

# Policy Key: Screening, Diagnostic and Advanced Radiologic Imaging

## TriWest Clinical Operations – TRICARE West Region

### SCOPE

This Policy Key outlines the clinical review and coverage criteria for screening and diagnostic and advanced radiologic imaging services under TRICARE. Covered modalities include, but are not limited to:

- Computed Tomography (CT)
- Magnetic Resonance Angiography (MRA)
- Magnetic Resonance Imaging (MRI)
- Magnetic Resonance Spectrum (MRS)
- Positron Emission Tomography (PET)
- Single Photon Emission Computed Tomography (SPECT)
- Ultrasound
- X-rays, Mammogram (Screening and Diagnostic)
- Other advanced imaging techniques

### NOT COVERED

- Bone density studies, routine, for osteoporosis screening. <sup>[1, 2, 3]</sup> - excluded.
- CT (ultrafast electron beam CT) for symptomatic patients and for screening asymptomatic patients for CAD – excluded. <sup>[1]</sup>
- CT angiography, multislice or multidetector row, with less than 16 slices per second and resolution of 1mm or less. <sup>[1]</sup>
- MRIs to screen for breast cancer in asymptomatic women considered to be at low or average risk of developing breast cancer; for diagnosis of suspicious lesions to avoid biopsy, to evaluate response to neoadjuvant chemotherapy, to differentiate cysts from solid lesions. <sup>[1]</sup>
- MRIs to assess implant integrity or confirm implant rupture, if implants were not originally covered or coverable. <sup>[1]</sup>
- Magnetic Resonance Spectroscopy (MRS) of the brain – unproven. <sup>[1]</sup>
- Ultrasound ablation (destruction of uterine fibroids) with Magnetic Resonance Imaging (MRI) guidance (CPT code 0071T) in the treatment of uterine leiomyomata - unproven. <sup>[3]</sup>
- Unproven 3D rendering, including: <sup>[1]</sup>
  - 3D rendering for monitoring coronary artery stenosis activity in patients with angiographically confirmed CAD

- 3D rendering for use as a screening test for CAD in healthy individuals or in asymptomatic patients who have one or more traditional risk factors for CAD
- 3D rendering for evaluating graft patency in individuals who have undergone revascularization procedures.
- 3D and 4D rendering with maternity ultrasound - unproven. [2]
- Ultrasound for routine screening for breast disease. [2]
- Ultrasound performed solely to determine the sex of an unborn child for non-medical reasons. [2]
- Ultrasound, spinal canal and contents for spinal scanning in adults for inflammatory conditions of the spine and nerve roots or as guidance for facet joint or epidural injections. [2]
- Scintimammography Breast-Specific Gamma Imaging [BSGI], and Molecular Breast Imaging (MBI) are unproven for all indications. [3]
- PET for the diagnosis and monitoring of treatment of Alzheimer's disease, fronto-temporal dementia, or other forms of dementia - unproven. [3]
- PET and PET/CT are excluded for the following: [3]
  - The initial diagnosis of differentiated thyroid cancer and for medullary cell thyroid cancer
  - The diagnosis, staging, restaging, and monitoring of treatment of gastric cancer is unproven.
  - The initial diagnosis and monitoring of treatment of colorectal cancer is unproven.
  - The diagnosis of renal mass or possible Renal Cell Carcinoma (RCC) recurrence
  - The diagnosis of systemic sarcoidosis
- Radiological supervision/interpretation for percutaneous vertebroplasty. [1]
- **Other imaging** (x-ray, ultrasound, CT scan, and MRI) for acute low back pain (LBP) within six weeks of the onset of symptoms **unless "red flags" are present** (see Coverage Criteria) – excluded. [1]

## COVERAGE CRITERIA

### Bone Density Studies [3]

**Initial Level of Review** may approve for the following indications:

- The diagnosis and monitoring of osteoporosis
- The diagnosis and monitoring of osteopenia
- When medically necessary and appropriate
- Patients must present with signs and symptoms of bone disease or be considered at high-risk for developing osteoporosis.
  - High-risk factors for osteoporosis are those identified as the standard of care by the American College of Obstetricians and Gynecologists (ACOG).

### Computed Tomography [1]

**Initial Level of Review** may approve when criteria are met:

- CT scans when medically necessary, appropriate, and the standard of care and all criteria stipulated in 32 CFR 199.4(e) are met.
- CT angiography, multislice or multidetector row, of the heart, coronary arteries, and bypass grafts (when present) with contrast when medically necessary and appropriate for the following indications:
  - Acute ischemic stroke
  - Intracerebral aneurysm and subarachnoid hemorrhage
  - CT perfusion for the evaluation of mechanical thrombectomy in cases of acute ischemic stroke is proven in patients with large vessel occlusions who present within six to 24 hours of the last known well time
  - Evaluation of cardiac conditions
    - Heart failure of unknown origin when invasive coronary angiography +/- Percutaneous Coronary Intervention (PCI) is not planned, unable to be performed or is equivocal, or
    - Acute and stable chest pain, or
    - Anomalous native coronary arteries in symptomatic patients when conventional angiography is unsuccessful or equivocal and when results would impact treatment, or
    - Complex congenital anomaly of coronary circulation or of the great vessels.
  - Presurgical evaluation
    - Prior to biventricular pacemaker placement, or
    - Coronary anatomy prior to non-coronary surgery (valve placement or repair; repair of aortic aneurysm or dissection), or
    - Cardiovascular evaluation for patients with equivocal stress study prior to kidney or liver transplantation, or
    - Prior to electrophysiologic procedure to isolate pulmonary veins for radiofrequency ablation of arrhythmia focus
- Helical (spiral) CT scans, with or without contrast enhancement

## Magnetic Resonance Imaging (MRI, MRA, MRS) <sup>[1, 4]</sup>

**Note:** Breast MRI CPT 77048 and 77049 with Computer-Aided Detection (CAD) may be authorized for high-risk beneficiaries.

**Initial Level of Review** may approve the following

- **Annual Breast MRI (in addition to screening mammogram)**, beginning at age 30, or 10 years prior to the youngest family member's diagnosis but no later than 40, for women who have a 20% or greater lifetime risk of breast cancer (according to risk assessment tools based on family history such as the Gail model, the Claus model, and the Tyrer-Cuzick model), or who have **ANY** of the following risk factors: [4]
  - Known BRCA1 or BRCA2 gene mutation (or TP53, PALB2, PTEN, CDH1, STK11, ATM, or CHECK2 pathogenic variants)

- First-degree relative (parent, child, sibling) with a BRCA1 or BRCA2 gene mutation and have not had genetic testing themselves.
- Radiation therapy to the chest between the ages of 10 and 30; or
- History of LiFraumeni, Cowden, or Bannayan-Riley-Ruvalcaba syndrome, or first-degree relative with a history of one of these syndromes
- Personal history of breast cancer and any of the following:
  - Diagnosed at age 50 or younger
  - Dense breasts
  - Primary breast cancer not seen on mammogram
  - Paget's disease not well-defined on other imaging (MMG, US)
  - Axillary node metastasis with occult primary (not seen on imaging)
- **Diagnostic MRI, MRA, MRS:**
  - MRA when medically necessary, appropriate, and the standard of care
  - MRI, MRI with contrast media, Open MRI, and Open MRI with contrast media when medically necessary and consistent with the standard of care
  - Breast MRI is covered for the following indications (this list is not all-inclusive; other indications may be approved if deemed medically necessary and appropriate):
    - To detect breast implant rupture, provided the implantation procedure was or would have been covered by TRICARE (e.g., related to a covered mastectomy and reconstruction, and not solely for cosmetic reasons), or
    - For detection of occult breast cancer in the setting of axillary nodal adenocarcinoma with negative physical exam and negative mammography, or
    - For presurgical planning to evaluate the presence of multicentric disease in patients with localized or locally advanced breast cancer who are candidates for breast conservation treatment, or
    - Evaluation of suspected cancer recurrence, high-risk women, or
    - To determine the presence of pectoralis major muscle/chest wall invasion in patients with posteriorly located tumor, or
    - For guidance of interventional procedures such as vacuum assisted biopsy and preoperative wire localization for lesions that are occult on mammography or sonography and are demonstrable only with MRI
  - MRS is covered for the following indications:
    - Distinguishing low grade from high grade gliomas, or
    - Evaluating a brain lesion of indeterminate nature when MRS findings will impact the medical management of the patient; or
    - Distinguishing recurrent brain tumor from radiation-induced tumor necrosis
  - Cardiovascular Magnetic Resonance (CMR) is covered for the following indications: [2]
    - Detection Of Coronary Artery Disease (CAD)

- Symptomatic evaluation of chest pain syndrome (use of vasodilator perfusion CMR or dobutamine stress function CMR):
  - Intermediate pre-test probability of CAD
  - Electrocardiogram (ECG) uninterpretable OR unable to exercise
- Evaluation of intracardiac structures (use of Magnetic Resonance (MR) coronary angiography)
- Evaluation of suspected coronary anomalies
- Risk assessment with prior test results (use of vasodilator perfusion CMR or dobutamine stress function CMR)
  - Coronary angiography (catheterization or CT)
  - Stenosis of unclear significance
- Evaluation of ventricular and valvular function. Procedures may include Left Ventricular (LV)/Right Ventricular (RV) mass and volumes, MRA, quantification of valvular disease, and delayed contrast enhancement:
  - Assessment of complex congenital heart disease, including anomalies of coronary circulation, great vessels, and cardiac chambers and valves, or
  - Evaluation of LV function following myocardial Infarction (MI) OR in heart failure patients. Patients with technically limited images from echocardiogram, or
  - Quantification of LV function. Discordant information that is clinically significant from prior tests, or
  - Evaluation of specific cardiomyopathies (infiltrative [amyloid, sarcoid]), Hypertrophic Cardiomyopathy (HCM), or due to cardiotoxic therapies, or
  - Characterization of native and prosthetic cardiac valves--including planimetry of stenotic disease and quantification of regurgitant disease. Patients with technically limited images from echocardiogram or Transesophageal Echocardiography (TEE), or
  - Evaluation for Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) Patients presenting with syncope or ventricular arrhythmia, or
  - Evaluation of myocarditis or MI with normal coronary arteries. Positive cardiac enzymes without obstructive atherosclerosis on angiography
- Evaluation of intracardiac and extracardiac structures:
  - Evaluation of cardiac mass (suspected tumor or thrombus). Use of contrast for perfusion and enhancement, or
  - Evaluation of pericardial conditions (pericardial mass, constrictive pericarditis).
  - Evaluation for aortic dissection, or
  - Evaluation of pulmonary veins prior to radiofrequency ablation for atrial fibrillation. Left atrial and pulmonary venous anatomy including dimensions of veins for mapping purposes, or

- Detection of Myocardial Scar and Viability. Evaluation of myocardial scar (use of late gadolinium enhancement), or
- To determine the location and extent of myocardial necrosis including “no reflow” regions. Post acute MI, or
- To determine viability prior to revascularization. Establish likelihood of recovery of function with revascularization (Percutaneous Coronary Intervention [PCI] or Coronary Artery Bypass Graft [CABG]) or medical therapy, or
- To determine viability prior to revascularization. Viability assessment by Single Photon Emission Tomography (SPECT) or dobutamine echo has provided “equivocal or indeterminate” results.

### **Nuclear Medicine - Indium111 Pentetretotide (Octreoscan) Scintigraphy** <sup>[3]</sup>

**Initial Level of Review** may approve the following:

- The localization and monitoring of treatment of primary and metastatic neuroendocrine tumors
- Other indications when documented by reliable evidence as safe, effective, and comparable or superior to standard care (proven)

### **Nuclear Medicine – PET and PET/CT** <sup>[3]</sup>

Positron Emission Tomography (PET). **Initial Level of Review** may approve the following:

- The diagnosis and management of seizure disorders
- Evaluation of ischemic heart disease
- The diagnosis, staging, restaging, and monitoring of treatment of pancreatic cancer
- Restaging of gastrointestinal stromal tumor (a rare disease)
- The diagnosis and management of lung cancer when documented by reliable evidence as safe, effective, and comparable or superior to standard care (proven)
- PET/CT for metastatic bladder cancer.
- PET and PET/CT for the following:
  - Diagnosis of cardiac sarcoidosis
  - Staging and restaging of differentiated (follicular, papillary, Hürthle cell) thyroid cancer
  - Ruling out recurrence of ovarian cancer
  - Staging, restaging, and detection of recurrence of colorectal cancer
  - Diagnosis, staging, and monitoring of treatment of lymphoma
  - Initial diagnosis, staging, and monitoring of treatment of ovarian cancer
  - Diagnosis, staging, restaging, and monitoring of oncologic indications, when supported by National Comprehensive Cancer Network (NCCN) clinical practice guidelines

### **Nuclear Medicine – Planar/ Single Photon Emission Computed Tomography (SPECT)** <sup>[3]</sup>

Planar, Single Photon Emission Computed Tomography (SPECT). **Initial Level of Review** may approve the following:

- Myocardial perfusion imaging utilizing SPECT
- Brain imaging utilizing SPECT for the evaluation of seizure disorder
- Prostatic radioimmunoscinigraphy imaging utilizing SPECT for the following indications:
  - Metastatic spread of prostate cancer and for use in post-prostatectomy patients in whom there is a high suspicion of undetected cancer recurrence
  - Newly diagnosed patients with biopsy-proven prostate cancer at high risk for spread of their disease to pelvic lymph nodes
- Indium<sup>111</sup> - for detecting the presence and location of myocardial injury in patients with suspected myocardial infarction
- Indium<sup>111</sup> - labeled anti-TAG72 for tumor recurrence in colorectal and ovarian cancer
- SPECT for other indications is covered when documented by reliable evidence as safe, effective, and comparable or superior to standard care (proven).

## Ultrasound [2]

**Initial Level of Review** may approve the following:

- Transient elastography (TE) (ultrasound-based transient elastography or FibroScan®) for the detection and monitoring of hepatic cirrhosis in patients with chronic hepatitis C. [2]
- Ultrasound procedures for diagnosis, guidance, and post-operative evaluation of surgical procedures:
  - Maternity-related ultrasound. Professional and technical components of medically necessary fetal ultrasounds are covered outside the maternity global fee. The medically necessary indications include (but are not limited to) clinical circumstances that require obstetric ultrasounds to: estimate gestational age, evaluate fetal growth, conduct a biophysical evaluation for fetal well-being, evaluate a suspected ectopic pregnancy, define the cause of vaginal bleeding, diagnose or evaluate multiple gestations, confirm cardiac activity, evaluate maternal pelvic masses or uterine abnormalities, evaluate suspected hydatidiform mole, and evaluate the fetus' condition in late registrants for prenatal care.

## X-Ray and Mammography, Screening and Diagnostic [1, 4]

**Initial Level of Review** may approve the following:

- **Chest X-rays**
- **Screening Mammography**, to include digital mammography or digital breast tomosynthesis (DBT) / "3D mammography," is covered when the following criteria are met for beneficiaries assigned female at birth: [4]
  - **Beginning at age 30** for beneficiaries who:
    - Have a 15% or greater lifetime risk of breast cancer (according to risk assessment tools based on family history such as the Gail model, the Claus model, and the Tyrer-Cuzick model), **OR**
    - Who has **ANY** of the following risk factors:

- History of breast cancer, Ductal Carcinoma In Situ (DCIS), Lobular Carcinoma in Situ (LCIS), Atypical Ductal Hyperplasia (ADH), or Atypical Lobular Hyperplasia (ALH);
- - Extremely dense breasts when viewed by mammogram.
  - Known BRCA1 or BRCA2 gene mutation (or TP53, PALB2, PTEN, CDH1, STK11, ATM, or CHECK2 pathogenic variants)
  - First-degree relative (parent, child, sibling) with a BRCA1 or BRCA2 gene mutation and have not had genetic testing themselves.
  - Radiation therapy to the chest between the ages of 10 and 30 years; or
  - History of Li-Fraumeni, Cowden, or Bannayan-Riley-Ruvalcaba syndrome, or a first-degree relative with a history of one of these syndromes.
- **Ages of 40 to 74** who are at an **average** or **increased risk** of breast cancer.
- **Ages 75 and older** at the discretion of the patient and physician.

**NOTE:** The frequency of breast cancer screening may be at the discretion of the patient and the clinician; however, screening mammography should not be performed less frequently than once every two years.

- **Diagnostic mammography to include Digital Breast Tomosynthesis (DBT)** to further define breast abnormalities or other problems, as well as clinical preventative services
- **Portable X-ray Services** covered when suppliers meet Medicare or Medicaid program conditions

**Note:** Clinical preventative services for digital mammography or DBT is covered for those assigned female at birth, age 40-74, and has an average or increased risk of breast cancer.

### Other Indication <sup>[1]</sup>

Imaging (x-ray, ultrasound, CT, MRI) for **acute low back pain within 6 weeks of symptom onset** with the following red flags:

- Possible fracture, such as from a major trauma, or a more minor trauma in older or potentially osteoporotic patients; history of osteoporosis; chronic steroid use, or
- Possible tumor, cancer, or infection, as evidenced by: a history of cancer; a history of intravenous drug use; fevers, chills, or unexplained weight loss; or immune suppression, or
- Possible cauda equina syndrome, as evidenced by: bowel or bladder dysfunction; or saddle anesthesia (loss of sensation in the buttocks, perineum, and inner surfaces of the thighs), or
- Major motor weakness, or
- Progressive neurological symptoms

## DEFINITIONS

**Magnetic Resonance Imaging (MRI)** - non-invasive method of graphically representing the distribution of water and other hydrogen-rich molecules in the human body. MRI uses radio frequency radiation in the presence of a carefully controlled magnetic field to produce high quality cross-sectional images of the head and body in any plane. These tomographic images represent the tissue being analyzed and the environment surrounding it. MRI has become a useful diagnostic imaging modality that is capable of demonstrating a wide variety of soft-tissue lesions with contrast resolution equal or superior to Computerized Tomography (CT) scanning in various parts of the body. Among the advantages of MRI are the absence of ionizing radiation and the ability to achieve high levels of tissue contrast resolution without injected iodinated contrast agents. [2]

**Magnetic Resonance Angiography (MRA)** - Techniques generate contrast between flowing blood and surrounding tissue, provide anatomic images that can be provided in a format similar to that of conventional x-ray angiography, and can also provide physiologic information. [2]

**Computed Tomography (CT)** - Scan using X-rays for cross-sectional images. Scan is interchangeably referred to as either a CT or CAT scan. This diagnostic test uses x-ray technology to create three-dimensional, computerized images of internal organs; however, unlike a traditional x-ray, CT/CAT scans are able to distinguish between obscured and overlapping parts of the body. CAT scans are also capable of producing images of several different internal components, including soft tissue, blood vessels and bones. [2]

## CODES

## REFERENCES

[1] TRICARE Policy Manual 6010.63-M, April 2021, Change 39 (July 31, 2025), Chapter 5 , Section 1.1, Diagnostic Radiology (Diagnostic Imaging),

[https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S1\\_1.html](https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S1_1.html)

[2] TRICARE Policy Manual 6010.63-M, April 2021, Change 39 (July 31, 2025), Chapter 5 , Section 2.1, Diagnostic Ultrasound, [https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S2\\_1.html](https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S2_1.html)

[3] TRICARE Policy Manual 6010.63-M, April 2021, Change 39 (July 31, 2025), Chapter 5 , Section 4.1, Nuclear Medicine, [https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S4\\_1.html](https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-07-31/AsOf/TPT5/C5S4_1.html)

[4] TRICARE Policy Manual 6010.63-M, April 2021, Change 41 (August 21,2025), Chapter 7, Section 2.1, Clinical Preventative Services, [https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-08-15/AsOf/TPT5/C7S2\\_1.html](https://manuals.health.mil/pages/DisplayManualHtmlFile/2025-08-15/AsOf/TPT5/C7S2_1.html)