



**BlueCross BlueShield
of Vermont**

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Corporate Medical Policy

Magnetic Resonance Imaging (MRI) of the Breast

File name: Magnetic Resonance Imaging (MRI) of the Breast

Origination: 6/06

Last Review: 5/08

Next Review: 5/09

Effective Date: 6/23/08

Description

Magnetic Resonance Imaging (MRI) is a non-invasive technology where powerful electromagnets are used to create a magnetic field surrounding the body. This field causes protons, the nuclei of hydrogen atoms to realign themselves and send out high frequency signals, which create a computer generated image. Different tissues of the body produce different signals when exposed to the magnetic field. MRI has certain advantages over CT scans with its ability to depict soft tissue in high contrast. MRI of the breast requires a breast coil.

Policy

Benefits are subject to all terms, limitations and conditions of the subscriber contract.

Prior approval may be required subject to all terms, limitations and conditions of the subscriber contract.

For New England Health Plan (NEHP) members an approved referral authorization is required.

When service or procedure is covered

MRI of the breast is considered medically necessary for indications noted below:

1. To confirm if necessary, rupture of breast silicon implants in asymptomatic members whose screening ultrasonography shows rupture.
2. To detect silicon implant rupture in symptomatic members whose ultrasonography is equivocal or shows no rupture.
3. To detect local tumor recurrence in the breast cancer members who have undergone mastectomy and breast reconstruction with an implant.
4. To exclude multicentric disease in members with newly diagnosed breast cancer and pathological findings suggestive of multifocality when the information will impact on clinical treatment, i.e., lumpectomy versus mastectomy.
5. To localize the site of primary occult breast cancer in members with adeno-carcinoma suggestive of breast cancer discovered as axillary node metastasis or distant metastasis without focal findings on physical examination or on mammography or ultrasonography.

6. For presurgical planning in members with locally advanced breast cancer before and after completion of neoadjuvant chemotherapy. MRI may be performed before and after completion of neoadjuvant chemotherapy to permit tumor localization and characterization.
7. To determine the presence of pectoralis major muscle/chest wall invasion in members with posteriorly located tumor.
8. To guide localization of breast lesions to perform needle biopsy when suspicious lesions exclusively detected by contrast-enhanced MRI cannot be visualized with mammography or ultrasonography or are detected by mammography in only one plane and are not palpable or localizable by ultrasound. Follow up MRI is considered medically necessary as follows:
 - a. At six months following benign concordant findings from a MRI localization biopsy to confirm target tissue was assessed.
 - b. At an interval shorter than six months when pathology findings are discordant with MRI imaging.
9. On an annual basis for screening in members with confirmed presence of BRCA1 or BRCA2 mutation or specific syndromes with a known high risk of breast cancer such as Li-Fraumaeni, Cowden, or Bannayan-Riley-Ruvalcaba syndromes, or a lifetime risk of greater than or equal to 20% of developing breast cancer as identified by published/validated models that are largely defined by family history.
10. On an annual basis for screening in members with a pattern of breast cancer history consistent with a high probability of harboring BRCA mutations or other hereditary breast cancer as follows:
 - a. There are three or more affected first or second degree relatives on the same side of the family, regardless of age at diagnosis, or
 - b. There are fewer than three affected relatives, but
 - i. the relatives were diagnosed at 45 years of age or less, or
 - ii. a family member has been identified with a detectable mutation, or
 - iii. there are one or more cases of ovarian cancer at any age, and one or more members on the same side of the family with breast cancer at any age, or
 - iv. there are multiple primary or bilateral breast cancers in the individual or one family member, or
 - v. there is breast cancer in a male member, or in a male relative, or
 - vi. the member is at increased risk for specific mutation(s) due to ethnic background (for instance: Ashkenazi Jewish descent) and has one or more relatives with breast cancer or ovarian cancer at any age.
 - vii. The presence of Li-Fraumaeni, Cowden, or Bannayan-Riley-Ruvalcaba syndromes in a first degree relative.
11. On an annual basis in individuals with a history of radiation to the chest between ages 10 and 30
12. To detect local tumor recurrence in breast cancer members with radiographically dense breast or old scar tissue from previous breast surgery that compromises the ability of combined mammography and ultrasonography.
13. On a biannual basis as an adjunct to mammography to detect breast cancer in premenopausal women with dense breasts and either a personal history of atypia, lobular carcinoma in situ (LCIS) or breast cancer, or a single first degree relative with premenopausal breast cancer.
14. At 6 months following a previous breast MRI with BI-RADS Category 3 findings.
15. For presurgical planning in members with locally advanced breast cancer with planned neoadjuvant chemotherapy before the initiation of, and after completion of, neoadjuvant chemotherapy to define the size and extent of tumor to guide the decision to use breast conservation therapy.

16. To determine the presence of pectoralis major muscle/chest wall invasion in members with posteriorly located tumor.
17. Under an approved research protocol prior to a planned biopsy for an indeterminate or suspicious lesion.
18. For evaluation of pathologic (i.e. unilateral, spontaneous, bloody or positive for occult blood) nipple discharge when mammography, ultrasound, and either galactography/ductography or ductoscopy cannot be performed or the results are equivocal or negative

When service or procedure may not be covered

MRI of the breast is considered not medically necessary or investigational for all other indications including those noted below:

1. To confirm implant rupture in symptomatic members whose ultrasonography shows rupture with implants that are > 10 years old.
2. As a routine screen for breast cancer in average risk members.
3. To evaluate breasts before biopsy in an effort to reduce the number of surgical biopsies for benign lesions.
4. To differentiate benign from malignant breast disease, especially clustered microcalcifications, in order to avoid biopsy.
5. To differentiate cysts from solid lesions.
6. For diagnosis of low suspicion findings on conventional testing (mammography and ultrasound) referred for short interval follow up instead of immediate biopsy.
7. For evaluation of residual tumor in members with positive margins after lumpectomy.
8. MRI of the breast without the use of a breast coil, regardless of the clinical indication, is considered investigational.
9. When medical necessity criteria above is not met
10. When prior approval is not obtained

Information required (if plan approval required)

Clinical summary that includes the indication for MRI above and supporting documentation is required for prior approval. Information should be sent to the Plan(s) or delegated entity

Billing and Coding/Physician Documentation Information

See Attachment I.

Eligible Providers

Surgeons
Allopathic physicians

Policy Implementation/Update information

06/06 Established as separate policy based upon previous BCBSVT Medical Policy for MRI, BCBSA Medical Policy and Technological Evaluation Committee (TEC) Assessments, 3 year pilot study in conjunction with Breast Care Center at RRMC, Health Quest Medical Reviews, and 06/08/2006 BCBSVT Specialty Advisory Committee meeting.

06/07 Addition of history of radiation to the chest and modifications of language for genetic basis to include all recommendations of the 2007 American Cancer Society guidelines; addition of criteria for use of MRI for pathologic nipple discharge; addition of new criteria from BCBSA TEC evaluation.

Reviewed by the CAC July 2007
2008 Format changes. No clinical changes. CPT 77021 no longer requires prior approval. CPT
code 0159T now investigational Reviewed by CAC July 2008

Approved by BCBSVT Medical Director **Date Approved**

Stephen E. Perkins M.D.

Attachment I – Breast MRI

| CPT CODE | DESCRIPTION | ELIGIBLE | NOT COVERED |
|--------------|---|------------------------------|-----------------|
| 77058 | Magnetic resonance imaging, breast, with and without contrast material(s); unilateral | Yes, Prior Approval Required | |
| 77059 | Magnetic resonance imaging, breast, with and without contrast material(s); bilateral | Yes, Prior Approval Required | |
| C8903 –C8908 | Magnet resonance imaging with and/or without contrast breast unilateral or bilateral | Yes, Prior Approval Required | |
| 0159T | Computer-aided detection, including computer algorithm analysis for MRI data | NO | Investigational |