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2024 Computed Tomography (CT) Pelvis

Diagnostic Imaging

CT-Pelvis-HH

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Computed Tomography (CT) Pelvis

NCD 220.1
See also, **NCD 220.1**: Computed Tomography at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

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.

CT Pelvis Guideline

Computed tomography (CT) of the pelvis is considered medically appropriate when the documentation demonstrates **ANY** of the following:
(*__NOTE__: *For syndromes for which imaging starts in the pediatric age group, magnetic resonance imaging [MRI] is preferred*.)

1. Cancer is suspected or known, for **ANY** of the following:
    a. Cancer is known and **ANY** of the following:
        i. Active treatment within the past 12 months
        ii. Metastasis is suspected based on signs (eg, anorexia, intestinal obstruction, night sweats) or abnormal lab values (eg, alpha-fetoprotein [AFP], cancer antigen [CA] 19-9, carcinoembryonic antigen [CEA]).
    b. Mass, pelvic, is suspected or known and **ANY** of the following:
        i. Pelvic lymph nodes are incidental, abnormal **AND** prior imaging (initial 3 month follow-up) is non-diagnostic or indeterminate.
        ii. Pelvic mass is suspicious, for initial evaluation **AFTER** ultrasound **AND** physical exam are completed.
        iii. Surveillance (*__NOTE__: *One follow-up exam to ensure no suspicious change has occurred in a tumor in the abdomen and pelvis. No further surveillance CT unless tumor(s) are specified as highly suspicious or a change was found on the last follow-up CT, there are new/changing sign/symptoms or abnormal lab values*.)
        iv. Ultrasound is non-diagnostic or indeterminate.

c. Prostate cancer is known, for treatment response **OR** recurrence, when **magnetic resonance imaging (MRI) is contraindicated or unavailable** for **ANY** of the following:

i. Radiation therapy

ii. Radical prostatectomy

d. Staging evaluation (*__NOTE:__ *If staging for prostate cancer, must be categorized as High Risk[1] or Intermediate Risk[2] with more than 10% probability of lymph node involvement. National Comprehensive Cancer Network [NCCN] recommends Memorial Sloan Kettering Cancer Center [MSKCC]/Kattan nomogram).*

e. Surveillance following the NCCN Guidelines recommended schedule (*see **Surveillance** section*)

References: [4] [10] [2] [9] [23] [19]

2. Fracture of the pelvis, occult or complex, is suspected with pain.
Reference: [26]

3. Hernia (incisional, occult, Spigelian, umbilical) is suspected or known and **ANY** of the following:

a. Complications are suspected **AND** physical exam and signs (eg, bowel changes, guarding, nausea, pain, vomiting) are new or progressing.

b. Pelvic pain **AND** physical exam **AND** prior imaging are non-diagnostic or indeterminate.

c. Pre-operative planning (*__NOTE:__ *surgery needs to be planned or scheduled to be considered as pre-operative planning.*)

d. Recurrence is suspected **AND** ultrasound is non-diagnostic or indeterminate.

References: [11] [13] [25]

4. Infection or inflammatory disease is suspected or known, for **ANY** of the following:

a. Abscess, localized to the pelvis, is suspected.

b. Fistula and **ANY** of the following:

i. Fistula recurrence is suspected.

ii. Fistula is known, localized to the pelvis, for re-evaluation

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[1]*High risk is T3a or above, prostate specific antigen (PSA) greater than 20 (including adjusted PSA due to 5-alpha reductase treatment), Gleason score 8-10*

[2]*Intermediate risk is T2b to T2c, PSA between 10 and 20 (including adjusted PSA due to 5-alpha reductase treatment), Gleason score of 7*

iii. Perianal fistula is suspected **AND** prior imaging is non-diagnostic or indeterminate.

c. Fluid collection is limited to the pelvis **AND** identified on prior imaging.

d. Inflammation is suspected or known, musculoskeletal-related pain, **MRI is contraindicated or unavailable** and **ANY** of the following:

i. Avascular necrosis of the hip is suspected or known **AFTER** X-ray is completed.

ii. Sacroiliac joint dysfunction, with persistent back or sacral pain that persists **AFTER** physician-directed conservative management for **at least** 4 weeks, within the last 6 months.

e. Pelvic infection is suspected with symptoms (eg, elevated white blood cells, fever, loss of appetite, nausea, pain, vomiting).

f. Sacroilitis is suspected or known, X-ray and rheumatology work-up (eg, complete blood count [CBC], c-reactive protein [CRP], erythrocyte sedimentation rate [ESR]) are non-diagnostic or indeterminate **AND MRI is contraindicated or unavailable**.

g. Urethral stricture or abnormal periurethral pathology and **MRI is contraindicated or unavailable**.

References: [20] [27] [5] [16] [13] [15] [24]

5. Inflammatory bowel disease (eg, Crohn's disease, ulcerative colitis) is known, with persistent symptoms requiring treatment re-evaluation or monitoring. (*__NOTE:__ *CT abdomen/pelvis is recommended.*)
References: [17] [18]

6. Inflammatory bowel disease (eg, Crohn's disease, ulcerative colitis) is suspected with abdominal pain and **ANY** of the following: (*__NOTE:__ *Includes CT enterography [CTE] and can also approve abdomen CT/CTE*.)

a. CT or MRI of the abdomen is non-diagnostic or indeterminate: CT enterography (CTE).

b. Diarrhea is chronic or bloody. (*__NOTE__: *For persons under 35 years old, consider MR enterography [MRE]*.)

c. Endoscopy **AFTER** biopsy, physical exam **AND** labs (CBC, chemistry, ESR) are non-diagnostic or indeterminate.

References: [18] [17]

7. Intrauterine device (IUD), for location, **AND** ultrasound **AND** X-ray are non-diagnostic or indeterminate.

8. May-Thurner syndrome (iliac vein compression syndrome) is suspected. (***NOTE**: *Computed tomography venography/magnetic resonance venography [CTV/MRV] is preferred*.)
Reference: [14]

9. Post-surgical assessments for evaluation of complications or disease recurrence

10. Symptom evaluation for **ANY** of the following:

    a. Lower extremity edema is diffuse, unexplained **AND** prior ultrasound is non-diagnostic or indeterminate.

    b. Pain and **ANY** of the following:

        i. Etiology is unknown and **ANY** of the following:

            A. Initial workup is non-diagnostic or indeterminate. (***NOTE:** *initial workup must include: imaging [eg, ultrasound], laboratory testing [CBC, chemistry, urinalysis, amylase/lipase if pancreatitis is suspected, liver function tests if hepatic disease is suspected.]*)

            B. Age is over 65 years old and pelvic pain is acute.

    c. Ultrasound is non-diagnostic or indeterminate **AND MRI is contraindicated or unavailable**.

    d. Varicocele, isolated on the right, for further evaluation with signs and symptoms suggestive of malignancy **OR** prior imaging is suspicious.

    Reference: [12]

11. Pelvic congestion syndrome, when prior ultrasound is non-diagnostic or indeterminate. (***NOTE:** *Computed tomography angiography/magnetic resonance angiography [CTA/MRA] is preferred*.)
Reference: [3]

12. Trauma is known **AND** pelvic bleeding is clinically suspected with pain, **AND** laboratory (CBC) or physical findings.

13. Undescended testes in adults and pediatric individuals, including determination of location of testes, for location or evaluation **AND** ordered by a specialist.

14. Urachal abnormalities are suspected or known, with pain, when ultrasound is non-diagnostic or indeterminate, for diagnosis or treatment.
Reference: [6]

15. Vascular disease (eg, aneurysm, hematoma) is suspected or known, **CTA and MRA are contraindicated or unavailable** and **ANY** of the following:

a. Aneurysm, pelvic (iliac) is suspected or known, to evaluate pelvic extent of aneurysm and **ANY** of the following:

   i. Aneurysm is suspected or known, larger than 2.5 cm and prior ultrasound is non-diagnostic or indeterminate.

   ii. Aneurysm is known, demonstrated on prior imaging (eg, ultrasound), and is larger than 2.5 cm in diameter.

   iii. Follow-up for **ANY** of the following: (*__NOTE__: *CTA is preferred*.)

      A. Diameter 2.0 cm to 2.9 cm, every three years

      B. Diameter 3.0 cm to 3.4 cm, annually

      C. Diameter greater than 3.5 cm, every 6 months

   iv. Aneurysm is known and complications, as evidenced by clinical findings, (eg, dizziness, pain, pulsatile mass) are suspected.

   v. Routine follow-up after endograft or stent (*__NOTE:__ *Recommended baseline study performed between 1 to 3 months following intervention. Asymptomatic every 6 months for 1 year, then annually. Symptomatic/ complications related to stent graft, more frequent imaging is needed.*)

b. Vascular abnormality is suspected, limited to the pelvis, based on prior imaging.

Reference: [29]

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*)

CT General Contraindications

Computed tomography (CT) may be contraindicated for **ANY** of the following: [1]

- Allergy to contrast (if contrast is used)
- Pregnancy
- Renal impairment and dialysis unmanageable (if contrast is used)

LCD 34415
See also, **LCD 34415**: CT of the Abdomen and Pelvis at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

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*.

Blood/Bone Marrow Cancers Surveillance section

Acute Lymphoblastic Leukemia Surveillance

NCCN Acute Lymphoblastic Leukemia Version 1.2025

Acute lymphoblastic leukemia: No imaging surveillance suggested.

Acute Myeloid Leukemia Surveillance reuse

NCCN Acute Myeloid Leukemia Version 2.2025

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

Chronic Lymphocytic Leukemia/Small Cell Lymphocytic Lymphoma Surveillance

NCCN Chronic Lymphocytic Leukemia/Small Cell Lymphocytic Lymphoma Version 2.2025

Chronic lymphocytic leukemia/small cell lymphocytic lymphoma: No imaging surveillance suggested.

Chronic Myeloid Leukemia Surveillance

NCCN Chronic Myeloid Leukemia Version 3.2025

Chronic Myeloid Leukemia: No imaging surveillance suggested.

Hairy Cell Leukemia Surveillance

NCCN Hairy Cell Leukemia Version 1.2025

Hairy cell leukemia: No imaging surveillance suggested.

Multiple Myeloma Surveillance

NCCN Multiple Myeloma Version 1.2025

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

1. Multiple myeloma, surveillance imaging as clinically indicated with **ANY** of the following:
    a. CT scan, low dose
    b. FDG PET/CT
    c. MRI without contrast, whole-body
2. Smoldering myeloma, surveillance imaging annually (or more often as indicated) with **ANY** of the following:
    a. CT scan, low dose
    b. FDG PET/CT
    c. MRI (without contrast, whole body

Pelvis Surveillance Section

Anal Cancer Surveillance

NCCN Anal Carcinoma Version 2.2025

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

1. Complete remission, when local or inguinal node recurrence is suspected and **ANY** of the following:
    a. Chest/abdomen/pelvis CT (+ contrast) and abdomen/pelvis MRI (+ contrast) annually for 3 years
    b. Chest CT (- contrast) and abdomen/pelvis MRI (+ contrast) annually for 3 years
2. Peri-anal cancer, with biopsy proven squamous cell carcinoma surveillance with **BOTH** of the following: (**NOTE**: *FDG-PET/CT scan is **NOT** indicated*)
    a. Chest/abdomen/pelvis CT (+ contrast) and abdomen/pelvis MRI (+ contrast) annually for 3 years
    b. Chest CT (- contrast) and abdomen/pelvis MRI (+ contrast) annually for 3 years

3. Persistent disease surveillance as follows:
    a. Chest/abdomen/pelvis CT (+ contrast) and abdomen/chest MRI (+ contrast) annually for 3 years
    b. Chest CT (- contrast) and abdomen/pelvis MRI (+ contrast) annually for 3 years
4. Progressive disease is biopsy proven, locally recurrent for restaging and **ANY** of the following:
    a. Chest/abdomen/pelvis CT (+ contrast) and abdomen/chest MRI (+ contrast) annually for 3 years
    b. Chest CT (- contrast) and abdomen/chest MRI (+ contrast) annually for 3 years

Bladder Cancer Surveillance

NCCN Bladder Cancer Version 1.2025

Bladder cancer imaging surveillance includes **ANY** of the following:

1. Metastatic disease surveillance includes **ANY** of the following:
    a. Computed tomography urography (CTU) or magnetic resonance urography (MRU); follow-up every 3 to 6 months if clinically indicated **AND** when symptoms are new or changing.
    b. CT chest, abdomen **AND** pelvis; follow-up every 3 to 6 months **AND** when symptoms are new or changing.
    c. Cystoscopy clinically as indicated
    d. FDG positron emission tomography/computed tomography (PET/CT) for category 2B
2. Muscle invasive bladder cancer (MIBC) and upper tract (greater then or equal to T2 disease) surveillance includes **ANY** of the following:
    a. Abdominal and pelvic imaging and **ANY** of the following:
        i. Upper tract and abdominal/pelvic imaging every 3 to 6 months for 2 years, then annually for up to 5 years and then clinically as indicated
        ii. FDG PET/CT for category 2B, if **NOT** previously completed
        iii. FDG PET/CT when high risk and metastatic disease is suspected. (*__NOTE__: *may also help guide biopsy and should **NOT** be used to delineate the anatomy of the upper urinary tract.*)
    b. Chest imaging for follow-up, with or without cystectomy **OR** cT4b disease and **ANY** of the following:

i. Chest CT (± contrast); consider as a single exam when abdomen and pelvis imaging is needed.

ii. Chest X-ray

iii. FDG PET/CT for category 2B, if **NOT** previously completed

iv. FDG PET/CT when high risk and metastatic disease is suspected. (*__NOTE__: *may also help guide biopsy*)

c. Post-bladder sparing (eg, chemoradiation or partial cystectomy) or post-cystectomy follow-up and **ANY** of the following:

i. Years 1 and 2 and **ALL** of the following:

A. **ANY** of the following:

I. Chest CT; every 3 to 6 months

II. Chest X-ray; every 3 to 6 months

B. CTU or MRU; every 3 to 6 months

C. FDG PET/CT for category 2B **ONLY** when metastatic disease is suspected; every 3 to 6 months.

ii. Years 3 to 5 and **ALL** of the following:

A. Abdominal/Pelvis CT or MRI, annually

B. **ANY** of the following:

I. Chest CT; annually

II. Chest X-ray; annually

C. FDG PET/CT for category 2B **ONLY** when metastatic disease is suspected; annually.

3. Non-muscle invasive bladder cancer (NMIBC) and upper tract (less than or equal to T1 disease) surveillance includes **ANY** of the following:

a. Low-risk and intermediate risk NMIBC: Imaging of upper tract baseline and abdomen/pelvis imaging and then as clinically indicated

b. High-risk NMIBC and **ANY** of the following:

i. Abdominal/pelvic imaging for baseline for 1 year then as clinically indicated

ii. Imaging of upper tract baseline and at 1 year, then every 1 to 2 years through year 10 then as clinically indicated thereafter

c. Post-cystectomy NIMBC; follow-up with CTU or MRU at 3 months and 12 months, then annually through year 5, followed by renal ultrasound through year 10 then as clinically indicated thereafter

4. Urothelial carcinoma of the prostate **OR** primary carcinoma of the urethra, neurologic/ brain imaging for follow-up and **ANY** of the following:

   a. Low risk T1 or less than T1 disease: MRI or CT of pelvis (± contrast)

   b. High risk T1 or T2 or higher disease chest X-ray and/or CT **AND** MRI or CT of the abdomen and pelvis: every 3 to 6 months for 2 years and then annually

Bone Cancer Surveillance

NCCN Bone Cancer Version 2.2025

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

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

   a. Atypical cartilaginous tumor surveillance with primary site X-rays and/or 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 imaging every 3 to 6 months, may include CT at least every 6 months for 5 years, then annually for at least 10 years, as clinically indicated

      ii. Primary site X-rays and/or cross-sectional imaging MRI (± contrast) or CT (+ contrast) as clinically indicated.

2. Chordoma surveillance with **ALL** of the following:

   a. Chest imaging every 6 months, with CT included, annually for 5 years, then annually thereafter as clinically indicated

   b. Imaging of primary site, timing and modality (eg, MRI ± CT [both + contrast], X-ray) as clinically indicated up to 10 years

3. Ewing Sarcoma after primary treatment completed and stable/improved disease, surveillance with **ALL** of the following:

   a. Chest imaging with X-ray or CT: every 3 months

   b. Primary site imaging with MRI ± CT (both + contrast) and X-ray, increase intervals after 24 months and after 5 years, annually as clinically indicated (indefinitely) (*__NOTE__: *Consider PET/CT [head-to-toe] and/or bone scan.*)

4. Giant cell tumor of the bone surveillance with **ALL** of the following:
    a. Chest imaging every 6 to 12 months for 4 years, then annually thereafter as clinically indicated
    b. Surgical site imaging as clinically indicated (eg, CT and/or MRI, both with contrast, X-ray)
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__: *Consider PET/CT [head-to-toe] and/or bone scan*.)
    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, as clinically indicated

Cervical Cancer Surveillance

NCCN Cervical Cancer Version 4.2025

Cervical cancer surveillance includes **ANY** of the following: (*__NOTE__: *if first post-treatment imaging is non-diagnostic or indeterminate, consider repeating in 3 months*)

1. Stage I cervical cancer and **ANY** of the following:
    a. Fertility sparing, pelvic magnetic resonance imaging (MRI) (+ contrast); follow-up 6 months after surgery and then annually for 2 to 3 years
    b. Non-fertility sparing, stage IB3 or high risk factors requiring post-operative adjuvant radiation or chemotherapy follow-up with positron emission tomography/ computed tomography (PET/CT) (abdomen, chest, groin, neck, pelvis) 3 to 6 months after completion of treatment. Imaging should be based on symptomatology and clinical concern for recurrent/metastatic disease.
2. Stage II to IV cervical cancer and **ANY** of the following:
    a. PET/CT (preferred) of the abdomen, chest, groin, neck and pelvis **OR** CT of the abdomen, chest and pelvis; follow-up 3 to 6 months after completion of therapy.
    b. MRI (+ contrast) of the pelvis; follow-up 3 to 6 months after completion of therapy
    c. Other imaging should be based on symptomatology and clinical concern for recurrent/metastatic disease.
3. Stage IVB or recurrence; follow-up imaging as appropriate (CT, MRI, or FDG-PET/CT) to assess response or to determine further therapy. (**NOTE**: *If first post-treatment FDG-PET/CT is indeterminate, then consider repeating in 3 months.)*

4. Suspected recurrence or metastasis
    a. Neck/chest/abdomen/pelvis/groin FDG-PET/CT
    b. MRI (+ contrast) of the pelvis

Colon Cancer Surveillance

NCCN Colon Cancer Version 1.2025

Colon cancer surveillance includes **ANY** of the following: (*__Note__: *Routine CEA monitoring and CT scanning are **NOT** recommended beyond 5 years.*)

1. Stage I disease surveillance: colonoscopy 1 year after surgery; if advanced adenoma, repeat in 1 year; if **NO** advanced adenoma, repeat in 3 years, then every 5 years.
2. Stage II or III disease surveillance includes **BOTH** of the following: (**NOTE**: *PET/CT is **NOT** indicated*.)
    a. CT chest, abdomen and pelvis every 6 to 12 months from date of surgery, for a total of 5 years.
    b. Colonoscopy in 1 year after surgery except if **NO** preoperative colonoscopy due to obstructing lesion, colonoscopy in 3 to 6 months; if advanced adenoma, repeat in 1 year; if **NO** advanced adenoma, repeat in 3 years, then every 5 years.
3. Stage IV disease surveillance includes **BOTH** of the following: (**NOTE**: *PET/CT is **NOT** indicated*.)
    a. 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.
    b. Colonoscopy in 1 year after surgery except if **NO** preoperative colonoscopy due to obstructing lesion, colonoscopy in 3 to 6 months; if advanced adenoma, repeat in 1 year; if **NO** advanced adenoma, repeat in 3 years, then every 5 years.

Gestational Trophoblastic Neoplasia Surveillance reuse

NCCN Gestational Trophoblastic Neoplasia Version 2.2025

Gestational trophoblastic neoplasia surveillance for intermediate trophoblastic tumor (placental site trophoblastic tumor [PSTT] or epithelioid trophoblastic tumor [ETT]), after treatement includes FDG-PET/CT (whole body) at the completion of chemotherapy and then FDG-PET/CT or CT chest/abdomen/pelvis every 6 to 12 months for 2 to 3 years.

Mesothelioma: Peritoneal Surveillance

NCCN Mesothelioma: Peritoneal Version 2.2025

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

Neuroendocrine and Adrenal Tumors Surveillance

NCCN Neuroendocrine and Adrenal Tumors Version 1.2025

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 12 weeks to 12 months up to 5 years, then clinically as indicated
    b. Locoregional unresectable or metastatic disease; chest CT (± contrast) and abdominal/pelvic CT or MRI (+ contrast) or FDG positron emission tomography (PET)/CT every 12 weeks to 12 months up to 5 years, then clinically as indicated
2. Carcinoid syndrome surveillance imaging includes **BOTH** of the following:
    a. Abdominal/pelvic multiphasic CT or MRI every 12 weeks to 12 months and chest CT (± contrast) as clinically indicated
    b. Echocardiogram every 1 to 3 years or as clinically indicated **without** known carcinoid heart disease (CHD) and at least annually for patients with established CHD.
3. Gastrointestinal tract (well-differenetiated grade 1/2), lung thymus imaging and **ANY** of the following:
    a. Duodenal, endoscopy every 3 to 12 months for 1 year, then annually thereafter.
    b. Gastric, EGD at 1 year and then every 1 to 3 years thereafter
    c. Lung nodules, multiple or tumorlest, image with chest CT (- contrast) every 12 to 24 months or clinically as indicated.
    d. Rectal tumor is 1 cm to less than 2 cm: endoscopy with rectal MRI or endorectal ultrasound at 6 and 12 months, then clinically as indicated.
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]:

[3]**NO** surveillance is indicated for appendiceal tumors 2 cm or smaller without aggressive features.
[4]High-grade tumors may be appropriate for more frequent monitoring.

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 as clinically indicated

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 as clinically indicated

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 12 weeks to 24 weeks for 2 years, then every 6 to 12 months for up to 10 years and chest CT as clinically indicated

ii. Unresectable disease surveillance every 12 weeks to 24 weeks (depending on tumor biology) **AND** chest CT (± contrast); as clinically indicated.

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 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) as clinically indicated

iii. FDG-PET/CT as clinically indicated

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

i. Every 12 weeks to 24 weeks 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, imaging studies without radiation are preferred.*)

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

ii. PanNET: abdominal/pelvic CT or MRI (+ contrast) every 1 to 3 years and consider serial endoscopic ultrasound (EUS)

iii. Parathyroid: if calcium rises, re-image with neck ultrasound and/or parathyroid sestamibi 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/abdominal/pelvic 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 as clinically indicated

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:

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

i. Chest/abdominal/pelvic CT with contrast

ii. Chest CT (± contrast) and abdominal/pelvic MRI without contrast (if risk for hypertensive episode)

iii. FDG-PET/CT for bone dominant disease

iv. Meta-iodobenzylguanidine (MIBG) with single-photon emission computerized tomography/CT (SPECT) (if previous MIBG-positive or concern for disease progression) prior to considering radionuclide therapy

v. SSTR-PET/CT or SSTR-PET/MRI (if previous SSTR-positive or concern for disease progression) prior to considering 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

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)

Occult Primary Cancer Surveillance

NCCN Occult Primary Cancer Version 2.2025

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

Ovarian, Fallopian Tube or Primary Peritoneal Cancers Surveillance

NCCN Ovarian Cancer Including Fallopian Tube Cancer and Primary Peritoneal Cancer Version 1.2025

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 **ALL** of the following:

i. Pelvic ultrasound every 3 months for years 1 and 2, then every 6 months for year 3

ii. Chest/abdomen/pelvis CT every 3 months for years 1 and 2, every 6-12 months for year 3, then clinically as indicated.

iii. Chest X-ray every 6 months for years 4 to 5, then clinically as indicated

b. Malignant sex cord-stromal tumors surveillance when symptomatic, biomarkers are elevated or physical exam demonstrates suspicious findings.

2. Stage I through IV, primary treatment was received; follow-up imaging is clinically as indicated

Penile Cancer Surveillance

NCCN Penile Cancer Version 2.2025

Penile cancer surveillance when there is lymph node involvement, includes **ANY** of the following:

1. Classification pN0, N1 imaging with abdomen/pelvis CT **and** chest X-ray every 6 months for the first 2 years, then every 12 months in years 3 and 4.
2. Classification pN2, N3 imaging with abdomen/pelvis CT **and** chest CT every 3 months in year 1, then every 6 months in years 2 to 4.
3. Inguinal region surveillance with CT (+ contrast), MRI (+ contrast) or ultrasound

Prostate Cancer Surveillance

NCCN Prostate Cancer Version 1.2025

Prostate cancer active surveillance candidates repeat multiparametric MRI (mpMRI) every 12 months (or longer) when life expectancy is longer than 10 years

Rectal Cancer Surveillance

NCCN Rectal Cancer Version 1.2025

Rectal cancer surveillance includes **ANY** of the following: [6]

1. Non-operative management surveillance imaging includes **ALL** of the following:
   a. Colonoscopy at 1 year following completion of therapy; if advanced adenoma, repeat in 1 year; if **NO** advanced adenoma, repeat in 3 years and then every 5 years.
   b. CT chest/abdomen every 6 to 12 months for a total of 5 years (*__NOTE__: *CT pelvis to be included once MRI rectum has been exhausted*.)

[6]Routine CT scanning is not recommended beyond 5 years.

c. MRI rectum every 6 months for at least 3 years

2. Operative management surveillance imaging includes **ANY** of the following:

a. Endoscopic submucosal dissection (ESD) surveillance with flexible sigmoidoscopy 3 to 6 months after ESD (assuming prior colonoscopy), then 3 to 6 months later and every 6 months fof a total of 5 years.

b. Polyps are low risk and removed by polypectomy; physical exam and proctoscopy every 3 to 6 months for the first 2 years then follow-up with colonoscopy 1 year after polypectomy.

c. Stage I with full surgical staging, surveillance imaging includes a colonoscopy 1 year after surgery; If advanced adenoma, repeat in 1 year, If **NO** advanced adenoma, repeat in 3 years, then every 5 years.

d. Stage II and III surveillance imaging includes **ALL** of the following:

i. Chest/abdominal/pelvic CT every 6 to 12 months for a total of 5 years.

ii. Colonoscopy in 1 year after surgery **EXCEPT** if **NO** pre-operative colonoscopy due to obstructing lesion, colonoscopy in 3 to 6 months; If advanced adenoma, repeat in 1 year, If **NO** advanced adenoma, repeat in 3 years, then every 5 years.

iii. PET/CT is **NOT** recommended.

e. Stage IV surveillance imaging includes **ALL** of the following:

i. Chest/abdominal/pelvic CT every 3 to 6 months for 2 years, then every 6 to 12 months for a total of 5 years.

ii. Colonoscopy in 1 year after surgery **EXCEPT** if **NO** pre-operative colonoscopy due to obstructing lesion, colonoscopy in 3 to 6 months; If advanced adenoma, repeat in 1 year, If **NO** advanced adenoma, repeat in 3 years, then every 5 years.

iii. PET/CT scan is **NOT** recommended.

f. Transanal local excision only, surveillance imaging includes **ALL** of the following:

i. Proctoscopy, with endoscopic ultrasound (EUS) or MRI (+ contrast), every 3 to 6 months for the first 2 years, then every 6 months for a total of 5 years.

ii. Colonoscopy 1 year after surgery; If advanced adenoma, repeat in 1 year, If **NO** advanced adenoma, repeat in 3 years, then every 5 years.

Small Bowel Adenocarcinoma Surveillance

NCCN Small Bowel Adenocarcinoma Version 2.2025

Small bowel adenocarcinoma surveillance (duodenum and jejunum/ilium) includes chest/abdominal/pelvic CT every 6 to 12 months for 2 years, then every 12 months for years 3 to 5. (*__NOTE__: *PET/CT and routine capsule endoscopy are not indicated.*)

Soft Tissue Sarcoma Surveillance

NCCN Soft Tissue Sarcoma Version 5.2024

Soft tissue sarcoma surveillance includes **ANY** of the following: (*__NOTE__: *Contrasted imaging is preferred; for long term surveillance to minimize radiation exposure, X-rays or MRI may be substituted.*)

1. Atypical lipomatous tumor and well-differentiated liposarcoma imaging surveillance includes the primary site, based on loation and estimated risk of locoregional recurrence.
2. Desmoid tumor (aggressive fibromatosis) imaging surveillance includes **ANY** of the following:
    a. CT or MRI every 3 to 6 months for 2 to 3 years, then every 6 to 12 months thereafter
    b. Ultrasound may be considered for select locations (eg, abdominal wall) for long-term follow-up
3. Retroperitoneal/intra-abdominal, after resection imaging surveillance includes CT or MRI (consider PET/CT) every 3 to 6 months for 2 to 3 years, then every 6 months for the next 2 years, then annually.
4. Stage IA/IB tumor surveillance includes **ALL** of the following:
    a. Chest imaging with CT (+contrast) or MRI (± contrast) as clinically indicated
    b. Magnetic resonance imaging (MRI) at baseline and periodically (frequency based on estimated recurrence)
5. Stage II/III/IV resectable with acceptable functional outcomes surveillance includes **ANY** of the following:
    a. Chest imaging and imaging of primary site with CT (+contrast) or MRI (± contrast) as clinically indicated
    b. Imaging of primary site at end of treatment and periodic imaging of primary site (based on estimated risk of locoregional recurrence)
6. Stage II, III or select stage IV (any T, N1, M0), resectable with adverse functional outcomes **OR** unresectable primary disease surveillance imaging includes **ANY** of the following:

a. Baseline and periodic imaging of primary site as clinically indicated

b. Chest imaging with CT (+contrast) or MRI (± contrast) as clinically indicated

7. Stage IV synchronous disease imaging surveillance includes **ANY** of the following:

a. Chest and other known metastatic sites imaging with CT (+contrast) or MRI (± contrast) as clinically indicated

b. MRI (± contrast) (preferred) and/or CT (+ contrast) at baseline and periodically (frequency based on estimated recurrence)

Testicular Cancer Surveillance

NCCN Testicular Cancer Version 2.2025

Testicular cancer surveillance includes **ANY** of the following:[7]

1. Nonseminoma stage I **WITHOUT** recurrence risk factors (eg, lymphovascular invasion, or an invasion spermatic cord or scrotum) for active surveillance with abdominal ± pelvic CT (+ contrast) or MRI, for **ANY** of the following intervals:

a. 1st year every 4 to 6 months with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) at 4 months and 12 months

b. 2nd year every 6 months with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) annually

c. 3rd year annually with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) clinically as indicated

d. 4th and 5th year as clinically indicated with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) as clinically indicated

2. Nonseminoma stage I with recurrence risk factors (eg, lymphovascular invasion, or an invasion spermatic cord or scrotum) for active surveillance abdominal ± pelvic CT (+ contrast) or MRI for **ANY** of the following:

a. 1st year every 4 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 4 months

b. 2nd year every 4 to 6 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 4 to 6 months

c. 3rd year every 6 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 6 months

[7]If a MRI is being considered instead of the abdomen/pelvis CT (eg, CT contraindicated), MRI protocol should include all nodes needing assessment. The same imaging modality (CT or MRI) should be used throughout surveillance.

d. 4th year annually with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) annually

e. 5th year clinically as indicated with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) clinically as indicated

3. Nonseminoma stage IA/B after 1 cycle of adjuvant BEP chemotherapy or primary retroperitoneal lymph node dissection (RPLND) surveillance with abdominal ± pelvic CT (+ contrast) or MRI, annually for the first 2 years, then clinically as indicated **AND** chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 6 to 12 months for the 1st year and then annually for year 2, then clinically as indicated.

4. Nonseminoma stage II to III after complete response to chemotherapy ± post-chemotherapy RPLND surveillance with abdominal ± pelvic CT (+ contrast) or MRI, for **ANY** of the following intervals:

   a. 1st year every 4 to 6 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 4 to 6 months

   b. 2nd year every 6 to 12 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 6 to 12 months

   c. 3rd year annually with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) clinically as indicated

   d. 4th and 5th year, clinically as indicated with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present, clinically as indicated

5. Nonseminoma pathologic stage IIA/B post primary RPLND and treated with adjuvant chemotherapy, surveillance with abdominal ± pelvic CT (+ contrast) or MRI 4 months after RPLND, then as clinically indicated, **AND** chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 6 months for the 1st year then annually through year 5

6. Nonseminoma pathologic stage II A/B post-primary RPLND and **NOT** treated with adjuvant chemotherapy surveillance with abdominal ± pelvic CT (+ contrast) or MRI for **ANY** of the following intervals:

   a. 1st year, at 4 months with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 2 to 4 months

   b. 2nd year annually with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) every 3 to 6 months.

   c. 3rd through 5th year clinically as indicated with chest X-ray or chest CT (+contrast) (if thoracic symptoms are present) annually

7. Seminoma stage I surveillance after orchiectomy with chest X-ray or chest CT (+ contrast) (for symptomatic patients), as clinically indicated **AND** abdominal ± pelvic CT (± contrast) or MRI (± contrast) for **ANY** of the following intervals:
    a. 1st year, at 4 to 6 months and 12 months
    b. 2nd year every 6 months
    c. 3rd year, every 6 to 12 months
    d. 4th and 5th year, every 12 to 24 months
8. Seminoma stage I seminoma surveillance after adjuvant treatment (chemotherapy or radiation) with chest X-ray or chest CT (+ contrast) (in symptomatic patients) as clinically indicated **AND** abdominal ± pelvic CT (± contrast), annually for the first 3 years, then clinically as indicated.
9. Seminoma stage IIA and non-bulky IIB seminoma surveillance after radiotherapy and/or post-chemotherapy with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) every 6 months for first 2 years, then clinically as indicated **AND** abdominal ± pelvic CT (+ contrast) or MRI and **ANY** of the following intervals:
    a. 1st year, at 3 months and then 9 **OR** 12 months
    b. 2nd and 3rdyear, annually
    c. 4th and 5th year, clinically as indicated
10. Seminoma II, **NOT** treated with adjuvant chemotherapy and post-primary retroperitoneal lymph node dissection surveillance imaging with CT or MRI abdomen/pelvis and chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) and **ANY** of the following:
    a. 1st year, every 4 months
    b. 2nd year, every 6 months
    c. 3rd year, annually
    d. 4th and 5th year, clinically as indicated
11. Seminoma II, after adjuvant chemotherapy and post-primary retroperitoneal lymph node dissection surveillance imaging includes abdomen/pelvis CT or MRI and chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) follow-up every 6 months for the 1st year, annually year 2, then clinically as indicated
12. Seminoma bulky stage IIB, IIC and III surveillance after chemotherapy, with CT or MRI of the abdomen and pelvis for **ANY** of the following intervals: (***NOTE**: *FDG PET skull base to mid thigh as clinically indicated*)
    a. 1st year, every 4 months with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present)

b. 2nd year, every 6 months with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present)

c. 3rd and 4th year, annually with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present)

d. 5th year, clinically as indicated with chest X-ray or chest CT (+ contrast) (if thoracic symptoms are present) annually

13. Seminoma with residual mass larger than 3 cm, surveillance with a PET/CT scan from skull base to mid-thigh to delineate viable residual tumor (CT is not specific enough); if PET-negative following chemotherapy, surveillance with abdominal/pelvic CT (+ contrast) every 6 months for the 1st year, then annually thereafter.

Uterine Neoplasm Surveillance

NCCN Uterine Neoplasms Version 3.2024

Uterine neoplasm surveillance includes **ANY** of the following:

1. Endometrial carcinoma surveillance includes **ANY** of the following:
   a. Fertility-sparing treatment for **ANY** pf the following:
      i. Pelvic ultrasound for patients with ovarian preservation
      ii. Other imaging should be based on symptomatology and clinical concern for metastatic disease.
      iii. Repeat pelvic magnetic resonance imaging (MRI) (preferred) for individuals with persistent endometrial carcinoma after 6 to 9 months of **FAILED** medical therapy, especially if considering further fertility-sparing approaches.
   b. Non–fertility-sparing treatment- Imaging should be guided by individual symptoms, risk assessment and clinical concern for recurrent or metastatic disease.
2. Uterine sarcoma surveillance imaging includes **ALL** of the following:
   a. Abdominal/pelvic MRI and chest CT (- contrast), every 3 to 6 months for the first 3 years, then every 6 to 12 months for the next 2 years. (*__NOTE__: *Depending on histology grade and initial stage, consider annual to biannual imaging thereafter, for up to an additional 5 years*.)
   b. Chest/abdomen/pelvis computed tomography (CT) every 3 to 6 months for the first 3 years, then every 6 to 12 months for the next 2 years. (*__NOTE__: *Depending on histology grade and initial stage, consider annual to biannual imaging thereafter, for up to an additional 5 years*.)

c. Neck/chest/abdomen/pelvis/groin FDG-positron emission tomography/CT (PET) if metastasis is suspected.

d. Additional imaging should be based on symptomatology and clinical concern for metastatic disease.

Vulvar Cancer Surveillance

NCCN Vulvar Cancer (Squamous Cell Carcinoma) Version 1.2025

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

1. Vulvar cancer surveillance with suspicious examination findings or symptoms of recurrence includes **ANY** of the following:
   a. CT chest/abdomen/pelvis or FDG-PET/CT neck/chest/abdomen/pelvis/groin if recurrence or metastasis is suspected.
   b. FDG-PET/CT or pelvis MRI at 3 to 6 months to assess treatment response after definitive primary treatment
2. Vulvovaginal melanoma surveillance may include **ANY** of the following:
   a. CT every 3 to 12 months
   b. FDG-PET/CT in cases of high-risk disease, every 3 to 12 months
   c. Groin nodal ultrasound for stage greater than IB; every 3 to 6 months for the first 2 years, then every 6 to 12 months for years 3 through 5

CT Pelvis Procedure Codes

Table 1. CT Pelvis Associated Procedure Codes

CODE	DESCRIPTION
72192	Computed tomography, pelvis; without contrast material
72193	Computed tomography, pelvis; with contrast material(s)
72194	Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections

CT Pelvis Summary of Changes

CT Pelvis guideline had the following version changes from 2023 to 2024:

- Added the following to keep in line with current research:
  - "Abnormality is seen" indication under "Mass, pelvic"
  - "Combination CT and/or MRI for Metastases Evaluation" reuse piece at end of guideline
  - "Etiology is unknown" indication under "Pain"

  - Pediatric indications
  - "Pelvic lymph nodes" indication under "Mass, pelvic"
  - "Ultrasound is non-diagnostic or indeterminate" indication under "Mass, pelvic"
  - "Vascular abnormality" indication under "Vascular disease"
  - "Vascular disease" indication
- Removed the following as current research does not support the indication:
  - "Foreign object" indication
  - NOTE from "Inflammatory bowel disease"
  - "Previously identified" indication under "Mass, pelvic"
  - "Recurrence or metastasis is suspected" indication under "Cancer is suspected or known"
- Mid-cycle update: added Pediatric Preamble and pediatric indications

CT Pelvis Definition/Key Terms

Abscess is a swollen area within body tissue, containing an accumulation of pus.
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.
Aneurysm occurs when part of an artery wall weakens, allowing it to abnormally balloon out or widen.
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.
Avascular necrosis is localized death of bone tissue due to impaired or disrupted blood supply (as from traumatic injury or disease).
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.

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.

CT enterography (CTE) is an imaging test that uses CT imagery and a contrast material to view the small intestine.

Computed tomography venography (CTV) is a technique targeted to assess venous anatomy, determine venous patency and delineate collateral circulation, often using contrast material.

Conservative management is an approach to treating pain utilizing non-surgical treatment options such as physical therapy, medication and injections, for a designated time, usually 4 to 6 weeks.

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.

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

Endograft is a minimally invasive procedure helps protect the aneurysm by placing a stent directly inside the aneurysm, using a guide wire that is inserted into the groin. Once placed at the site of the aneurysm, the graft expands to seal the aneurysm and exclude it from circulation.

Endoscopy is a procedure that uses an endoscope to examine the inside of the body. An endoscope is a thin, tube-like instrument with a light and a lens for viewing. It may also have a tool to remove tissue to be checked under a microscope for signs of disease.

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.

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.

Hematoma is a mass of usually clotted blood that forms in a tissue, organ or body space as a result of a broken blood vessel.

Hernia is a gap in the muscular wall that allows the contents inside the abdomen to protrude outward.

Iliac vein compression syndrome (May-Thurner syndrome) also known as May-Thurner 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).

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.

Intrauterine devices (IUDs) are small contraceptive devices that are inserted into the uterus (womb) to prevent pregnancy. The 2 types available are the copper IUD and the hormonal IUD.

Kattan Nomogram is a commonly used pre-operative prediction tool used for estimating individualized risk of biochemical recurrence after radical prostatectomy. The nomogram can be found at: https://www.mskcc.org/nomograms/prostate

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

Magnetic resonance angiogram (MRA) is a test that uses a magnetic field and pulses of radio wave energy to provide images of blood vessels inside the body, allowing for evaluation of blood flow and blood vessel wall condition. MRA is used to look for aneurysms, clots, tears in the aorta, arteriovenous malformations and stenosis caused by plaque in the carotid arteries (neck) or blood vessels leading to the lungs, kidneys or legs.

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 venogram (MRV) is a diagnostic procedure that uses a combination of a large magnet, radiofrequencies, and a computer to produce detailed images of organs and structures within the body. An MRV uses magnetic resonance technology and intravenous (IV) contrast dye to visualize the veins. Contrast dye causes the blood vessels to appear opaque on the X-ray image, allowing the visualization the blood vessels being evaluated. MRV is useful in some cases because it can help detect causes of leg pain other than vein problems.

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).

Memorial Sloan Kettering Cancer Center (MSKCC) nomograms are prediction tools designed to help patients and their physicians understand the nature of their prostate cancer, assess risk based on specific characteristics of a patient and his disease, and predict the likely outcomes of treatment. The nomograms can be located at: https://www.mskcc.org/nomograms/prostate

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.

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.
Osteonecrosis is localized death of bone tissue due to impaired or disrupted blood supply.
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:

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

Pelvic congestion syndrome occurs when varicose veins develop around the ovaries, similar to varicose veins that occur in the legs. The valves in the veins no longer function normally, which causes blood to back up. The veins become engorged or "congested", which can be very painful.
Prostate specific antigen (PSA) is a protease (an enzyme that hydrolyzes proteins) secreted by epithelial cells of the prostate gland. PSA's concentration in blood serum tends to be proportional to the clinical stage of the disease, making it useful in detecting prostate cancer.
Recurrence is a new occurrence of something that happened or appeared before.
Sacroiliitis is an inflammation of one or both of the sacroiliac joints, which are situated where the lower spine and pelvis connect.
Sacroiliac joint dysfunction is a condition in which pain is caused by the sacroiliac joint that connects the sacrum and the pelvis, believed to be caused by either too much movement (hypermobility) or too little movement (hypomobility) at the joint.
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).
Stent is a small, narrow tube made of metal or plastic that is inserted into a hollow structure in the body to keep a passageway open.
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.
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.
Urachus is a cord of fibrous tissue extending from the bladder to the navel and constituting the functionless remnant of a part of the duct of the allantois of the embryo.
Varicocele is abnormal dilation and enlargement of the scrotal venous pampiniform plexus which drains blood from each testicle.

CT Pelvis Reference Section

[1] American College of Radiology. (2023). ACR Manual on Contrast Media. *American College of Radiology*. Retrieved: January 2024. https://www.acr.org/-/media/ACR/Files/Clinical-Resources/Contrast_Media.pdf
[2] Atri, M., Alabousi, A., . . . Glanc, P. (2019). ACR Appropriateness Criteria Clinically Suspected Adnexal Mass, No Acute Symptoms. *Journal of the American College of Radiology, 16*(5S), S77-S93.
[3] Balabuszek, K., Toborek, M. & Pietura, R. (2022). Comprehensive overview of the venous disorder known as pelvic congestion syndrome. *Annals of Medicine, 54*(1), 22-36.
[4] Bestic, J.M., Wessell, D.E., . . . Kransdorf, M.J. (2020). ACR Appropriateness Criteria Primary Bone Tumors. *Journal of the American College of Radiology, 17*(5S), S226-S238.
[5] Bulut, S.S.D. & Sakci, Z. (2021). Magnetic resonance imaging with dynamic contrast enhancement in perianal fistula staging. *Annals of Medical Research, 28*(4), 657-662.
[6] Das, J.P., Vargas, H.A., . . . McCarthy, P. (2020). The urachus revisited: multimodal imaging of benign & malignant urachal pathology. *British Journal of Radiology, 93*(1110), Article 20190118.
[7] Devine, C., Viswanathan, C, . . . Sagbiel, T.L. (2019). Imaging and Staging of Cervical Cancer. *Seminars in Ultrasound, CT and MRI, 40*(4), 280-286.
[8] Galea, M., Brincat, M.R. & Calleja-Agius, J. (2023). A review of the pathophysiology and evidencebased management of varicoceles and pelvic congestion syndrome. *Human Fertility*, 1-12.

[9] Galgano, S., Porter, K., . . . Rais-Bahrami, S. (2020). The role of imaging in bladder cancer diagnosis and staging. *Diagnostics, 10*(9), 703.

[10] Gamer, H.W., Wessell, D.E., . . . Chang, E.Y. (2023). ACR Appropriateness Criteria Soft Tissue Masses: 2022 Update. *Journal of the American College of Radiology, 20*(5), S234-S245.

[11] Garcia, E.M., Pietryga, J.A., . . . Carucci, L.R. (2022). ACR Appropriateness Criteria Hernia. *Journal of the American College of Radiology, 19*(11S), S329-S340.

[12] Gasparis, A.P., Kim, P.S. . . . Labropoulos, N. (2020). Diagnostic approach to lower limb edema. *Phlebology, 35*(9), 650-655.

[13] Gavlin, A., Kierans, A.S., . . . Mazzariol, F.S. (2020). Imaging and Treatment of Complications of Abdominal and Pelvic Mesh Repair. *RadioGraphics, 40*(2), 432-453.

[14] Gozzo, C., Giambelluca, D., . . . Salfaggio, G. (2020). CT imaging findings of abdominopelvic vascular compression syndromes: what the radiologist needs to know. *Insights into Imaging, 11*(1), Article 48.

[15] Ha, A.S., Chang, E.Y., . . . Beaman, F.D. (2022). ACR Appropriateness Criteria Osteonecrosis: 2022 Update. *Journal of the American College of Radiology, 19*(11S), S409-S416.

[16] Itani, M., Menias, C., . . . Revzin, M.V. (2021). Imaging of abdominal and pelvic infections in the cancer patient. *Abdominal Radiology, 46*(6), 2920-2941.

[17] Kim, D.H., Chang, K.J., . . . Carucci, L.R. (2020). ACR Appropriateness Criteria Crohn Disease. *Journal of the American College of Radiology, 17*(5S), S81-S99.

[18] Kucharzik, T., Tiebeek, J., . . . Rimola, J. (2022). ECCO-ESGAR topical review on optimizing reporting for cross-sectional imaging in inflammatory bowel disease. *Journal of Crohn's and Colitis, 16*(4), 523-543.

[19] Lakhman, Y., Vargas, H.A., . . . Glanc, P. (2021). ACR Appropriateness Criteria Staging and Follow-up of Vulvar Cancer. *Journal of the American College of Radiology, 18*(5S), S212-S228.

[20] Levy, A.D., Liu, P.S., . . . Carucci, L.R. (2021). ACR Appropriateness Criteria Anorectal Disease. *Journal of the American College of Radiology, 18*(11S), S268-S282.

[21] Loizzo, D., Pandolfo, S.D., . . . Autorino, R. (2022). Current Management of Urachal Carcinoma: An Evidence-based Guide for Clinical Practice. *European Urology Open Science, 39*, 1-6.

[22] Nikolic, M.B., Spasic, A., . . . Nikolic, D. (2021). Imaging of acute pelvic pain. *The British Journal of Radiology, 94*(1127), Article 20210281.

[23] Reinhold, C., Ueno, Y., . . . Glanc, P. (2020). ACR Appropriateness Criteria Pretreatment Evaluation and Follow-Up of Endometrial Cancer. *Journal of the American College of Radiology, 17*(11S), S472-S486.

[24] Revels, J.W., Wang, S.S., . . . Moshiri, M. (2022). A multimodality review of male urethral imaging: pearls and pitfalls with an update on urethral stricture treatment. *British Journal of Radiology, 95*(1134), 20211034.

[25] Romain, B., Renard, Y., . . . Ortega-Deballon, P. (2020). Recurrence after elective incisional hernia repair is more frequent than you think: An international prospective cohort from the French Society of Surgery. *Surgery, 168*(1), 125-134.

[26] Ross, A.B., Lee, K.S., . . . Kransdorf, M.J. (2019). ACR Appropriateness Criteria Acute Hip Pain Suspected Fracture. *Journal of the American College of Radiology, 16*(5S), S18-S25.

[27] Smits, F.J., Molenaar, I.Q., . . . van Santvoort, H.C. (2020). Early recognition of clinically relevant postoperative pancreatic fistula: a systematic review. *HPB, 22*(11), 1-11.

[28] Wang, C., Asch, D., . . . Weinstein, S. (2022). ACR Manual on Contrast Media. *American College of Radiology*. Retrieved: October 2023. https://www.acr.org/-/media/ACR/files/clinical-resources/contrast_media.pdf

[29] Wanhainen, A., Verzini, F., . . . Verhagen, H. (2019). European Society for Vascular Surgery (ESVS) 2019 Clinical Practice Guidelines on the Management of Abdominal Aorto-iliac Artery Aneurysms. *European Journal of Vascular and Endovascular Surgery, 57*(1), 8-93.

[30] Witte, D.H. (2021). Advanced Imaging in Orthopaedics. F.M. Azar & J.H. Beaty (Eds.). *Campbell's Operative Orthopaedics* (14), (pp. 141-176). Philadelphia, PA: Elsevier.

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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.

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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.

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