NSHA DIAGNOSTIC IMAGING
IWK CLINICAL MANUAL
GUIDELINES

Title:	Clinical Access Guidelines for Diagnostic Breast MRI in Nova Scotia	**Number:**	**NSHA** DT-DI-030 **IWK**-687
Sponsor:	**NSHA** Senior Medical Director Diagnostic and Therapeutic Services Network **NSHA** Director Clinical Networks **IWK** Director of Healthy Populations & Provincial Initiatives **IWK** Director of Pathology & Lab Medicine, Diagnostic Imaging, and Maritime Medical Genetics	**Page:**	1 of 7
Approved by:	**NSHA** Clinical Operations Council (COC) **IWK** Policy and Practice Committee	**Approval Date: NSHA** June 15, 2023	**Approval Date: IWK** Feb. 14, 2023
		Effective Date:	July 11, 2023
Applies to:	Radiologists, Oncologists, Surgeons and Primary Care Practitioners working with women, Transgender, Gender Diverse, and Non-binary people in Nova Scotia where breast MRI will enhance treatment planning, problem solving or the diagnostic evaluation of the breasts		

PURPOSE

The purpose of these guidelines is to help Radiologists, Oncologists, Surgeons, and Primary Care Practitioners understand the role of magnetic resonance imaging (MRI) in the diagnosis and management of breast disease in Nova Scotia.

Note:

This guideline does **not** apply to the use of MRI in screening women, Transgender, Gender Diverse and Non-binary people who are at high risk of breast cancer (25% or greater lifetime risk of breast cancer).

Refer to Radiological Breast Screening of High-Risk Women in Nova Scotia – NSHA DT-DI-025, IWK-686.

Breast MRI is an expensive test with limited availability. Breast MRI is a referral-based service, and patients cannot self-refer.

MRI is an adjunctive test that should complement mammography and other radiologic modalities (ultrasonography) and is only recommended for specific clinical situations outlined below.

Breast MRI can only be performed at sites with a dedicated breast MRI coil.

The target patient population for this policy extends beyond women, and includes Transgender, Gender Diverse and Non-binary people to recognize the gender diversity of those requiring breast MRI (See Appendix A: Definitions). This policy also recognizes the evolving nature of gender identity terminology and has adopted some terms that are more encompassing to be reflective of that.

GUIDELINES

Current Indications for Breast MRI

1. Preoperative treatment planning of histologically proven breast cancer (invasive or ductal carcinoma in situ [DCIS])
   - Where, in the opinion of the referring surgeon, oncologist, or radiologist, significant risk of locally extensive, multi-focal, multi-centric and/or contralateral disease (particularly for invasive lobular cancer or extensive DCIS) and the results of MRI would potentially alter management decisions.
2. Assessment of disease extent and/or response in the setting of neoadjuvant (pre-operative) systemic therapy
   - Where, in the opinion of the referring surgeon, oncologist or radiologist, the results of either a pre-treatment (baseline) MRI and/or MRI evaluation of disease response would be useful in guiding management.
3. Evaluation of residual disease post-lumpectomy
   - Where, in a patient who has not had a pre-operative MRI and has “close” or “positive” margins post-lumpectomy, and, in the opinion of the referring surgeon, oncologist and/or radiologist, there is:
   - Benefit to assess the extent of local disease and detect unsuspected multi-focal or multi-centric disease.
4. Assessment of questioned recurrent breast cancer (versus scar)
   - Where MRI might be of value (following complete clinical and radiologic evaluation) in breast cancer patients post-breast conserving treatment and/or breast reconstruction.

> **Note**: Breast MRI is **not recommended** for routine follow up of breast cancer patients unless they are at 25% or greater lifetime risk of a second breast cancer. It is also not recommended for post-mastectomy screening or surveillance.

5. To look for breast primary in patients with axillary metastases or distant metastases considered to be of breast origin in patients with an unknown primary
   - Where, in the absence of clinical, mammographic or ultrasound evidence of a primary breast cancer, there is:
   - Benefit to detect or exclude an occult breast primary.
6. Problem solving
   - Where MRI might be useful to further assess the rare instance of suspicious, but still indeterminate breast findings following complete clinical and mammographic/ultrasound assessment including assessment by a breast surgeon.
7. Silicone breast implant augmentation
   - Where MRI may be useful for evaluation of silicone implant integrity. Specialist referral for clinical assessment of the implants should be performed before MRI.

   NOTE: MRI is not indicated for saline implants.

PRINCIPLES AND VALUES

Providing person-centred care means working collaboratively with clients and their families to provide care that is respectful, compassionate, culturally safe, and competent, while being responsive to their needs, values, cultural backgrounds, and beliefs and preferences.

PROCEDURE GUIDELINES

Request and Approval Process

1. The request for MRI of the breast should provide sufficient information to demonstrate the medical necessity of the examination and allow for its proper performance and interpretation. Documentation that satisfies medical necessity includes:
   - Signs and symptoms:
   - Relevant history (including known diagnoses)
   - Additional information regarding the specific reason for the examination or a provisional diagnosis would be helpful and may at times be needed to allow for the proper performance and interpretation of the examination.

   1.1. Patients should have thorough breast imaging work up of the abnormality using mammography, ultrasound (US), and any other relevant imaging prior to MRI.
      - □ These studies and reports should be available to the radiologist for review prior to approval of the request and should be available to the radiologist reporting the MRI study.

Note: Breast MRI requests are reviewed by a Breast Imaging Radiologist according to the above guidelines.

If a request is refused because it does not meet the guidelines, information on the reason for refusal will be provided to the referring physician.

Reason for approval or refusal is documented in the Breast imaging Information System.

2. The provincial MRI requisition should be used for requesting breast MRI.
3. Contraindications for MRI of the breast are the same as for any MRI study.
4. All breast MRI studies will be booked in the Breast Information System (BIS) by the Nova Scotia Breast Screening Program (NSBSP) and reported in BIS.

Note: Pregnant and lactating patients:

The decision to perform MRI during pregnancy should be made on an individual basis. There are theoretical risks of MRI in pregnancy, but there is no known adverse effect of MRI on the fetus.

Gadolinium based contrast agents should only be used if their usage is considered critical and the potential benefits justify the potential unknown risk to the fetus.

In a breastfeeding patient, a very small percentage of gadolinium-based contrast medium is excreted into the breast milk and absorbed by the infant's gut, far less than would be administered during an MRI performed on an infant.

Available data suggests that it is safe for the lactating patient and infant to continue breast-feeding following an enhanced MRI in a lactating patient, with no medical indication to suspend breastfeeding or discard excreted breast milk.

National Maximum Wait Time Access Target

The Canadian Association of Radiologists (CAR) recently updated its benchmark targets for wait times in computed tomography (CT) and MRI. A systematic literature search by CAR failed to identify any articles relevant to patient outcomes and access to MRI or CT. The CAR, therefore, acknowledges that the evidence behind the recommendations are the best recommendations of a panel of participating experts, based on unsystematic and undocumented experience, reviewed and vetted through a wider, pan-Canadian consultation process.

The CAR recommends a five-point priority classification system with priority definitions and maximum benchmark time interval targets as per the table below:

Priority Category Definitions	**Maximum Time Interval Target**
P1: Emergent	24 Hours
P2: Urgent	7 Days
P3: Semi-Urgent	30 Days
P4: Non-Urgent	60 Days
Specified Procedure Date	Specified Procedural Date

REFERENCES

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United Nations Human Rights Office of the High Commissioner. (n.d.). *The struggle of trans and gender-diverse persons*. https://www.ohchr.org/en/special-procedures/ie-sexual-orientation-and-gender-identity/struggle-trans-and-gender-diverse-persons.

RELATED DOCUMENTS

Radiological Breast Screening of High-Risk Women in Nova Scotia – NSHA DT-DI-025, IWK-686

Appendix A: Definitions

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Appendix A: Definitions

Gender Diverse	Refers to persons whose gender roles and/or gender expression are at odds with social and cultural expectations; also known as "gender non-conforming" or "gender variant."
Non-binary	An umbrella term that refers to diverse people whose gender identity is neither female nor male. Some individuals self-identify as Non-binary, whereas others may use terms such as gender non-conforming, genderqueer, or agender. Non-binary people may or may not conform to societal expectations for their gender expression and gender role, and they may or may not seek gender affirming medical or surgical care.
Transgender	An umbrella term that describes a wide range of people whose gender identity differs from their assigned sex at birth. These could include but not limited to: ○ Assigned female at birth and have not undergone gender affirming surgery; or ○ Assigned male at birth and have been on feminizing/affirming hormone therapy for five or more years

POLICIES BEING REPLACED

Clinical Access Guidelines in Breast MRI in Nova Scotia – Approved by Department of Health and Wellness in 2008.

VERSION HISTORY

Version:	Effective:	Approved by:	What's changed:
Original	2023-07-11	**NSHA** Clinical Operations Council (COC) **IWK** Policy and Practice Committee	N/A