IMAGING GUIDELINES FOR MEDICAL NECESSITY

Eviti Imaging:

Breast Cancer

Lung Cancer

Prostate Cancer

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Please note the following:

For Medicare members/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Please refer to the CMS website at http://www.cms.gov for additional information.

For Medicaid members/enrollees, circumstances when state Medicaid coverage provisions conflict with the coverage provisions within this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Discussion

This imaging guideline provides a standardized framework for the use of diagnostic and surveillance imaging in the management of common adult malignancies, specifically breast cancer, lung cancer (including non-small cell lung cancer [NSCLC] and small cell lung cancer [SCLC]), and prostate cancer. The goal is to ensure timely, evidence-based imaging that supports accurate staging, treatment planning, response assessment, and post-treatment surveillance.

Guiding Principles

- Follow evidence-based practices from major guidelines (e.g., NCCN, ESMO, ACR Appropriateness Criteria)
- Ensure imaging aligns with the clinical context and stage of disease
- Minimization of unnecessary radiation exposure
- Promote timely and cost-effective imaging utilization
- Incorporate multidisciplinary collaboration in imaging decisions

Cancer Types Covered

This guideline includes recommendations for imaging in the following malignancies:

Breast Cancer

1. Screening and diagnostic imaging
2. Pre-operative staging
3. Post-operative surveillance
4. Imaging for suspected recurrence or metastasis

Lung Cancer

1. Non-Small Cell Lung Cancer (NSCLC): Imaging for diagnosis, staging (TNM), treatment planning, and follow-up
2. Small Cell Lung Cancer (SCLC): Imaging for staging (including brain and bone), treatment response, and surveillance

Prostate Cancer

1. Imaging for initial risk stratification and staging
2. Assessment for biochemical recurrence
3. Advanced imaging for metastatic or castration-resistant disease

Imaging Guidelines

This guideline applies to the following patients:

1. At least 18 years of age with confirmed or suspected diagnoses of breast, lung, or prostate cancer; AND

2. All phases of oncologic care, including one of the following:
   a) Initial staging
   b) Treatment response evaluation
   c) Post-treatment surveillance
   d) Detection of recurrence or progression; AND

3. All imaging modalities used in oncology care, including but not limited to the following:
   a) CT
   b) MRI
   c) PET/CT
   d) Ultrasound
   e) Mammography and Breast MRI
   f) Nuclear Medicine (e.g., bone scan, PSMA PET)

Note: The concurrent utilization of multiple advanced imaging modalities—such as PET/CT and MRI—is not routinely warranted and should be considered only when each modality is expected to provide distinct and clinically relevant information that will directly impact patient management. The selection of the most appropriate imaging study should be individualized, taking into account tumor type, clinical presentation, prior imaging, and other patient-specific factors. Imaging requests will be evaluated on a case-by-case basis to ensure clinical necessity, appropriateness, and the potential to influence therapeutic decision-making.

Breast Cancer Imaging

Imaging plays a central role in early detection, diagnosis, staging, treatment planning, and surveillance of breast cancer. Appropriate imaging selection based on patient risk, disease stage, and clinical context improves diagnostic accuracy and optimizes patient outcomes. This section provides a structured guide for the use of imaging in both screening and management of breast cancer.

Breast Cancer Imaging Guidelines			
Clinical Scenario	Recommended Modality	Frequency/Timing	Purpose/Notes
Screening (Average Risk)	Digital Mammography (2D or 3D Tomosynthesis)	Annually starting at age 40	Early cancer detection

Screening (High Risk)	Breast MRI + Mammography	Annually, alternating every 6 months	BRCA mutation, strong family history, prior mantle radiation, etc.
Diagnostic Workup (Symptomatic or Abnormal Screening)	Mammography + Targeted Breast Ultrasound	As needed	Evaluates palpable masses, focal pain, nipple discharge, or abnormal screening
Pre-operative Staging	Mammography + Ultrasound ± Breast MRI	Once prior to surgery	Assess extent of disease, multifocality, contralateral breast
Axillary Nodal Assessment	Axillary Ultrasound ± FNA/Core Biopsy	As needed	Pre-surgical or staging assessment
Staging for Advanced Disease (Stage III–IV)	CT Chest/Abdomen/ Pelvis ± Bone Scan PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging)	Once at diagnosis	Evaluate for distant metastasis
Neoadjuvant Chemotherapy (Pre-surgical)	Breast MRI ± Ultrasound	Baseline Optional mid-treatment Post-treatment (pre-surgery)	Assess treatment response, guide surgical planning
Adjuvant Therapy (Post-Surgical Chemo/Radiation)	None routinely required unless symptomatic	N/A	Imaging is not typically indicated unless recurrence is suspected
Metastatic Disease Monitoring (Stage IV)	CT Chest/Abdomen/ Pelvis ± Bone Scan PET/CT (as clinically indicated when conventional imaging provides insufficient information)	Every 3-6 months	Monitor treatment response in metastatic setting
	Brain MRI	Every 2–3 months if known brain metastases	Evaluate stability or progression

Known Bone Metastases	Bone Scan PET/CT (as clinically indicated when conventional imaging provides insufficient information)	Every 3–6 months	Monitor for progression or new lesions
Monitoring for Treatment-Related Complications	Chest CT or Cardiac MRI/Echocardiogram	As clinically indicated	Evaluate for cardiotoxicity, pneumonitis, or other therapy effects
Suspected Local Recurrence	Mammography + Ultrasound ± Breast MRI	As clinically indicated	Evaluate for recurrence at surgical site
Post-Treatment Surveillance (Early Stage)	Mammography (affected and contralateral breast)	Annually, starting 6–12 months after radiation or surgery	Detect recurrence or new primary tumor
Suspected Distant Recurrence/ Progression	CT Chest/Abdomen/Pelvis PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging) Brain MRI as clinically indicated	As clinically indicated	Based on symptoms or rising tumor markers (e.g., CA 15-3, CEA)

Notes:

1. High-risk includes BRCA1/2 mutation carriers, strong family history, or prior mantle radiation; May be indicated in patients with known diagnosis of cancer before age of 50 or have dense breasts
2. FES PET/CT may be useful in the setting of ER positive disease and lobular histology
3. Adherence to NCCN and ACR guidelines is assumed unless clinical circumstances warrant deviation.[1,2]

Small Cell Lung Cancer (SCLC) Imaging

Small Cell Lung Cancer is an aggressive neuroendocrine carcinoma characterized by rapid growth and early metastasis. Imaging is critical for accurate staging, treatment planning, and surveillance. Because of its high metastatic potential, comprehensive initial imaging and close follow-up are essential.[3,4]

Small Cell Lung Cancer Imaging Recommendations			
Clinical Scenario	Recommended Modality	Frequency/Timing	Purpose/Notes
Initial Diagnosis & Staging	CT Chest with contrast + CT Abdomen/Pelvis	At diagnosis	Evaluate primary tumor, lymph nodes, liver, adrenals
	Brain MRI with contrast	At diagnosis	Required due to high risk of brain metastases
	Bone Scan PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging o**r** Limited Stage)	Optional/As indicated	For detecting bone metastases; PET/CT may replace CT plus bone scan in limited stage
Treatment Response Evaluation	CT Chest/Abdomen/Pelvis ± Brain MRI (if brain metastasis or symptoms)	After 2-3 cycles of therapy, then at end of treatment	Assess tumor response or progression
Surveillance Post-Treatment	CT Chest/Abdomen/ Pelvis	Every 3 months for 2 years, then every 6 months up to year 5	Monitor for recurrence or metastasis
	Brain MRI (if previously involved or prophylactic cranial irradiation given)	Every 3–6 months (if prior brain involvement)	Brain relapse is common even after prophylactic cranial irradiation
Suspected Recurrence or Progression	CT Chest/Abdomen/Pelvis ± PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging) or Brain MRI	As clinically indicated	Based on symptoms or clinical suspicion

Non-Small Cell Lung Cancer (NSCLC) Imaging

NSCLC accounts for approximately 85% of lung cancers and includes subtypes such as adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. Imaging is essential for

staging (TNM), treatment planning (surgical, radiation, or systemic therapy), and surveillance. Imaging protocols vary by disease stage and treatment intent.[5,6]

Non-Small Cell Lung Cancer Imaging Recommendations			
Clinical Scenario	Recommended Modality	Frequency/Timing	Purpose/Notes
Initial Diagnosis & Staging	CT Chest with contrast + CT Abdomen (include adrenals)	At diagnosis	Evaluate tumor size, nodal status, metastasis
	PET/CT	At diagnosis	Better assessment of nodal/metastatic disease; may upstage patients
	Brain MRI with contrast	At diagnosis for Stage II or higher or neurologic symptoms	Brain is a common metastatic site, especially in adenocarcinoma
Treatment Response Monitoring Neoadjuvant Therapy	CT Chest/Abdomen ± PET/CT	Before surgery	To assess response of neoadjuvant chemotherapy prior to surgery
Post treatment response after concurrent chemoradiotherapy	CT Chest ± Abdomen	Before initiation of maintenance therapy	For patients treated with radiation and/or systemic therapy
Treatment Response Monitoring for Stage IV	CT Chest/Abdomen ± PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging)	Every 2–4 cycles of systemic therapy or every 3 months	Track response to chemotherapy, immunotherapy, or targeted agents
Suspected Recurrence or Progression	CT Chest/Abdomen ± Brain MRI PET/CT (When clinically indicated due to inconclusive or inadequate findings	As clinically indicated	Based on clinical symptoms or rising tumor markers

	on conventional imaging)		
Known Brain Metastases	Brain MRI with contrast	Every 2–3 months initially, then per clinical judgment	Assess response or progression post-SRS or WBRT
Post-operative Surveillance (Curative Resection for stage I/II)	CT Chest	Every 6 months for 2-3 years, then LDCCT chest annually	Early detection of recurrence
Surveillance (All other clinical scenarios)	CT Chest	Every 3-6 months during first 3 years, then 6 months for 2 additional years then LDCCT chest annually	For patients treated with radiation or systemic therapy

Prostate Cancer Imaging

Prostate cancer imaging supports accurate risk stratification, staging, and assessment of treatment response or recurrence. Imaging strategies vary by disease risk category (low, intermediate, high), presence of symptoms, and biochemical recurrence after initial therapy. Advanced imaging techniques such as multiparametric MRI and PSMA PET have significantly enhanced diagnostic accuracy.

Prostate Cancer Imaging Recommendations			
Clinical Scenario	Recommended Modality	Frequency/Timing	Purpose/Notes
Initial Diagnosis (Elevated PSA / Abnormal DRE)	Multiparametric MRI (mpMRI) and MRI pelvis+/- abdomen	Prior to biopsy	Guides targeted biopsy and decide appropriateness of active surveillance; improves detection of clinically significant cancer
Initial Staging (High-Risk or Unfavorable Intermediate-Risk)	CT Chest/Abdomen/Pelvis + Bone Scan OR PSMA PET/CT	At diagnosis	PSMA PET preferred where available; superior to conventional imaging
Low-Risk / Favorable Intermediate-Risk	No routine imaging unless symptomatic or concern for metastasis	N/A	Imaging is usually not indicated unless clinical concerns exist
Post-Treatment Surveillance	PSA monitoring	Every 6–12 months Every 3-4 months on ADT (as per guideline)	Routine imaging is not indicated

(Radiation or Surgery)			
Active Surveillance	Multiparametric MRI (mpMRI)	Every 12 months	
Biochemical Recurrence (Rising PSA post-RP or RT)	PSMA PET/CT	At time of recurrence	High sensitivity for detecting local or distant recurrence
Suspected Local Recurrence (Post-Radiation)	Multiparametric MRI (mpMRI) and MRI pelvis+/- abdomen	As clinically indicated	Evaluate for local recurrence, especially if salvage therapy is considered
Known Metastatic Disease (mHSPC or mCRPC) Follow-Up	CT Chest/Abdomen/ Pelvis +/- Bone Scan PSMA PET/CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging)	Every 3–6 months (based on therapy)	Monitor for disease progression and treatment response
Bone Metastases Follow-Up	Bone Scan PSMA PET CT (When clinically indicated due to inconclusive or inadequate findings on conventional imaging)	Every 6–12 months or as needed	Monitor skeletal disease burden
Symptom-Driven Imaging	MRI Spine, Bone Scan, CT, PSMA PET (When clinically indicated due to inconclusive or inadequate findings on conventional imaging)	As needed	For new pain, neurological symptoms, or concern for progression

Notes:

1. PSMA PET/CT is now the preferred imaging modality in many settings, particularly in biochemical recurrence and staging of high-risk disease.
2. Multiparametric MRI plays a vital role in both diagnosis and post-treatment evaluation, particularly in local recurrence assessment.
3. Imaging should always be guided by clinical risk factors, PSA kinetics, and symptomatology.

4. When PET imaging is clinically appropriate, prostate-specific membrane antigen (PSMA) PET is the preferred modality. In settings where PSMA PET is not available, alternative tracers such as ^{18}F-fluciclovine PET/CT or ^{11}C-choline PET/CT may be considered acceptable substitutes.[7,8]

Coding (CPT®)

Procedure codes appearing in medical policy documents are only included as a general reference. This list may not be all-inclusive and is subject to updates. In addition, the codes listed are not a guarantee of payment. CPT codes are available through the AMA.

Code	Description
70450	CT HEAD/BRAIN W/O DYE
70460	CT HEAD/BRAIN W/DYE
70470	CT HEAD/BRAIN W/O & W/DYE
70551	MRI BRAIN STEM W/O DYE
70552	MRI BRAIN STEM W/DYE
70553	MRI BRAIN STEM W/O & W/DYE
71250	CT THORAX DX C-
71260	CT THORAX DX C+
71270	CT THORAX DX C-/C+
71275	CT ANGIOGRAPHY CHEST
71550	MRI CHEST W/O DYE
71551	MRI CHEST W/DYE
71552	MRI CHEST W/O & W/DYE
72125	CT NECK SPINE W/O DYE
72126	CT NECK SPINE W/DYE
72127	CT NECK SPINE W/O & W/DYE
72128	CT CHEST SPINE W/O DYE

72129	CT CHEST SPINE W/DYE
72130	CT CHEST SPINE W/O & W/DYE
72131	CT LUMBAR SPINE W/O DYE
72132	CT LUMBAR SPINE W/DYE
72133	CT LUMBAR SPINE W/O & W/DYE
72141	MRI NECK SPINE W/O DYE
72142	MRI NECK SPINE W/DYE
72146	MRI CHEST SPINE W/O DYE
72147	MRI CHEST SPINE W/DYE
72148	MRI LUMBAR SPINE W/O DYE
72149	MRI LUMBAR SPINE W/DYE
72156	MRI NECK SPINE W/O & W/DYE
72157	MRI CHEST SPINE W/O & W/DYE
72158	MRI LUMBAR SPINE W/O & W/DYE
72192	CT PELVIS W/O DYE
72193	CT PELVIS W/DYE
72194	CT PELVIS W/O & W/DYE
72195	MRI PELVIS W/O DYE
72196	MRI PELVIS W/DYE
72197	MRI PELVIS W/O & W/DYE
74150	CT ABDOMEN W/O CONTRAST
74160	CT ABDOMEN W/CONTRAST
74170	CT ABD WO CNTRST FLWD CNTRST
74176	CT ABD & PELVIS W/O CONTRAST

74177	CT ABD & PELVIS W/CONTRAST
74178	CT ABD&PLV WO CNTR FLWD CNTR
74181	MRI ABDOMEN W/O CONTRAST
74182	MRI ABDOMEN W/CONTRAST
74183	MRI ABD W/O CNTR FLWD CNTR
74185	MRA ABD W OR W/O CNTRST
76380	CAT SCAN FOLLOW-UP STUDY
77046	MRI BREAST C- UNILATERAL
77047	MRI BREAST C- BILATERAL
77048	MRI BREAST C-+ W/CAD UNI
77049	MRI BREAST C-+ W/CAD BI
77078	CT BONE DENSITY AXIAL
77084	MRI BONE MARROW BLOOD SUPPLY
78608	BRAIN IMAGING (PET)
78609	BRAIN IMAGING (PET)
78811	PET IMAGE LTD AREA
78812	PET IMAGE SKULL-THIGH
78813	PET IMAGE FULL BODY
78814	PET IMAGE W/CT LMTD
78815	PET IMAGE W/CT SKULL-THIGH
78816	PET IMAGE W/CT FULL BODY
0042T	CT PERFUSION W/CONTRAST CBF
0633T	CT BREAST W/3D UNI C-
0634T	CT BREAST W/3D UNI C+

0635T	CT BREAST W/3D UNI C-/C+
0636T	CT BREAST W/3D BI C-
0637T	CT BREAST W/3D BI C+
0638T	CT BREAST W/3D BI C-/C+
0648T	QUAN MR TIS WO MRI 1ORGN
0649T	QUAN MR TISS W/MRI 1ORGN
0697T	QUAN MR TIS WO MRI MLT ORGN
0698T	QUAN MR TISS W/MRI MLT ORGN
0865T	QUAN MRI ALYS BRN W/O DX MRI
S8042	MAGNETIC RESONANCE IMAG LOW-FIELD

Revision and Review History

No.	Description	Date(s)
1	Original Effective Date:	10/1/2025
2	Policy Annual Review Dates:	
3	Department Owner:	Medical Affairs
4	NH Advisory Committee Approval Dates:	
5	Revision Changes:	

References

[1] National Comprehensive Cancer Network Guidelines: Breast Cancer. https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf. Accessed September 8, 2025.

[2] NCCN Imaging AUC Compendium: Breast Cancer. https://www.nccn.org/professionals/imaging/content/. Accessed September 8, 2025.

[3] National Comprehensive Cancer Network Guidelines: Small Cell Lung Cancer. https://www.nccn.org/professionals/physician_gls/pdf/sclc.pdf. Accessed September 8, 2025.

[4] NCCN Imaging AUC Compendium: Small Cell Lung Cancer. https://www.nccn.org/professionals/imaging/content/. Accessed September 8, 2025.

[5] National Comprehensive Cancer Network Guidelines: Non-Small Cell Lung Cancer. https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed September 8, 2025.

[6] NCCN Imaging AUC Compendium: Non-Small Cell Lung Cancer. https://www.nccn.org/professionals/imaging/content/. Accessed September 8, 2025.

[7] National Comprehensive Cancer Network Guidelines: Prostate Cancer. https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed September 8, 2025.

[8] NCCN Imaging AUC Compendium: Prostate Cancer. https://www.nccn.org/professionals/imaging/content/. Accessed September 8, 2025.