under the "Prior abdominal ultrasound" indication ▪ "Pheochromocytoma is suspected" as this falls under the "Prior abdominal ultrasound" indication ▪ "Prior MRI abdomen imaging is non-diagnostic or indeterminate" as it is too broad. ▪ Under "Cancer is suspected or known" ◦ "Active cancer treatment" as it is redundant with restaging ◦ "Lymphoma is suspected" due to lack of EBM ◦ "Paraneoplastic syndrome" due to lack of EBM ▪ Under "Infection or inflammatory disease" ◦ "Diverticulitis" as this falls under the "Prior abdominal ultrasound" indication ◦ "Fluid collection is abnormal, limited to abdomen" as this falls under the "Prior abdominal ultrasound" indication ◦ "Infection is known and abscess, localized to the abdomen, is suspected" as this falls under the "Prior abdominal ultrasound" indication ▪ Under MRCP ◦ Combined "Choledochal cysts" with "Choledocholithiasis" for consistency

Date	Type of Change	Summary
		◦ "Primary sclerosing cholangitis" per ACR ▪ "Varicocele is new or NOT reducible" as this falls under the "Prior abdominal ultrasound" indication

MRI Abdomen/MRCP Procedure Codes

Table 1. MRI Abdomen Associated Procedure Codes

CODE	DESCRIPTION
74181	Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s)
74182	Magnetic resonance (eg, proton) imaging, abdomen; with contrast material(s)
74183	Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences
0649T	Quantitative magnetic resonance for analysis of tissue composition (eg, fat, iron, water content), including multiparametric data acquisition, data preparation and transmission, interpretation and report, obtained with diagnostic MRI examination of the same anatomy (eg, organ, gland, tissue, target structure); single organ
S8037	Magnetic resonance cholangiopancreatography (MRCP)

MRI Abdomen/MRCP Definitions

24-hour urinalysis is a timed urine collection used in the metabolic evaluation of urinary stone disease, proteinuria evaluation, and estimation of renal function via creatinine clearance, estimating residual renal function in end stage renal disease with urea and creatinine clearance.
Aberrant is a deviation from the normal or expected course, structure or function.
Abscess is a swollen area within body tissue, containing an accumulation of pus.
Adenoma describes a benign tumor or a glandular structure or of glandular origin.
Adrenal glands, also known as suprarenal glands, are small, triangular-shaped glands located on top of both kidneys. Adrenal glands produce hormones that help regulate your metabolism, immune system, blood pressure, response to stress and other essential functions.
Alanine Transaminase (ALT) is an enzyme which promotes transfer of an amino group from glutamic acid to pyruvic acid and when present in abnormally high levels in the blood is a diagnostic indication of liver disease or damage.
Alkaline phosphatase (ALP) refers to any of the phosphatases that are optimally active in alkaline medium and occur in especially high concentrations in bone, the liver, the kidneys and the placenta. It is commonly used to diagnose liver damage or bone disorders.
Alpha-fetoprotein (AFP) is a fetal blood protein present abnormally in adults with some cancers (as of the liver) and normally in the amniotic fluid of pregnant women with high or low levels tending to be associated with certain birth defects (such as spina bifida or Down syndrome).

Amylase is an enzyme, or special protein, that helps digest carbohydrates. Most of the amylase in the body is made by the pancreas and salivary glands. A small amount of amylase in the blood and urine is normal.

Angiomyolipoma is a benign (noncancer) tumor of fat and muscle tissue that usually is found in the kidney. Angiomyolipomas rarely cause symptoms, but may bleed or grow large enough to be painful or cause kidney failure.

Anorexia is defined as a loss of appetite or an inability to eat, which can be secondary to various conditions such as depression, infection, cancer, or medication side effects.[1] Anorexia nervosa, on the other hand, is a complex psychological disorder characterized by restrictive eating leading to significantly low body weight, intense fear of gaining weight, and distorted body image.

Ataxia Telangiectasia Mutated (ATM) gene refer to changes in a gene that causes a rare neurodegenerative, autosomal recessive disorder characterized by chromosome instability, radiosensitivity, immunodeficiency and a predisposition for cancer.

BRCA1-associated protein 1 (BAP1) is a tumor suppressor gene that is located on chromosome 3p21. BAP1 is a deubiquitinating enzyme that regulates other cellular events, such as: cell-cycle control, transcription, chromatin modification, DNA damage response.

Beckwith-Wiedemann syndrome (BWS) is an inherited disease that is present at birth and is characterized especially by abdominal wall defects, increased birth weight, enlarged tongue, hypoglycemia, tumors usually of embryonic origin and enlargement of internal organs.

Biliary strictures, also known as bile duct strictures, are narrowing or blockages in the ducts that carry bile from the liver to the small intestine.

Bilirubin is a yellowish pigment that is produced when red blood cells break down. It is an important metabolite of heme, which coordinates iron in proteins.

Biochemical profile is a series of blood tests used to evaluate the functional capacity of several critical organs and systems, such as the liver and kidneys.

Birt Hogg Dube syndrome is an autosomal dominant genodermatosis, usually manifesting in the third decade of life with multiple fibrofolliculomas, trichodiscomas, and acrochordons. Patients with this syndrome have an increased susceptibility to develop renal cell carcinoma, lung cysts and spontaneous pneumothorax.

Bosniak Classification System is a system for classifying renal cystic masses based on imaging characteristics on contrast-enhanced computed tomography (CT). The classification system helps predict a risk of malignancy and suggests either follow up or treatment.

The Bosniak classification system divides renal cystic masses into five categories:

- Bosniak I:
  - Simple, benign cyst with imperceptible, rounded wall
  - ~0% malignant
  - **NO** follow-up required

- Bosniak 2:
  - Minimally complex
    - Few thin septa or calcifications
    - Non-enhancing attenuation
    - Renal lesions less than 3 cm
    - Well marginated
  - ~0% malignant
  - **NO** follow-up required
- Bosniak 2F:
  - Minimally complex
    - Hyperdense cyst greater than 3 cm diameter, mostly intrarenal (less than 25% of wall visible); no enhancement
    - Increased number of septa, minimally thickened with nodular or thick calcifications
    - Perceived (but not measurable) enhancement of a hairline-thins, mooth septa
  - ~5% malignant
  - Ultrasound/CT follow-up at 6 months
- Bosniak 3: Considered to have a malignancy risk greater than 80% and surgical excision is recommended in able-bodied patients.
  - Indeterminate with thick, nodular multiple septa or wall with measurable enhancement, hyperdenseon CT
  - ~55% malignant
  - Partial nephrectomy or radiofrequency ablation in elderly or poor surgical candidates
- Bosniak 4: Defined by their degree of complexity
  - Clearly malignant; solid mass with large cystic or necrotic component
  - ~100% malignant
  - Partial or total nephrectomy

BRCA1-associated protein 1 (BAP1) is a tumor suppressor gene that is located on chromosome 3p21. BAP1 is a deubiquitinating enzyme that regulates other cellular events, such as: cell-cycle control, transcription, chromatin modification, DNA damage response.

BReast Cncer Antigen gene (BRCA 1 or 2) are sometimes called tumor suppressor genes that change into harmful mutations resulting in cancer, notably breast and ovarian cancers.
B symptoms refer to systemic symptoms of fever, night sweats and weight loss which can be associated with both Hodgkin lymphoma and some non-Hodgkin lymphomas. The presence of B symptoms is a prognostic factor for some lymphomas.
Cancer Antigen (CA) 19-9 is a tumor marker that can indicate advanced pancreatic cancer. It's also associated with cancers in the colon, stomach and bile duct.
Carcinoembryonic antigen (CEA) is a glycoprotein involved in intercellular adhesion, produced by columnar and goblet cells, and found in normal colonic mucosa, but overexpressed in various malignancies, particularly colorectal cancer.
Catecholamines are hormones that act as neurotransmitters. They are produced by the body in the brain, nerve tissues, and adrenal glands. The main types of catecholamines are dopamine, norepinephrine, and epinephrine. Catecholamines are important in stress responses. They are released into the body in response to physical or emotional stress.
Cholangitis is inflammation of the bile ducts, the tubes that carry bile from the liver and gallbladder to the small intestine. It can be caused by various factors, including bacterial infections, obstruction of the bile ducts (like by gallstones or tumors), or autoimmune conditions.
Choledochal means related to, being or occurring in the common bile duct.
Choledochal cyst is a congenital dilation or aneurysm of the intrahepatic or extrahepatic biliary tract, often presenting with cholestatic jaundice, abdominal pain, and/or a right upper quadrant mass.
Choledocholithiasis is a condition where gallstones are present in the common bile duct. The gallstones can be made of cholesterol, calcium or bile pigments.
Cirrhosis is a condition in which the liver is scarred and permanently damaged. Scar tissue replaces healthy liver tissue and prevents the liver from working normally. Scar tissue also partly blocks the flow of blood through the liver. As cirrhosis gets worse, the liver begins to fail.
Colonoscopy is a nonsurgical procedure used to examine the entire large intestine using a flexible fiberoptic endoscope, typically performed with sedation after adequate bowel preparation.
Computed tomography (CT) is an imaging test that uses X-rays to computer analysis to generate cross sectional images of the internal structures of the body that can be displayed in multiple planes.
Computed tomography angiography (CTA) is a medical test that combines a computed tomography (CT) scan with an injection of a special dye to produce pictures of blood vessels and tissues in a part of the body.
Computed tomography urography (CTU) is a imaging exam that evaluates the urinary tract system using contrast medium.
Congenital is a condition or trait present from birth.
C-reactive protein (CRP) is a pentameric protein synthesized by the liver, whose level rises in response to inflammation.

Crohn's disease is chronic inflammation that typically involves the lower portion of the ileum, often spreads to the colon, and is characterized by diarrhea, cramping, loss of appetite and weight and the development of abscesses and scarring.

Cyclin-dependent kinase inhibitor (CKI) is a type of drug that specifically inhibits the activity of cyclin-dependent kinases (CDKs), which are crucial for cell cycle regulation and cellular proliferation. Common side effects include myelosuppression, neutropenia, and gastrointestinal disturbances.

Cyst is a closed sac having a distinct membrane and developing abnormally in a cavity or structure of the body.

Dermatomyositis is a rare disease that causes muscle inflammation and skin rash. Symptoms include a red or purple rash on sun exposed skin and eyelids, calcium deposits under the skin, muscle weakness and trouble talking or swallowing.

Diverticulitis is inflammation of an abnormal pouch or sac opening from a hollow organ (such as the intestine or bladder).

Edema an abnormal infiltration and excess accumulation of serous fluid in connective tissue or in a serous cavity.

Elastography is an imaging technique used to measure the stiffness of tissues, often to detect fibrosis or other pathological changes.

Endoscopic retrograde cholangiopancreatography (ERCP) is a procedure that diagnoses and treats problems in the pancreas, gallbladder, liver and bile ducts. It combines X-ray and an endoscope, which is a long, flexible, lighted tube.

Epigastric hernia occurs when fat or part of the intestines pushes through a weakness in the wall of the abdomen. The bulge can be caused by body tissue bulging through the surrounding muscle in the stomach area.

Erythrocyte sedimentation rate (ESR) is a blood test that measures the rate at which red blood cells settle at the bottom of a test tube over one hour, indicating the presence of inflammation in the body.

Fever of unknown origin is defined as a fever of 38.3°C (100.9°F) or higher on several occasions, persisting for at least 3 weeks despite thorough investigation, including at least three outpatient visits or three days in the hospital, without a definitive diagnosis.

Fibrosis is the pathological replacement of normal tissue architecture with rigid, collagen-rich connective tissue, leading to organ dysfunction.

Fistula is an abnormal connection between two epithelialized surfaces, often involving organs such as the gut, bladder, vagina, or skin, and can result from various causes including surgery, trauma, Crohn's disease, diverticular disease, or malignancy.

Focal nodular hyperplasia (FNH) is a benign tumor or lesion that forms in the liver.

Gaucher's disease is a rare hereditary disorder of lipid metabolism caused by an enzyme deficiency and characterized by enlargement of the spleen and liver, bone lesions and sometimes neurological impairment.

Hemochromatosis is a condition characterized by excessive iron accumulation in various organs due to increased iron absorption, which can lead to serious complications such as liver cirrhosis, heart failure, diabetes, and skin pigmentation.
Hepatitis inflammation of the liver tissue, which can be caused by various factors including viral infections, alcohol consumption, certain drugs, autoimmune diseases, and fatty liver disease.
Hepatocellular carcinoma is a malignant epithelial neoplasm originating in the liver, characterized by hepatic differentiation and often associated with cirrhosis or chronic viral hepatitis.[
Hepatoma also known as hepatocellular carcinoma (HCC), is a malignant epithelial neoplasm originating in the liver, characterized by hepatic differentiation and often associated with cirrhosis or chronic viral hepatitis.
Hepatomegaly is enlargement of the liver.
Hereditary leiomyomatosis and renal cell cancer (HLRCC) is a rare autosomal dominant genetic disorder characterized by cutaneous and uterine leiomyomas and an aggressive form of renal cell carcinoma.
Hereditary papillary renal carcinoma (HPRC) is a rare autosomal dominant disorder characterized by the development of multiple bilateral type 1 papillary renal cell carcinomas due to activating mutations in the MET proto-oncogene.
Hereditary paraganglioma syndrome is an autosomal dominant disorder characterized by the development of paragangliomas, which are tumors arising from paraganglia, often due to mutations in the succinate dehydrogenase (SDH) gene complex.
Hernia is a gap in the muscular wall that allows the contents inside the abdomen to protrude outward.
Iliac artery compression is a clinical syndrome of unilateral lower extremity swelling and pain due to venous hypertension caused by an iliac artery compressing an overlying iliac vein.
Incarcerated (also referred to as irreducible) is used to describe herniae, in which their contents are unable to pass back through the hernial opening to their anatomical site of origin. Incarceration is a risk factor for bowel obstruction and strangulation, and therefore usually necessitates urgent surgery.
Incisional hernia is a hernia that develops along a prior surgical incision in the abdomen.
Indeterminate findings are inconclusive or insufficient for treatment planning.
Inflammatory bowel disease is a group of chronic inflammatory conditions that affect the gastrointestinal tract, primarily the intestines. The two main types of IBD are Crohn's disease and ulcerative colitis.
Intraductal papillary mucinous neoplasm (IPMN) is a type of pancreatic cystic lesion that produces mucin and has the potential to transform into pancreatic cancer.
Jaundice is the yellow-orange discoloration of the skin, conjunctivae, and mucous membranes due to elevated plasma bilirubin levels, typically becoming evident at plasma bilirubin levels greater than 3 to 4 mg/dL.

Lipase is a digestive enzyme that breaks down fats during digestion. It is produced in the pancreas, mouth and stomach.

Lymphoma is a type of blood cancer that affects the immune system. Lymphoma occurs when abnormal white blood cells, called lymphocytes, grow in the lymphatic system.

Magnetic resonance angiography (MRA) is a non-invasive imaging technique that uses magnetic resonance imaging (MRI) to visualize the blood vessels in the body. It offers detailed images of arteries and veins without the need for catheters or ionizing radiation, unlike traditional angiography. MRA can help detect blockages, narrowing, aneurysms, and other vascular issues.

Magnetic resonance cholangiopancreatography (MRCP) is a type of MRI scan that uses computer software to create images of the pancreatic and bile ducts. It can also be used to see pancreatic cysts and blockages in the ducts.

Magnetic resonance enterography (MRE) is a type of magnetic resonance imaging (MRI) that uses a contrast material to produce detailed images of the small intestine and bowel.

Magnetic resonance imaging (MRI) is a non-invasive diagnostic technique that produces computerized images of internal body tissues and is based on nuclear magnetic resonance of atoms within the body induced by the application of radio waves.

Magnetic resonance urography (MRU) is a radiation-free MRI exam that uses magnetic waves and contrast material to create detailed images of the urinary tract. The images can show the structure and function of the kidneys, ureters and bladder.

May-Thurner syndrome (iliac vein compression syndrome) is a condition where the left common iliac vein is compressed by the overlying right common iliac artery and the underlying vertebral body, leading to venous congestion and stasis, which predisposes to venous thromboembolism (VTE).

Metastases is the spread of a disease-producing agency (such as cancer cells) from the initial or primary site of disease to another part of the body.

Mucinous cystic neoplasm (MCN) is a usually large uni- or multilocular thick-walled cyst, most often filled with mucinous fluid, but may also have a hemorrhagic or serous content.

Multiple endocrine neoplasia type 1 (MEN1) is a rare endocrine tumor syndrome with high penetrance. This syndrome is also known as Wermer syndrome. It primarily causes neoplasia of the parathyroid glands, the anterior pituitary gland and the neuroendocrine tissue of gastro-entero-pancreatic organ systems.

Non-diagnostic is a result that does not lead to a confirmed diagnosis.

Occult means the problem was hidden, not immediately apparent or cannot be detected with clinical methods alone.

Occult hernia or hidden hernia, also commonly referred to as an occult inguinal hernia, is an undetectable mass of herniated tissue.

Pancreas divisum is a congenital defect of the pancreas. It occurs when the ventral and dorsal buds of the pancreas do not fuse together during development. This results in a smaller opening for the main pancreatic duct to drain through.

Pancreatitis is an inflammatory condition of the pancreas that can be acute or chronic, leading to symptoms such as abdominal pain, nausea, and vomiting, and may result in complications like necrosis, fibrosis and organ failure.
Paraneoplastic syndrome is a group of rare disorders that are triggered by an abnormal immune system response to a cancerous tumors.
Pediatric approximate ages are defined by the US Department of Health (USDH), the Food and Drug Administration (FDA), and the American Academy of Pediatrics (AAP) as the following:

1. Infancy, between birth and 2 years of age
2. Childhood, from 2 to 12 years of age
3. Adolescence, from 12 to 21 years of age, further defined by the AAP into:
    a. Early (ages 11–14 years)
    b. Middle (ages 15–17 years),
    c. Late (ages 18–21 years)
    d. Older ages may be appropriate for children with special healthcare needs.

Peritonitis is inflammation of the smooth transparent serous membrane that lines the cavity of the abdomen of a mammal and is folded inward over the abdominal and pelvic viscera.
Peutz-Jeghers syndrome (PJS) is a familial polyposis inherited as an autosomal dominant trait that is characterized by numerous polyps in the stomach, small intestine and colon along with melanin-containing spots on the skin and mucous membranes especially the lips and gums.
Pheochromocytoma is a small vascular tumor of the adrenal medulla, causing irregular secretions of epinephrine and norepinephrine, leading to attacks of raised blood pressure, palpitations and headaches.
Polycystic kidney disease (PKD) is a genetic disorder that causes fluid-filled cysts to grow in the kidneys. The cysts can grow very large and cause the kidneys to enlarge and lose function. PKD cysts can reduce kidney function and lead to kidney failure.
Primary sclerosing cholangitis (PSC) is a chronic liver disease in which the bile ducts inside and outside the liver become inflamed and scarred, and are eventually narrowed or blocked. When the bile ducts are narrowed or blocked, bile builds up in the liver and causes further liver damage.
Prolactin (also known as lactotropin and PRL) is a hormone that's responsible for lactation, certain breast tissue development and contributes to hundreds of other bodily processes. Prolactin levels are normally low in people assigned male at birth (AMAB) and non-lactating and non-pregnant people.
Pyelonephritis is inflammation of both the lining of the renal pelvis and the parenchyma of the kidney, especially due to bacterial infection.
Pseudocyst is a fluid-filled cavity resembling a cyst but lacking a wall or lining.
Recurrence is a new occurrence of something that happened or appeared before.

Renal colic is a sudden, acute pain in the kidney area caused by the obstruction of urine flow from the kidney to the bladder. Kidney stones are the most frequent cause of obstruction.
Retroperitoneal describes the area behind the smooth transparent serous membrane that lines the cavity of the abdomen.
Retroperitoneal fibrosis (RPF) occurs when extra fibrous tissue forms in the area behind the stomach and intestines. The tissue forms a mass (or masses) or tough fibrotic tissue. It can block the tubes that carry urine from the kidney to the bladder. The cause of this problem is mostly unknown.
Screening is the systematic application of a test or inquiry to identify individuals at sufficient risk of a specific disorder to warrant further investigation or direct preventive action, among persons who have not sought medical attention for symptoms of that disorder.
Serine/threonine kinase 11 (STK11) is a tumor suppressor enzyme that helps prevent cells from growing and dividing too quickly or in an uncontrolled way.
Sickle cell disease is a chronic anemia that occurs in individuals who are homozygous for the gene controlling hemoglobin S (eg, African or Mediterranean descent). It is characterized by destruction of red blood cells and by episodic blocking of blood vessels by the adherence of sickle cells to the vascular endothelium. This causes the serious complications of the disease (such as organ failure).
Spigelian hernia is a rare ventral hernia that is defined as herniation of abdominal contents or peritoneum through a defect, namely the Spigelian fascia which is comprised of the transversus abdominis and the internal oblique aponeuroses.
Staging in cancer is the process of determining how much cancer is within the body (tumor size) and if it has metastasized (spread).
Steatosis is the first stage of nonalcoholic fatty liver disease (NAFLD). It's a condition where fat builds up in liver cells, but there's no inflammation or scarring at this stage.
Strangulated hernia occurs when the hernia contents are ischemic due to a compromised blood supply. This phenomenon occurs most commonly when there is a small opening in the musculature and a significant quantity of contents within the hernia itself.
Stricture is a narrowing or constriction of the lumen of a tube, duct or hollow organ such as the esophagus, ureter or urethra.
Surveillance in cancer is the ongoing, timely and systematic collection and analysis of information on new cancer cases, extent of disease, screening tests, treatment, survival and cancer deaths.
Syncope is loss of consciousness resulting from insufficient blood flow to the brain.
Total Kidney Volume (TKV) is the sum of the volume of the left and right kidneys. It is the primary measure of kidney growth and can provide information on disease status and progression.
Transfusion dependent thalassemia major is a disease that causes the early breakdown of red blood cells, requiring regular red blood cell transfusions to survive.

Transient elastography (TE) is a non-invasive ultrasound exam that measures liver stiffness. It's also known as ultrasound elastography.
Tuberous sclerosis is a genetic disorder of the skin and nervous system that is characterized by the formation of small benign tumors in various organs (such as the brain, kidney, eye and heart), is accompanied by variable symptoms including seizures, developmental delay or intellectual disability, skin lesions (as hypopigmented macules of the trunk and limbs or telangiectatic facial papules) and is inherited as an autosomal dominant trait or results from spontaneous mutation.
Tumor protein 53 (TP53) is a gene that instructs cells to produce a protein called tumor protein p53. The p53 protein acts as a tumor suppressor and is also known as the "guardian of the genome".
Ulcerative colitis (UC) is a nonspecific inflammatory disease of the colon of unknown cause characterized by diarrhea with discharge of mucus and blood, cramping abdominal pain, inflammation and edema of the mucous membrane with patches of ulceration.
Ultrasound is the diagnostic or therapeutic use of ultrasound and especially a noninvasive technique involving the formation of images used for the examination and measurement of internal body structures and the detection of bodily abnormalities.
Umbilical hernia occurs when part of the intestine bulges through the opening in the abdominal muscles near the navel.
Varicocele is abnormal dilation and enlargement of the scrotal venous pampiniform plexus which drains blood from each testicle.
Von Hippel-Lindau disease is a rare genetic disease that is characterized by hemangiomas of the retina and cerebellum, cysts or tumors of the central nervous system, pancreas, kidneys, adrenals and reproductive organs that is typically inherited as an autosomal dominant trait.

MRI Abdomen/MRCP References

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Disclaimer section

Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

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National and Local Coverage Determination (NCD and LCD)

NOTICE
To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to https://www.cms.gov/medicare-coverage-database/search.aspx.

Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions.
CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.
In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.

Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.

For Internal Use Only:

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