

Breast Imaging

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

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Summary

The Plan considers breast mammography, breast ultrasound, and breast magnetic resonance imaging (MRI) medically necessary as screening modalities in patients meeting certain risk criteria (described below). These modalities and positron emission tomography (PET) are also used as a diagnostic tool, typically for the purpose of breast cancer evaluation and staging.

Definitions

“Automated breast ultrasound (ABUS)” is a technique similar to a standard handheld breast ultrasound, except an automated transducer is used to standardize the image acquisition process.

“Breast cancer risk” refers to the estimated chance a person has of developing breast cancer over time. According to the 2024 American College of Radiology (ACR) Appropriateness Criteria® for Female Breast Cancer Screening, breast cancer risk is most commonly grouped into three categories based on estimated lifetime risk: average, intermediate, and high.

- Average risk: A person at average risk typically has less than a 15% chance of developing breast cancer in their lifetime based on medical risk assessment tools.
- Intermediate risk: A person at intermediate risk has a 15-20% chance of developing breast cancer in their lifetime based on medical risk assessment tools.
- High risk: A person at high risk has a 20% or greater chance of developing breast cancer in their lifetime based on medical risk assessment tools.

“Breast MRI” is an imaging modality that utilizes magnets to provide a detailed picture of breast tissue, usually in the setting of existing breast cancer or assessment of silicone implants.

“Breast PET” is an imaging modality that uses an injected radiotracer to highlight abnormal areas in the breast that might harbor cancer cells. It is often combined with a CT scan for better anatomic delineation.

“Breast tomosynthesis (3D mammography, digital mammography)” is an imaging modality that uses a moving X-ray source to create a three dimensional view of the breast tissue, as opposed to a two dimensional view provided by a standard mammogram.

“Breast ultrasound” is an imaging modality that uses sound waves to evaluate the breast tissue, usually in the setting of diagnostic follow up to concerning areas found on previous imaging, focal breast symptoms in women under 30, or guidance for biopsy or aspiration procedures.

“Computer-aided detection” is the use of specialized software to help analyze ultrasound, mammography, or MRI breast images with the goal of decreasing the time to read and interpret images.

“Mammography” is an imaging modality that uses X-rays to study breast tissue for screening or diagnostic purposes. The diagnostic mammogram often requires additional views and is interpreted in real-time by a radiologist.

Medical Necessity Criteria for Clinical Review

Indication-Specific Criteria

Mammography (Digital or Film Screen)

The Plan considers mammography medically necessary for higher risk or average risk (no prior history or risk factors) members when the criteria outlined in MCG Mammography (A-0039) are met. Please refer to plan benefits for eligibility by age for members younger than 40 years old (average risk) for breast cancer screening.

Breast Tomosynthesis (3D Mammography)

The Plan considers breast tomosynthesis (3D mammography) medically necessary for higher risk or average risk (no prior history or risk factors) members when the criteria outlined in MCG Mammography (A-0039) are met. Please refer to plan benefits for eligibility by age for members younger than 40 years old (average risk) for breast cancer screening.

Breast MRI

The Plan considers breast MRI medically necessary when the criteria outlined in MCG Breast MRI (A-0048) are met.

Breast MRI - Follow-Up Surveillance

Breast MRI follow-up surveillance (e.g., up to 5 years) after completing therapy for breast cancer may be considered medically necessary when ALL of the following are met:

1. Member had breast conserving therapy or unilateral mastectomy; *and*
2. Member has extremely dense breast tissue on mammography (Category D); *and*
3. Member presents with additional risk factor(s) in MCG Breast MRI (A-0048), under the breast cancer screening criteria.

Breast Ultrasound

The Plan considers breast ultrasound medically necessary when the criteria outlined in MCG Breast Ultrasound (A-0101) are met.

Whole-Body Positron Emission Tomography (PET) Scan

The Plan considers PET or PET-CT scans medically necessary for staging and post-treatment follow-up of breast cancer when the criteria outlined in MCG Tumor Imaging Positron Emission Tomography (PET) and PET-CT (A-0098) are met. For PET-based imaging that is not medically necessary or considered experimental, investigational, or unproven, refer to the [Experimental, Investigational, or Unproven / Not Medically Necessary](#) section.

[Experimental, Investigational, or Unproven / Not Medically Necessary](#)

Automated Breast Ultrasound

The Plan does NOT consider automated breast ultrasound (ABUS) medically necessary for breast imaging for any conditions. Studies comparing ABUS and handheld ultrasound (HHUS) have demonstrated comparable cancer detection rates between the two modalities in women with dense breasts. A meta-analysis concluded no statistically significant difference in any screening performance metrics including incremental cancer detection rate, positive predictive value of recall, and positive predictive value of biopsy among HHUS and ABUS, when used as supplemental screening in women with dense breasts and negative mammography (Hussein 2023). The ACR Appropriateness Criteria has similarly noted that automated breast ultrasound shows performance results comparable to HHUS. MRI is consistently superior to both ABUS for supplemental breast cancer screening in women with dense breasts (Gilbert et al., 2025).

Breast MRI

1. The Plan does NOT consider breast MRI medically necessary for the screening or initial evaluation of saline implant rupture related to a solely cosmetic breast implant not associated with a medically necessary breast reconstruction procedure.
2. The Plan does NOT consider routine MRI surveillance medically necessary for asymptomatic members with a history of breast cancer who have successfully completed primary therapy with bilateral mastectomy.
3. The National Comprehensive Cancer Network (NCCN) guidelines for breast cancer (Version 2.2026) state that the utility of MRI in the follow-up screening of most patients with prior breast cancer is undefined.
4. According to the ACR Appropriateness Criteria, breast MRI after mastectomy and breast reconstruction is “usually not appropriate.”

Breast-Specific Gamma-Imaging (BSGI) / Molecular Breast Imaging (MBI) / Scintimammography

The Plan does NOT consider breast-specific gamma-imaging (BSGI)/scintimammography, also known as Sestamibi (Tc-99m) molecular breast imaging (MBI), medically necessary for any indication. According to the 2025 ACR Appropriateness Criteria, Sestamibi molecular breast imaging is “usually not appropriate” across all risk categories and all breast density categories due to insufficient evidence although there is emerging data (Expert Panel on Breast Imaging et al., 2025).

Computer-Aided Detection (CAD) for Ultrasound

The Plan considers computer-aided detection for ultrasound experimental, investigational, or unproven for any indication. No major guidelines (NCCN, ACR, USPSTF, ACS) currently include CAD for ultrasound for breast cancer screening or diagnosis. Although this technology remains promising, there currently is insufficient evidence to recommend its use.

Computer-Aided Tactile Breast Imaging

The Plan considers computer-aided tactile breast imaging experimental, investigational, or unproven for all indications. Published studies have not demonstrated that computer-aided tactile breast imaging improves diagnostic accuracy or clinical outcomes compared to conventional imaging modalities. A systematic review by Bhimani et al. (2023) evaluated the iBreastExam (iBE), a form of computer-aided tactile breast imaging, and found that the device demonstrates highly variable and often inadequate sensitivity (34.3%–86%), high false-positive rates, and no evidence of improved patient outcomes (e.g., reduced mortality or earlier-stage detection) compared to standard breast imaging modalities such as mammography. The NCCN, ACR, USPSTF, and ACS do not include computer-aided tactile breast imaging in their screening or diagnostic recommendations.

Ductography

The Plan does NOT consider ductography (also known as galactography) medically necessary for any indication. Mammography and ultrasound are the recommended initial imaging exams for evaluation of pathologic nipple discharge. Ductography is not recommended in the 2026 NCCN Breast Cancer Screening and Diagnosis guideline. According to the 2022 ACR Appropriateness Criteria for Evaluation of Nipple Discharge, ductography is “usually not appropriate” and has lower specificity and higher false-negative rates (Sanford, 2022). The evidence on ductography for breast imaging is mixed; it has some diagnostic utility but is generally considered inferior to MRI and is no longer routinely recommended by major guidelines. A meta-analysis of 10 studies demonstrated that MRI significantly outperforms ductography across all metrics: pooled sensitivity of 92% vs. 69% ($p < 0.001$) and specificity of 76% vs. 39% ($p < 0.001$) for detecting any lesion (Berger, 2017). The meta-analysis concluded that when mammography and ultrasound are negative, MRI should be preferred over ductography (Berger, 2017).

Elastography: Magnetic Resonance Elastography (MRE) or Ultrasound Elastography

The Plan considers magnetic resonance elastography (MRE) or ultrasound elastography experimental, investigational, or unproven for all indications. MRE is not established as a primary screening or diagnostic tool for breast cancer. The only FDA-cleared clinical application of MRE is for hepatic fibrosis staging in chronic liver disease. A review explored recent advances in ultrasound elastography for breast cancer detection and found a lack of diagnostic accuracy and inconsistent reproducibility of ultrasound elastography for breast cancer imaging (Zhou, 2025). The 2026 NCCN Breast Cancer Screening and Diagnosis guidelines and 2025 ACR Appropriateness Criteria do not include ultrasound elastography in any screening or diagnostic guidelines.

Electrical Impedance Scanning (EIS)

The Plan considers electrical impedance scanning (EIS) experimental, investigational, or unproven for any breast imaging indication as this technique has not demonstrated improved effectiveness compared to mammography alone. A systematic review covering EIS across multiple cancer types including breast, both concluded that the evidence base remains insufficient to recommend EIS for clinical use in cancer screening or diagnosis (Pathiraja et al. 2020). A more recent systematic review of portable non-invasive technologies for early breast cancer detection, that included technologies encompassing what has been previously termed EIS, concluded that most electrical impedance technologies remain in early stages of development with limited large-scale clinical validation, and that further research is needed to validate clinical efficacy before widespread adoption can be recommended (Aboagye et al., 2024).

Positron Emission Tomography (PET) Scan, Including with 18F and 18F-Fluoroestradiol Tracers

1. The Plan does NOT consider PET-based imaging (e.g., PET, PET-CT, PET-MRI, etc.) medically necessary for breast imaging as part of breast cancer screening. NCCN guidelines for breast cancer screening do not list PET as an option. USPSTF, and ACS do not list PET under breast cancer screening recommendations.
2. Certain PET diagnostic procedures and radiotracers are considered experimental, investigational, or unproven; please see [Applicable Billing Codes](#).

Transillumination

The Plan considers transillumination experimental, investigational, or unproven for any breast imaging indication. There is no mention of transillumination by NCCN, ACR, U.S. Preventive Services Task Force, and American Cancer Society for any breast imaging indication. The studies evaluating transillumination for breast cancer detection are outdated, conducted primarily in the 1980s, and consistently demonstrate substantially lower sensitivity than mammography.

[Applicable Billing Codes](#)

Table 1	
CPT/HCPCS codes considered medically necessary if criteria are met:	
<i>Code</i>	<i>Description</i>
76641	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete
76642	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited
77046	Magnetic resonance imaging, breast, without contrast material; unilateral

Table 1	
CPT/HCPCS codes considered medically necessary if criteria are met:	
<i>Code</i>	<i>Description</i>
77047	Magnetic resonance imaging, breast, without contrast material; bilateral
77048	Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (CAD real-time lesion detection, characterization and pharmacokinetic analysis), when performed; unilateral
77049	Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (CAD real-time lesion detection, characterization and pharmacokinetic analysis), when performed; bilateral
77061	Digital breast tomosynthesis; unilateral
77062	Digital breast tomosynthesis; bilateral
77063	Screening digital breast tomosynthesis, bilateral (List separately in addition to code for primary procedure)
77065	Diagnostic mammography, including computer-aided detection (CAD) when performed; unilateral
77066	Diagnostic mammography, including computer-aided detection (CAD) when performed; bilateral
77067	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed
78811	Positron emission tomography (PET) imaging; limited area (eg, chest, head/neck)
78812	Positron emission tomography (PET) imaging; skull base to mid-thigh
78813	Positron emission tomography (PET) imaging; whole body
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)

Table 1	
CPT/HCPCS codes considered medically necessary if criteria are met:	
<i>Code</i>	<i>Description</i>
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh
78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body
A9552	Fluorodeoxyglucose F-18 FDG, diagnostic, per study dose, up to 45 millicuries
C8903	Magnetic resonance imaging with contrast, breast; unilateral
C8905	Magnetic resonance imaging without contrast followed by with contrast, breast; unilateral
C8906	Magnetic resonance imaging with contrast, breast; bilateral
C8908	Magnetic resonance imaging without contrast followed by with contrast, breast; bilateral
G0219	PET imaging whole body; melanoma for noncovered indications
G0235	PET imaging, any site, not otherwise specified
G0279	Diagnostic digital breast tomosynthesis, unilateral or bilateral (list separately in addition to 77065 or 77066)

Table 2	
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
<i>Code</i>	<i>Description</i>
C50.011 - C50.9292	Malignant neoplasms of breast
C50.A0 - C50.A2	Inflammatory breast cancer (IBC)
C79.81	Secondary malignant neoplasm of breast
D05.00 - D05.92	Carcinoma in situ of breast
D24.1	Benign neoplasm of right breast

Table 2	
ICD-10 codes considered medically necessary with Table 1 codes if criteria are met:	
<i>Code</i>	<i>Description</i>
D24.2	Benign neoplasm of left breast
D48.60 - D48.62	Neoplasm of uncertain behavior of breast
N60.01 - N65.1	Disorders of breast
Q85.81 - Q85.89	Other phakomatoses, not elsewhere classified
R92.8	Other abnormal and inconclusive findings on diagnostic imaging of breast
Z12.31	Encounter for screening mammogram for malignant neoplasm of breast
Z12.39	Encounter for other screening for malignant neoplasm of breast
Z15.01	Genetic susceptibility to malignant neoplasm of breast
Z40.01	Encounter for prophylactic removal of breast
Z80.3	Family history of malignant neoplasm of breast
Z84.81	Family history of carrier of genetic disease
Z85.3	Personal history of malignant neoplasm of breast
Z86.000	Personal history of in-situ neoplasm of breast
Z92.3	Personal history of irradiation

Table 3	
CPT/HCPCS codes considered experimental, investigational, or unproven for indications in this guideline:	
<i>Code</i>	<i>Description</i>
0422T	Tactile breast imaging by computer-aided tactile sensors, unilateral or bilateral
76391	Magnetic resonance (eg, vibration) elastography
76499	Unlisted diagnostic radiographic procedure • <u>Due to the broad nature of this code, clarification is provided below:</u> • When billed for transillumination or electrical impedance scanning, it is considered experimental, investigational, or unproven

Table 3	
CPT/HCPCS codes considered experimental, investigational, or unproven for indications in this guideline:	
<i>Code</i>	<i>Description</i>
78800	Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, single area (eg, head, neck, chest, pelvis), single day imaging
78801	Radiopharmaceutical localization of tumor, inflammatory process or distribution of radiopharmaceutical agent(s) (includes vascular flow and blood pool imaging, when performed); planar, 2 or more areas (eg, abdomen and pelvis, head and chest), 1 or more days imaging or single area imaging over 2 or more days
76981	Ultrasound, elastography; parenchyma (eg, organ)
76982	Ultrasound, elastography; first target lesion
76983	Ultrasound, elastography; each additional target lesion (List separately in addition to code for primary procedure)
A9591	Fluoroestradiol F-18, diagnostic, 1 millicurie
G0252	PET imaging, full and partial-ring PET scanners only, for initial diagnosis of breast cancer and/or surgical planning for breast cancer (e.g., initial staging of axillary lymph nodes)

Table 4	
CPT/HCPCS codes <u>not considered medically necessary</u> for breast cancer screening:	
<i>Code</i>	<i>Description</i>
78811	Positron emission tomography (PET) imaging; limited area (eg, chest, head/neck)
78812	Positron emission tomography (PET) imaging; skull base to mid-thigh
78813	Positron emission tomography (PET) imaging; whole body

Table 4	
CPT/HCPCS codes <u>not considered medically necessary</u> for breast cancer screening:	
<i>Code</i>	<i>Description</i>
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (eg, chest, head/neck)
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh
78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body
G0219	PET imaging whole body; melanoma for noncovered indications
G0235	PET imaging, any site, not otherwise specified

Table 5	
CPT/HCPCS codes <u>not considered medically necessary</u> for indications in this guideline (including breast cancer screening or diagnosis):	
<i>Code</i>	<i>Description</i>
19030	Injection procedure only for mammary ductogram or galactogram
76641	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; complete • <u>Due to multiple procedures represented by this code, specific exclusions are indicated:</u> • When billed for automated breast ultrasound (ABUS), it is considered NOT medically necessary

Table 5	
CPT/HCPCS codes <u>not considered medically necessary</u> for indications in this guideline (including breast cancer screening or diagnosis):	
<i>Code</i>	<i>Description</i>
76642	Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited • <u>Due to multiple procedures represented by this code, specific exclusions are indicated:</u> • When billed for automated breast ultrasound (ABUS), it is considered NOT medically necessary
77053	Mammary ductogram or galactogram, single duct, radiological supervision and interpretation
77054	Mammary ductogram or galactogram, multiple ducts, radiological supervision and interpretation
A9500	Technetium Tc-99m sestamibi, diagnostic, per study dose • <u>Due to multiple indications represented by this code, specific exclusions are indicated:</u> • When billed for breast imaging, it is considered NOT medically necessary
S8080	Scintimammography (radioimmunosintigraphy of the breast), unilateral, including supply of radiopharmaceutical

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