CMRITO

What you must know about ... performing procedures

INTRODUCTION

As regulated health professionals, registrants of the College of Medical Radiation and Imaging Technologists of Ontario (CMRITO) are accountable to their patients and the public to provide safe, effective, and ethical medical radiation and imaging technology services. Registrants of the CMRITO do this every day by ensuring that their practice meets the requirements of applicable legislation and the CMRITO Standards of Practice.

In this publication, “registrants” refers to all registrants of the CMRITO, which includes registrants in all of the five specialties (radiography, radiation therapy, nuclear medicine, magnetic resonance, and diagnostic medical sonography), and “profession” refers to the profession of medical radiation and imaging technology.

CMRITO registrants are qualified medical radiation and imaging professionals who use ionizing radiation, electromagnetism, and soundwaves to produce diagnostic images of a patient’s body or who administer radiation to treat patients for certain medical conditions, on the order of a physician or other authorized health professional.

Registrants must perform all procedures in accordance with the CMRITO Standards of Practice. The Standards of Practice describe what each registrant is accountable and responsible for in their practice. The Standards of Practice reflect the knowledge, skills, and judgement that registrants need to perform the services and procedures that fall within the scope of practice of the profession.

The purpose of this publication is to outline the information that registrants must understand to perform medical radiation and imaging technology procedures in accordance with the Standards of Practice, including:

1. performing procedures within the scope of practice of the profession,
2. having the knowledge, skills, and judgement to perform a procedure, and
3. ensuring that the appropriate order authorizing the performance of a procedure, treatment, or intervention is in place before performing that procedure, treatment, or intervention.

These requirements are discussed in detail in Part I below. Part I also includes a summary of the conditions that must be met before performing a procedure, treatment, or intervention.

Part II of this publication touches on related topics including delegation, fetal ultrasound for non-medical purposes, and issues affecting students and applicants prior to their registration with CMRITO.

PART I

REQUIREMENT 1: SCOPE OF PRACTICE

Registrants must perform procedures, including authorized acts, only while engaging in the practice of medical radiation and imaging technology.

The scope of practice statement for the profession under the *Medical Radiation and Imaging Technology Act, 2017* is as follows:

"The practice of medical radiation and imaging technology is the use of ionizing radiation, electromagnetism, soundwaves, and other prescribed forms of energy for the purposes of diagnostic or therapeutic procedures, the evaluation of images and data relating to the procedures, and the assessment of an individual before, during, and after the procedures."

REQUIREMENT 2: KNOWLEDGE, SKILLS AND JUDGEMENT

The Standards of Practice of the profession require that registrants must be competent and have the necessary knowledge, skills, and judgement to perform procedures safely, effectively, and ethically to ensure safe, effective, and ethical outcomes for the patient. Registrants must maintain competence in their current area(s) of practice.

If registrants are not competent to perform a particular procedure, treatment, or intervention they must not perform the procedure, treatment, or intervention – even if a valid order is in place.

What should a registrant do if they are not competent to perform a procedure, treatment, or intervention?

If a registrant is not competent to perform a procedure, treatment, or intervention, they must not continue and must take appropriate action to address the situation. The appropriate action will vary depending on the situation.

For example: if performing a procedure is part of a registrant's regular role expectations within a particular practice setting, then the registrant should obtain the competencies necessary to provide safe, effective, and ethical services to patients in their care requiring those procedures. The registrant may also consult with their supervisor or manager to determine how this may be achieved.

Every registrant is ultimately responsible to ensure that they are competent to provide the medical radiation or imaging services required by patients within a particular practice setting.

REQUIREMENT 3: ORDERS

The CMRITO Standards of Practice require registrants to ensure that the appropriate order authorizing the performance of a procedure, treatment, or intervention is in place.[1] This applies to all procedures performed by registrants in all of the five specialties: radiography, radiation therapy, nuclear medicine, magnetic resonance, and diagnostic medical sonography.

What is an order?

An order is an authorizing statement from a regulated health professional with prescribing authority, permitting registrants to perform a procedure, treatment, or intervention that falls within the scope of practice of the profession. An order may also be called a requisition, protocol, medical directive, or treatment plan.

Registrants must ensure that the appropriate order is in place ***prior*** to performing every procedure, treatment, or intervention.[2]

Who can issue an order?

The regulated health professional with ordering authority will vary depending on the procedure, treatment, or intervention.

The source of the ordering authority will also vary, as set out in the table below:

[1] This standard of practice is set out in indicator (d) of Standard 3: Diagnostic and Therapeutic Procedures. The Standards of Practice are sent to all CMRITO registrants by email and are available on the CMRITO website at www.cmrito.org.

[2] Registrants who perform mammography screening under the Ontario Breast Screening Program (OBSP) are authorized to do so under Reg. 543: X-ray Safety Code under the *Healing Arts Radiation Protection Act*, R.S.O. 1990, c. H.2 (HARP Act) which provides that registrants of the College of Medical Radiation and Imaging Technologists of Ontario are exempt from section 6 of the Act in the operation of an x-ray machine for the irradiation of a human being if the irradiation is part of a breast cancer screening program administered by Ontario Health.

Type of procedure, treatment or intervention	Required order(s)
Application of ionizing radiation	The order must be from a physician or other authorized health professional listed in the *Healing Arts Radiation Protection Act* or regulations[3,4]
Nuclear medicine procedures	The order must be from a person authorized under the regulations made under the *Public Hospitals Act* or in accordance with generally accepted professional standards under the *Independent Health Facilities Act*
Application of electromagnetism for magnetic resonance imaging procedures	The order must be from a physician, or other authorized health professional listed in the Controlled Acts regulation made under the *Regulated Health Professions Act*[5]
Application of soundwaves for diagnostic medical sonography	The order must be from a physician, or other authorized health professional listed in the Controlled Acts regulation made under the *Regulated Health Professions Act*[6]

[3] On a date to be named by proclamation of the Lieutenant Governor, the *Healing Arts Radiation Protection Act*, R.S.O. 1990, c. H.2 will be repealed and replaced with the *Oversight of Health Facilities and Devices Act, 2017*. If and when the Act is proclaimed, it will expland the current scope of regulated devices beyond only x-ray machines to all existing and emerging energy applying and detecting medical devices (EADMDs). Until such a time as the Act is proclaimed, the HARP Act continues in force.

[4] See Appendix A.

[5] See Appendix B.

[6] See Appendix C.

Performance of authorized acts,[7] which are:
• administering substances by injection or inhalation;
• tracheal suctioning of a tracheostomy;
• administering contrast media or putting an instrument, hand or finger,
  • beyond the opening of the urethra,
  • beyond the labia majora,
  • beyond the anal verge, or
  • into an artificial opening of the body; and
• performing a procedure on tissue below the dermis.
	The order, medical directive, or protocol must be from a member of the College of Physicians and Surgeons of Ontario (CPSO)

What types of orders exist?

An order may be one of two types: (1) direct order or (2) medical directive or protocol.

1. Direct orders

An order may be a direct order for a specific procedure, treatment, or intervention, for a specific patient, by a physician or other authorized health professional.

Under the regulations made under the *Public Hospitals Act* (PHA), every order must be:

- in writing[8]
- dated
- authenticated by the ordering physician or other authorized health professional

[7] Other than the application of electromagnetism for magnetic resonance imaging procedures and the application of soundwaves for diagnostic medical sonography.

[8] Although direct orders are generally in writing, provision has been made in regulations made under the *Public Hospitals Act* for telephone and electronically transmitted orders. Verbal prescriptions are however made under the provisions of the *Drug and Pharmacies Regulation Act*.

The order should also include the details required to perform the procedure, treatment or intervention. For example:

- patient name and date of birth
- date and time the order was made
- name of the procedure or substance being ordered, and, when a substance is being ordered, the details required to administer the substance[9]

In order to deal properly with telephone orders or requests, health professionals who work in hospitals governed by the PHA are expected to:

- ensure they have been designated by the hospital administrator as someone who can accept telephone orders
- transcribe the order along with the name of the physician or other authorized health professional who dictated the order, along with the date and time it was received
- sign the order
- ensure that if someone else has transcribed the telephone order, that the person has the authority to accept such orders before the procedure, treatment or intervention is performed[10]

Registrants are also encouraged to review their organization's policies about telephone orders or requests.

2. Medical directives or protocols

An order may also be made through a medical directive or protocol (also known as a standing order). A medical directive is an order for a procedure, treatment or intervention for a range of patients who meet specific conditions, authorized by a physician, and implemented by another individual, such as a nurse, physiotherapist, physician assistant or a registrant of the CMRITO.

Medical directives are always written or documented electronically. They cannot be verbal.

[9] The details required to administer the substance may include the dosage, the route of administration, and the frequency with which the substance is to be administered.

[10] These responsibilities are set out in the Hospital Management Regulation made under the PHA at s. 24(3). The Regulation also requires that the physician or other authorized health professional who dictated the order shall authenticate the order on the first visit to the hospital after dictating the order.

Medical directives or protocols must:

- contain a standardized reference number
- identify the specific procedure, treatment or range of treatments being ordered
- identify who specifically may implement the procedure under the authority of the medical directive (may be an individual or a group)
- list specific patient conditions that must be met before the procedure(s) can be implemented
- identify any circumstances that must be met before the procedure(s) can be implemented
- list any contraindications for implementing the procedure(s)
- identify documentation requirements and quality monitoring mechanisms
- list the name(s) and signature(s) of the physician(s), or other authorized health professional(s), authorizing the medical directive
- list the date and signature of the administrative authority approving the medical directive

When are medical directives or protocols used?

Generally, medical directives or protocols may be used as the authority for performing procedures when a health professional has the knowledge, skills and judgement to determine that the conditions and circumstances described in the medical directive have been met. Procedures that require the direct assessment of a patient by a physician require direct orders and are not appropriate for implementation under a medical directive or protocol.

For example: an order to perform a CT scan on a particular patient requires a direct order from the patient's physician or other authorized health professional; while the order for the injection of the contrast media necessary to complete the CT scan may be covered under a medical directive or protocol from the department's radiologist.

What should a registrant do if they have concerns about an order or treatment plan?

If a registrant has a concern about the accuracy or appropriateness of an order or treatment plan, they should take appropriate action to address the situation. Although the appropriate steps may vary depending on the situation, resolving the concerns will involve:

1. discussing the concern directly with the health professional responsible for the order or treatment plan
2. identifying the outcomes desired for resolution
3. providing a rationale and best practice evidence in support of the concern
4. documenting the concern and the steps taken to resolve the concern in the appropriate record

What conditions must be met prior to performing a procedure, treatment or intervention?

The conditions which must be met before performing procedures, treatments or interventions are set out in the CMRITO Standards of Practice. In accordance with Practice Standard 3: Diagnostic and Therapeutic Procedures, registrants must:

1. ensure that the appropriate order authorizing the procedure is in place
2. perform procedures, including authorized acts, only in the course of engaging in the practice of medical radiation and imaging technology
3. not perform procedures contrary to any terms, conditions or limitations placed upon the registrant's certificate of registration[11]
4. have and apply the necessary knowledge, skill and judgement to perform and manage the outcomes of performing the procedure safely, effectively and ethically
5. ensure that patient consent has been obtained[12]
6. be responsible and accountable for performing the procedure and managing the outcomes, having considered:
    a. the known risks to the patient in performing the procedure
    b. the predictability of the outcomes in performing the procedure
    c. whether the management of the possible outcomes is within the registrant's knowledge, skill and judgement, given the situation
    d. any other factors specific to the situation to ensure the procedure is implemented safely, effectively and ethically
7. not perform any procedure or provide any advice which may result in serious bodily harm unless that procedure or advice is within the scope of practice of the profession or the registrant is authorized or permitted to do so by legislation

At the end of this publication, registrants will find a decision-making guide to help them determine whether they should perform a procedure.[13]

[11] As of January 1, 2018, the following condition was added to each registrant's certificate of registration: "The registrant shall practise only in the areas of medical radiation and imaging technology in which the registrant is educated and experienced." This addition was made to accommodate the different areas within each specialty in which registrants are practising, and to provide for the three areas of practice in diagnostic medical sonography – general, cardiac and vascular.

[12] It is important to note that consent may be withdrawn at any time. If a patient withdraws their consent, a registrant must respect the patient's autonomy to refuse service and stop the treatment or procedure, even though they have an order. For more information, please consult the CMRITO publication *What you must know about … consent*. This publication includes consent guidelines for registrants of CMRITO.

PART II

DELEGATION

As discussed in Part I above, the CMRITO's Standards of Practice require registrants to ensure that the appropriate order authorizing the performance of a procedure, treatment or intervention is in place prior to performing that procedure, treatment or intervention. However, there are instances where a registrant may be asked to accept and perform procedures beyond the principal expectations of practice. This occurs through the process of delegation, which involves a controlled act that is not authorized to registrants.

What are controlled acts?

Under the *Regulated Health Professions Act, 1991* (RHPA), regulated health professionals may be authorized to perform one or more of the 14 controlled acts.

Under the *Medical Radiation and Imaging Technology Act, 2017* (MRIT Act), registrants of the CMRITO are authorized to perform five of the 14 controlled acts set out in the RHPA (the authorized acts).

All 14 controlled acts are set out in the table below and the five controlled acts that registrants of the CMRITO are authorized to perform appear in bold (see controlled acts 2, 5, 6, and 7).

Controlled Act	Description
1	Communicating to an individual or their personal representative a diagnosis identifying a disease or disorder as the cause of symptoms of the individual in circumstances in which it is reasonably foreseeable that the individual or their personal representative will rely on the diagnosis.
2	**Performing a procedure on tissue below the dermis**, below the surface of a mucous membrane, in or below the surface of the cornea, or in or below the surfaces of the teeth, including the scaling of teeth.
3	Setting or casting a fracture of a bone or a dislocation of a joint.
4	Moving the joints of the spine beyond the individual's usual physiological range of motion using a fast, low amplitude thrust.

[13] See Appendix D.

5	**Administering a substance by injection or inhalation.**
6	**Putting an instrument, hand or finger,** i. beyond the external ear canal, ii. beyond the point in the nasal passages where they normally narrow, **iii. beyond the larynx,**[14] **iv. beyond the opening of the urethra,** **v. beyond the labia majora,** **vi. beyond the anal verge, or** **vii. into an artificial opening into the body.**
7	**Applying** or ordering the application of **a form of energy prescribed by the regulations under the RHPA.**[15]
8	Prescribing, dispensing, selling or compounding a drug as defined in the *Drug and Pharmacies Regulation Act*, or supervising the part of a pharmacy where such drugs are kept.
9	Prescribing or dispensing, for vision or eye problems, subnormal vision devices, contact lenses or eyeglasses other than simple magnifiers.
10	Prescribing a hearing aid for a hearing impaired person.
11	Fitting or dispensing dental prosthesis, orthodontic or periodontal appliance or a device used inside the mouth to protect teeth from abnormal functioning.
12	Managing labour or conducting the delivery of a baby.
13	Allergy challenge testing of a kind in which a positive result of the test is a significant allergic response.

[14] Under the MRIT Act, registrants of the CMRITO are authorized only to perform a "tracheal suctioning of a tracheostomy."

[15] The forms of energy prescribed by the regulations under the RHPA include electricity, soundwaves for diagnostic ultrasound and electromagnetism for magnetic resonance imaging.

14	Treating, by means of psychotherapy technique, delivered through a therapeutic relationship, an individual's serious disorder of thought, cognition, mood, emotional regulation, perception or memory that may seriously impair the individual's judgement, insight, behaviour, communication or social functioning.

Controlled acts may only be performed by health professionals in their practice if:

- the controlled act is authorized to them under their profession-specific legislation; or
- the controlled act is delegated to them by a health professional who is authorized to perform it; or
- an exception or exemption exists.

What is delegation?

Under the RHPA, delegation is the process by which a regulated health professional authorized to perform one of the controlled acts confers authority to someone – regulated or unregulated – who is not authorized to perform that controlled act.

Registrants of the CMRITO do not typically perform delegated acts, as most of the controlled acts they perform in their practice fall under the five authorized acts they have the authority to perform. However, on occasion, some registrants will accept delegation of a controlled act which is not one of the five authorized acts.

For example: communicating to an individual or their personal representative a diagnosis is not one of the controlled acts authorized to registrants of the CMRITO. However, registrants who perform procedures where pregnancy may be a contraindication may need to communicate pregnancy test results to their patient after performing a pregnancy test.

How do I determine if it's appropriate to accept a delegation and perform a procedure?

The CMRITO enables registrants to accept the delegation of controlled acts that are not authorized to them under the MRIT Act, provided that they comply with the RHPA and the CMRITO Standards of Practice. Registrants may perform controlled acts under delegation only when the following conditions have been met:

- the regulated health professional who is delegating the controlled act (the delegator) is authorized by their health profession Act to perform the controlled act;
- the delegator is following any applicable legislation, guidelines and policies of their regulatory body regarding delegation, and they have not been restricted or prohibited from delegating the controlled act;
- the delegator has the knowledge, skills and judgement to perform and delegate the controlled act;

- the registrant accepting the delegation has the knowledge, skills and judgement to perform the controlled act delegated to them safely, effectively and ethically given the circumstances of the situation;
- a written record of the transfer of authority (delegation) and certification of the CMRITO registrant's competence is maintained; and
- the registrant follows any conditions set by the delegator for the registration to continue to be authorized to perform the controlled act.

It is important for registrants to understand that under the CMRITO Standards of Practice, CMRITO registrants cannot delegate their authorized acts to other individuals.

FETAL ULTRASOUND FOR NON-MEDICAL REASONS

Physicians and other authorized health professionals routinely order diagnostic ultrasounds of the fetus during their patient's pregnancy. While diagnostic ultrasound is an essential component of prenatal care, ultrasound technology is used by others for non-medical reasons, such as for fetal portraits, keepsake videos, heartbeat recordings or gender identification.

CMRITO registrants must only perform procedures, including the authorized acts, in the course of engaging in the practice of the profession (the scope of practice for diagnostic medical sonographers (DMSs) is the use of soundwaves for the purposes of diagnostic or therapeutic procedures, the evaluation of images or data relating to the procedure, and the assessment of an individual before, during and after the procedure). The Controlled Acts regulation made under the RHPA requires registrants to only apply soundwaves for diagnostic ultrasound procedures when they have an order from a physician or other authorized health professional. Therefore, it would be professional misconduct for a CMRITO registrant to use ultrasound only to obtain a picture or video of a fetus or to determine gender for non-medical reasons.

STUDENTS AND APPLICANTS

There are exemptions in place under the RHPA and the HARP Act that permit students to perform authorized acts and apply ionizing radiation while they are students actively enrolled in an approved educational program, provided they are supervised by a registrant of the CMRITO.

In order to practise as a medical radiation and imaging technologist in Ontario, an individual must be registered with the CMRITO.

All applicants are required to successfully complete an approved program, successfully complete an approved examination and meet other requirements as defined by the registration regulation before they can be registered and authorized to practice in Ontario.

In between completing an educational program and becoming registered with CMRITO, an individual is **not**:

- authorized to apply ionizing radiation to human beings in Ontario, or
- authorized to perform any of the controlled acts authorized to CMRITO registrants, including:
  - the application of electromagnetism for magnetic resonance imaging procedures, and
  - the application of soundwaves for diagnostic medical sonography.

The same is true even if the individual is doing so under the supervision of a registration of the CMRITO.

Remember … CMRITO staff are available by phone or email to help registrants understand their professional obligations and their accountabilities. If you have any further questions about performing procedures or practice advice as a medical radiation or imaging technologist, please contact the CMRITO professional practice team at practiceadvice@cmrito.org.

APPENDIX A:
ORDERING AND APPLYING IONIZING RADIATION

The *Healing Arts Radiation Protection Act* (HARP Act) provides that no person shall operate an x-ray machine for the irradiation of a human being unless the irradiation has been prescribed as follows:

Health care professional	Ordering authority	Authority to apply
A legally qualified medical practitioner	A legally qualified medical practitioner, or member of the College of Physicians and Surgeons of Ontario, can order the application of ionizing radiation without restriction, provided that they do so in accordance with the expectations set out in the practice standards of CPSO.	Yes
Member of the Royal College of Dental Surgeons of Ontario (RCDSO)	When ordering the application of ionizing radiation for dental radiographs and dental CTs, a dentist is accountable to the expectations set out in the practice standards of their College.	Yes
Registrant of the College of Chiropodists of Ontario	Registrant must have been continuously registered as a chiropodist under the *Chiropody Act* and the *Chiropody Act, 1991* since before November 1, 1980 or who is a graduate of a four-year course of instruction in chiropody (a Doctor of Podiatric Medicine (DPM) degree).	Yes
Member of the College of Chiropractors of Ontario	When ordering the application of ionizing radiation, a member must adhere to the Standards of Practice of the College of Chiropractors of Ontario.	Yes
Member of the College of Nurses of Ontario (CNO)	To order the application of ionizing radiation, a member must hold an extended certificate of registration under the *Nursing Act, 1991* (Nurse Practitioner or NP). NPs can order all types of x-rays, including CTs. When ordering the application of ionizing radiation, NPs are accountable to the expectations set out in the practice standards of their College.	No

Registrant of the College of Physiotherapists of Ontario	To order the application of ionizing radiation, the irradiation must be prescribed in a manner permitted by the regulations. As of the date of publication, no regulation has been made.	No
Registrant of the College of Dental Hygienists of Ontario	Registrants have no ordering authority under HARP.	Yes
Registrant of the College of Medical Radiation and Imaging Technologists of Ontario	Registrants have no ordering authority under HARP. Registrants do not need an order with respect to the application of ionizing radiation for mammography procedures under the Ontario Breast Screening Program in accordance with s. 6 of R.R.O. 1990, Reg. 543 made under the HARP Act.	Yes

For more information regarding ordering and applying ionizing radiation, please contact CMRITO or the College of the relevant health care professional listed above.

APPENDIX B: ORDERING AND APPLYING ELECTROMAGNETISM FOR MAGNETIC RESONANCE IMAGING

The Controlled Acts Regulation made under the *Regulated Health Professions Act, 1991* sets out those who can apply and order the application of electromagnetism for magnetic resonance imaging.

Health care professional	Ordering authority	Authority to apply
Member of the College of Physicians and Surgeons of Ontario	A member of the CPSO can order the application of electromagnetism provided that the conditions set out in the Regulation are met.[1]	Yes, provided that the conditions set out in the Regulation are met.[2]
Registrant of the College of Medical Radiation and Imaging Technologists of Ontario	A registrant of the CMRITO cannot order the application of electromagnetism for magnetic resonance imaging.	Yes, but only with an order from a member of the CPSO, a member of RCDSO in the specialty of Oral and Maxillofacial Surgery, or a member of CNO in the extended class (Nurse Practitioner) and only if the conditions set out in the Regulation are met.[3]

[1] Section 5(2) of O. Reg. 107/96 provides that a member of the CPSO is exempt from subsection 27(1) of the Act for the purpose of applying or ordering the application of electromagnetism if a number of conditions are met that are listed in the regulation.

[2] Please see footnote 1 above.

[3] Section 3.1 of O. Reg. 107/96 provides that a registrant of the CMRITO is exempt from subsection 27(1) of the Act for the purpose of applying electromagnetism if the application is ordered by a member of the CPSO, a member of RCDSO who holds a specialty certificate of registration authorizing the practice of the specialty of Oral and Maxillofacial Surgery or a member of CNO who is a registered nurse in the extended class, and:

(a) the electromagnetism is applied for magnetic resonance imaging using equipment that is,

(i) installed in a site of a public hospital where the public hospital is approved as a public hospital under the *Public Hospitals Act* and the site of the public hospital is graded under that Act as a Group N site of a hospital, and

(ii) operated by the public hospital mentioned in subclause (i);

(a.1) the electromagnetism is applied for magnetic resonance imaging using equipment that is installed in, and operated by, the University of Ottawa Heart Institute;

(b) the electromagnetism is applied for magnetic resonance imaging and all of the following conditions are met:

Member of the Royal College of Dental Surgeons of Ontario in the specialty of Oral and Maxillofacial Surgery	A member of the RCDSO who holds a specialty certificate of registration authorizing the practice of the specialty of Oral and Maxillofacial Surgery can order the application of electromagnetism provided that the conditions set out in the Regulation are met.[4]	No
Member of the College of Nurses of Ontario (Registered Nurse in the Extended Class)	A member of the CNO who is a registered nurse in the extended class (Nurse Practitioner) can order the application of electromagnetism provided that the conditions set out in the Regulation are met.[4]	No

For more information regarding ordering and applying electromagnetism for magnetic resonance imaging, please consult O. Reg. 107/96 or contact the CMRITO.

(i) the electromagnetism is used to support, assist and be a necessary adjunct, or any of them, to an insured service within the meaning of the *Health Insurance Act,*

(ii) the magnetic resonance imaging is provided to persons who are insured persons within the meaning of the *Health Insurance Act*,

(iii) the electromagnetism is applied in an independent health facility licensed under the *Independent Health Facilities Act* in respect of magnetic resonance imaging; or

(c) the electromagnetism is applied for magnetic resonance imaging and all of the following conditions are met:

(i) the electromagnetism is not used to support, assist and be a necessary adjunct, or any of them, to an insured service within the meaning of the *Health Insurance Act*, or the magnetic resonance imaging is not provided to persons who are insured persons within the meaning of that Act, or both,

(ii) the electromagnetism is applied in a facility that is operated by an operator that holds a licence under the *Independent Health Facilities Act* in respect of magnetic resonance imaging,

(iii) the electromagnetism is applied in a facility that is operated on the same premises as the independent health facility licensed under the *Independent Health Facilities Act* in respect of magnetic resonance imaging that is operated by the operator mentioned in subclause (ii),

(iv) the electromagnetism is applied using the same equipment that is used to provide magnetic resonance imaging in the independent health facility licensed under the *Independent Health Facilities Act* in respect of magnetic resonance imaging that is operated by the operator mentioned in subclause (ii),

(v) the operator of the facility in which the electromagnetism is applied is a party to a valid and subsisting agreement with the Minister concerning the provision of magnetic resonance imaging.

[4] Section 7.4 of O. Reg. 107/96 provides that a member of the RCDSO who holds a specialty certificate of registration authorizing the practice of the specialty of Oral and Maxillofacial Surgery or a member of the CNO who is a registered nurse in the extended class is exempt from subsection 27(1) of the Act for the purpose of ordering the application of electromagnetism provided certain conditions listed in the Regulation are met.

APPENDIX C: ORDERING AND APPLYING SOUNDWAVES FOR DIAGNOSTIC ULTRASOUND

The Controlled Acts Regulation made under the *Regulated Health Professions Act, 1991* sets out those who can apply and order the application of soundwaves for diagnostic ultrasound.

For the purposes of the Regulation, "diagnostic ultrasound" means ultrasound that produces an image or other data.

Health care professional	Ordering authority	Authority to apply
Member of the College of Physicians and Surgeons of Ontario	A member of the CPSO can order the application of soundwaves for diagnostic ultrasound.	Yes
Registrant of the College of Midwives of Ontario (CMO)	A registrant of the CMO can order the application of soundwaves for pregnancy diagnostic ultrasound or pelvic diagnostic ultrasound.	Yes, but only pregnancy or pelvic diagnostic ultrasound.
Member of the College of Nurses of Ontario (Registered Nurse in the Extended Class)	A member of the CNO who is a registered nurse in the extended class can order the application of soundwaves for diagnostic ultrasound.	Yes

Member of the College of Nurses of Ontario (other than a member who is a Registered Nurse in the Extended Class)	A member of the CNO who is not a registered nurse in the extended class cannot order the application of soundwaves for diagnostic ultrasound.	Yes, but only if the member has a therapeutic nurse-patient relationship with the person to whom the soundwaves are being applied and the soundwaves are being applied for conducting one or more routine nursing assessments of a patient to assist in the development/ implementation of the patient's plan of care and only if the conditions set out in the Regulation are met.[1]
Registrant of the College of Medical Radiation and Imaging Technologists of Ontario	A registrant of the CMRITO cannot order the application of soundwaves for diagnostic ultrasound.	Yes, but only with an order from a health care professional with ordering authority and only if the conditions set out in the Regulation are met.[2]
Member of the College of Respiratory Therapists of Ontario	A member of the CRTO cannot order the application of soundwaves for diagnostic ultrasound	Yes, but only with an order from a health care professional with ordering authority and only if the conditions set out in the Regulation are met.[2]

[1] Section 4.1(1) of O. Reg. 107/96 provides that a member of the CNO, other than a member described in subsection (2), is exempt from subsection 27(1) of the Act for the purpose of applying soundwaves for diagnostic ultrasound, as long as the member has a therapeutic nurse-patient relationship with the person to whom the soundwaves are being applied and the soundwaves are being applied for the purpose of conducting one or more routine nursing assessments of a patient to assist in the development or implementation of the patient's plan of care. Subsection (2) provides that a member of the CNO who is a registered nurse in the extended class is exempt from subsection 27(1) of the Act for the purpose of applying, or ordering the application of, soundwaves for diagnostic ultrasound.

For more information regarding ordering and applying soundwaves for diagnostic ultrasound, please consult O. Reg. 107/96 or contact the CMRITO.

The conditions set out in section 7.1(1) of O. Reg. 107/96 also apply in this context. Section 7.1(1) provides that a person is exempt from subsection 27(1) of the Act for the purpose of applying soundwaves for diagnostic ultrasound if the application is ordered by a member with ordering authority, and the soundwaves for diagnostic ultrasound are applied in accordance with certain conditions set out in the Regulation. See footnote 2 below for more information.

[2] The conditions set out in section 7.1(1) of O. Reg. 107/96 also apply to registrants of the CMRITO and members of the CRTO. Registrants of the CMRITO and members of the CRTO are exempt from subsection 27(1) of the Act for the purpose of applying soundwaves for diagnostic ultrasound if the application is ordered by a member with ordering authority, and the soundwaves for diagnostic ultrasound are applied,

(a) in a site of a public hospital where the public hospital is approved as a public hospital under the *Public Hospitals Act*, and the equipment is operated by the public hospital;

(b) in a private hospital operated under the authority of a licence issued under the *Private Hospitals Act* and the equipment is operated by the private hospital;

(b.1) in the University of Ottawa Heart Institute, and the equipment is operated by the University of Ottawa Heart Institute;

(c) in an independent health facility licensed under the *Independent Health Facilities Act* in respect of diagnostic ultrasound on a site for which that independent health facility is licensed in respect of diagnostic ultrasound; or

(d) in a fixed site where health services are customarily performed, and the application is ordered by a member with ordering authority who treats his or her own patients in the course of his or her health care practice, but only if,

  (i) there exists an ongoing professional health care relationship between the patient and the member with ordering authority, or between the patient and a regulated health professional who ordinarily practises with that member at one or more sites in Ontario,

  (ii) there exists an ongoing professional health care relationship between the patient and a regulated health professional who has given an opinion on the health of the patient, or between the patient and a regulated health professional who ordinarily practises at one or more sites in Ontario with the regulated health professional who has given the opinion, and the patient has requested that the member with ordering authority confirm, refute or vary that opinion and,

    (A) the member orders the application of soundwaves for diagnostic ultrasound in the course of an assessment of the patient resulting from that request, and

    (B) the diagnostic ultrasound is directly related to that assessment, or

  (iii) there exists an ongoing professional health care relationship between the patient and a regulated health professional who has referred the patient to the member with ordering authority for the purpose of a consultation, or between the patient and a regulated health professional who ordinarily practises at one or more sites in Ontario with the regulated health professional who has made the referral and,

    (A) the member conducts an assessment of the patient, and

    (B) the diagnostic ultrasound is directly related to that assessment or services arising out of that assessment.

(2) In this section, “member with ordering authority” means:

(a) a member of the College of Midwives of Ontario, with respect to ordering the application of soundwaves for pregnancy diagnostic ultrasound or pelvic diagnostic ultrasound,

(b) a member of the College of Nurses of Ontario who is a registered nurse in the extended class, with respect to ordering the application of soundwaves for diagnostic ultrasound, or

(c) a member of the College of Physicians and Surgeons of Ontario, with respect to ordering the application of soundwaves for diagnostic ultrasound.

APPENDIX D: DECISION-MAKING GUIDE FOR PERFORMING A PROCEDURE

CMRITO

Do I have the legal authority to perform the procedure?

- Does the procedure fall under the scope of practice of the profession as defined by the MRIT Act?
- Does the procedure require performing a controlled act, and if so, is the controlled act an authorized act under the MRIT Act?
- Does the procedure require performing a controlled act that is not authorized to me under the MRIT Act, and if so, is there a delegation in place giving me the authority to perform the procedure?

NO — Stop. Do not perform the procedure. Take necessary action.

YES

Do I have the necessary knowledge, skills and judgement to perform the procedure safely, effectively and ethically?

- Do I have the necessary education and experience in this area of practice?
- Are all the provisions in place for me to perform the procedure safely under the RHPA, MRIT Act, HARP Act, *Public Hospitals Act*, *Independent Health Facilities Act*, *Nuclear Safety and Control Act*, and any other applicable legislation?
- Are all the provisions in place for me to be responsible and accountable for performing the procedure and for managing the outcomes, having considered the known risks to the patient in performing the procedure, the predictability of the outcomes in performing the procedure, whether the management of the possible outcomes are within my knowledge, skill and judgement, and any other factors specific to the situation?

NO — Stop. Do not perform the procedure. Take necessary action.

YES

Is an appropriate order in place giving me the authority to perform the procedure?

- Do I have an order from an authorized health professional, either directly or through a medical directive, to perform each component of the procedure including the application of ionizing radiation, or electromagnetism for MRI, or soundwaves for diagnostic ultrasound, or any authorized act or delegated controlled act?

NO — Stop. Do not perform the procedure. Take necessary action.

YES

Have all the conditions set out in the CMRITO Standards of Practice been met?

- Has the patient provided informed consent for the procedure?
- Am I able to provide the patient with clear and understandable information and instruction regarding the procedure, and respond to their questions?
- Are all the provisions in place for me to be responsible and accountable for performing the procedure in accordance with the conditions set out in the *Personal Health Information Protection Act*, and the *Health Care Consent Act*?
- Are all the provisions in place for me to be responsible and accountable for performing the procedure in accordance with the conditions set out in the CMRITO Standards of Practice, Code of Ethics and sexual abuse prevention program?

NO — Stop. Do not perform the procedure. Take necessary action.

YES

PERFORM THE PROCEDURE