New Zealand Society of Medical Imaging and Radiation Therapy (NZSMIRT)

Consultation Document:

MRI Safety and Remote Scanning Position Statement

Status: Draft for Consultation

Issued: 29 May 2026

Submission closes: 11:59pm, 28 June 2026

Purpose of this Consultation

The New Zealand Society of Medical Imaging and Radiation Therapy (NZSMIRT) is seeking feedback from stakeholders on this draft position statement regarding MRI safety and the use of remote MRI scanning models in Aotearoa New Zealand.

Advances in technology and workforce challenges have led to increased interest in remote MRI scanning. While NZSMIRT supports innovation that enhances access for patients and sustainability of MRI services, patient safety and professional standards must remain paramount.

Remote MRI introduces unique risks never present in conventional onsite MRI workflows.

This document sets out NZSMIRT's proposed position and the principles that should govern safe MRI service delivery when remote scanning models are implemented. Stakeholder feedback will inform the final position statement.

Thank you for taking part in this consultation.

How to Provide Feedback

Complete the consultation online feedback form: Consultation Feedback Form: MRI Safety and Remote MRI Scanning Position Statement – Fill out form

Consultation closing date: 11:59pm 28 June 2026

Next Steps

Following the consultation period, NZSMIRT will:

- Review and synthesise stakeholder feedback
- Consider amendments where appropriate
- Publish a final Position Statement on MRI Safety and Remote Scanning

NZSMIRT thanks stakeholders for their engagement and commitment to safe, high-quality MRI practice in Aotearoa New Zealand.

Proposed NZSMIRT Position

1. Patient Safety as the Primary Consideration

NZSMIRT affirms that patient safety in the MRI environment is paramount and must not be compromised by changes in service delivery models, including remote MRI scanning.

MRI is a high-risk imaging modality requiring specialised knowledge and vigilance to manage hazards associated with:

- Strong static magnetic fields
- Gradient magnetic fields
- Radiofrequency (RF) energy

Potential risks include projectile incidents, thermal injury, interference with implanted or external devices, and the need for immediate response to medical emergencies.

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2. Professional Accountability and Scope of Practice

In Aotearoa New Zealand, MRI is a restricted scope of practice regulated by the Medical Radiation Technologists Board (MRTB). NZSMIRT considers that a qualified MRI Technologist is the appropriate professional responsible for MRI safety within the clinical environment.

This responsibility includes, but is not limited to:

- Completion and verification of MRI safety screening
- Management of controlled access to MRI safety zones (Zones III and IV)
- Patient consenting and safety assessment

- Patient positioning and safe use of coils and equipment
- Prevention of thermal injury and other MRI-related risks
- Continuous patient monitoring and communication
- Immediate recognition and response to adverse events or emergencies

The NZSMIRT does not support the delegation of safety critical responsibilities such as patient consenting, MRI safety screening, contrast administration, or patient positioning to unqualified assistants. These activities require the knowledge, clinical judgement and accountability of a qualified MRI Technologist and/or other appropriately registered health professional.

3. Contrast Media Safety and Clinical Governance

MRI services must maintain robust clinical governance in relation to contrast media.

Contrast administration must be undertaken by a registered health professional who is:

- Appropriately trained and competent in its use
- Able to recognise and manage adverse reactions
- Supported by immediate access to emergency equipment and assistance

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4. Staffing Requirements for Remote MRI Scanning Models

When remote MRI scanning models are employed, NZSMIRT supports a service model in which:

- A qualified MRI Technologist is physically present on-site for each MRI scanner
- In addition to the on-site MRI Technologist, at least one further staff member is present in the MRI environment at all times who has completed departmental MRI safety training
- At least one staff member present has advanced MRI safety training and is explicitly responsible for patient monitoring and safety oversight
- A dedicated staff member is assigned to each patient during scanning to ensure continuous observation and communication
- Staffing levels enable immediate response to emergencies without compromising patient supervision

These principles reflect the need for continuous patient supervision, on-site expertise, clear communication, and rapid response capability in a high-risk clinical environment.

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5. Use of Remote MRI Scanning

NZSMIRT recognises that remote MRI scanning may offer benefits in supporting service delivery and workforce sustainability. However, such models must:

- Retain on-site MRI expertise
- Align with professional standards and scope of practice requirements
- Maintain clear accountability for patient safety at the site where the patient is located
- Avoid practices that dilute safety oversight or fragment responsibility

Remote scanning must not be used to replace essential on-site clinical roles critical to MRI safety.

Supporting Guidance and Alignment

International MRI Safety Guidance

International guidance from the American College of Radiology (ACR) indicates that:

- MRI safety remains the responsibility of the site where the patient is located
- Remote MRI scanning requires a minimum of three MR personnel: a remote MR Technologist, an on-site Level 2 MR Technologist, and an additional on-site MR staff member
- A Level 2 MR Technologist must be physically present on-site and immediately available
- A dedicated Level 2 MR personnel member should be assigned to each patient for continuous monitoring
- Monitoring more than one patient at a time is not recommended
- Remote technologists should not scan more than one patient simultaneously
- Level 2 MR Personnel are defined as individuals with advanced MRI safety training who are responsible for supervising MRI safety and making safety-critical decisions

Regional Clinical Guidance

The Royal Australian and New Zealand College of Radiologists (RANZCR) states that contrast media must be administered by a registered health professional trained in its use and in the management of adverse reactions.

New Zealand Regulatory Context

The Medical Radiation Technologists Board (MRTB) defines MRI as a restricted scope of practice requiring specific competencies. These competencies align with advanced MRI safety training expectations described in international guidance.

References

- American College of Radiology. *ACR Manual on MR Safety 2026*.
- Medical Radiation Technologists Board (MRTB). *Scopes of Practice and Prescribed Qualifications – Magnetic Resonance Imaging 26 August 2025. New Zealand Gazette*.
- Royal Australian and New Zealand College of Radiologists (RANZCR). *Iodinated Contrast Media Guideline, V2.3*
