The Alberta College of Medical Diagnostic and Therapeutic Technologists exists so that the public is assured of receiving safe, competent and ethical diagnostic and therapeutic care by a regulated and continually advancing profession.
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Introduction

Background

The Alberta College of Medical Diagnostic and Therapeutic Technologists (ACMDTT, or “the College”) is the regulatory body in Alberta for medical diagnostic and therapeutic technologists. This collective is composed of five distinct specialties within two distinct professional groups called medical radiation technologists and electroneurophysiology technologists.

The five specialties consist of radiological technologists, nuclear medicine technologists, magnetic resonance technologists, radiation therapists, and electroneurophysiology technologists.

These professional groups are legislated by the Health Professions Act (HPA) and, in accordance with Section 133 of the HPA, the College has developed Standards of Practice (Standards) to guide professional practice.

The Standards represent the expected minimum level of performance for members and reflect delivery of safe, competent and ethical care to patients.

These Standards are mandatory for all members of the College across all contexts of professional practice. The HPA and the Medical Diagnostic and Therapeutic Technologists Profession Regulation (the Regulation) govern the practice of the profession.

Schedule 12(3)(1) of the HPA sets out the practice statement for the profession of medical diagnostic and therapeutic technologists as follows:

3(1) In their practice, medical diagnostic and therapeutic technologists do one or more of the following:

(a) apply ionizing radiation, non-ionizing radiation and other forms of energy to produce diagnostic images,
(b) evaluate the technical sufficiency of the images,
(c) use ionizing radiation, non-ionizing radiation and other forms of energy for treatment purposes,
(d) teach, manage and conduct research in the science, techniques and practice of medical diagnostic and therapeutic technology,
(d.1) assess the medical condition and needs of patients before, during and after the procedure described in clause (a)
(e) provide restricted activities authorized by the regulations.

Schedule 12(3)(2) of the HPA sets out the practice statement for the profession of, electroneurophysiology technologists as follows:

(2) In their professional practice, electroneurophysiology technologists do one or more of the following:

(a) use sensitive electronic equipment to record and evaluate the electrical activity of patients’ central and peripheral nervous systems to assist physicians, surgeons and other health professionals in diagnosing diseases, injuries and abnormalities;
(a.01) evaluate the technical sufficiency of the recordings made under clause (a);
(a.02) assess the medical condition and needs of patients before, during and after the procedure described in clause (a);
(a.1) teach, manage and conduct research in the science, techniques and practice of electroneurophysiology;
(b) provide restricted activities authorized by the regulations.

Schedule 7.1 of the Government Organization Act and sections (14), (15), (16), (17) and (18) of the Regulation sets out restricted activities for the practice of medical radiation technology and electroneurophysiology technology.

The process used to develop the Standards is described in Appendix A.

1 A glossary of key terms used in the Standards is included at the end of the document. Words or terms that are included in the Glossary are identified in the document by bold text the first time they appear in each Standard.
Introduction (continued)

Purpose of the Standards of Practice

The Standards serve a variety of purposes for stakeholders both internal and external to the professions of medical radiation technology and electrophysiology technology such as:

- The College uses the Standards to outline standards/expectations for evaluation of the quality of professional practice and inform processes to review professional practice and conduct of regulated members.
- Educators use the Standards in the design of education programs and practice assessments, in conjunction with entry-to-practice competency statements.
- Managers/employers use the Standards to guide the development of job descriptions/roles and performance evaluation.
- Other health professionals use the Standards to learn about the roles of those regulated by the College and enhance collaborative practice.
- Regulated members use the Standards to provide guidance for exemplary practice and a framework for patient care, to enhance the culture of professionalism, to provide the basis for self-monitoring processes and to facilitate continued learning initiatives.
- Members of the public use the Standards to learn about what patients can expect when receiving services.

How the Standards of Practice are organized

The Standards of Practice are organized under five broad standard areas, including:

**Standard Area 1:** Provision of Patient Care/Services
**Standard Area 2:** Professional Accountability
**Standard Area 3:** Professional Roles
**Standard Area 4:** Practice Management
**Standard Area 5:** Protection of Patients from Sexual Abuse and Sexual Misconduct

Each broad standard area includes several standards that are described using the following headings:

- Standard Statement: describes the legal and professional expected level of performance by a member.
- Indicators: describe the application of the standards by a member, and can also be used to determine if the standards are being achieved. The indicators are not all-inclusive, nor are they listed in order of importance. Both general indicators (those that are applicable to all members) and specific indicators (those that apply to one or more of the specialties) are provided.
- Expected Outcomes: describe the outcomes that patients, family/representatives, the public and employers may expect when a member provides services.
- Related Standards: refer to other standards that provide additional and/or related information.
- Resources: includes a list of documents that provide additional information related to the Standards.
- Glossary: provides definition for words in boldface in the Standards of Practice. Words or terms that are included in the Glossary are identified in the document by **bold text** the first time they appear in each Standard.
Assumptions

The Standards are based on the following assumptions:

- All regulated members are expected to be safe, competent, ethical, accountable and professional.
- All regulated members will only practice where they have the necessary knowledge, skills and judgment, as well as the requisite education to deliver diagnostic and therapeutic services.
- The Standards are applicable to all College members regardless of practice area or setting.
- The Standards are part of a continuum of standards and should be used in conjunction with related College documents such as:
  - *Code of Ethics*\(^2\) or
  - *Competency Profile*\(^3,4,5,6,7\) for each specialty.

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\(^3\) ACMDTT. (2016). *Competency Profile Electroencephalography.* Edmonton: Author. Available at: https://acmdtt.com


Standard Area 1: Provision of Patient Care/Services

Standard 1.1 Patient-Centred Care

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists provides patient-centred care that is safe, competent and ethical. The member provides the patient’s care with integrity and compassion and adheres to the member’s inherent legal responsibilities (e.g., Health Professions Act, Medical Diagnostic and Therapeutic Technologists Profession Regulation).

Indicators
To demonstrate this Standard, a regulated member will:

a. Take steps to put the patient at ease and establish rapport (e.g., introduce oneself, state profession and role).

b. Assess the patient’s level of understanding of the procedure and adapt communication and assessment accordingly.

c. Clearly explain the procedure and possible implications to the patient.

d. Ensure appropriate informed consent for the procedure has been obtained (e.g., explain procedure and possible implications, recognize the patient’s right to accept or refuse medical services).

e. Be aware of the individual needs of patients, patients’ expressed wishes and adapt approach, if appropriate, within the limitations of the procedure (e.g., consider the patient’s cultural, physical, emotional and cognitive needs).

f. Perform procedure in a manner that maintains the patient’s dignity.

g. Provide the opportunity, where appropriate, to have a third party in attendance for specific procedures.

h. Advise the patient of any preparation for the procedure and/or post-procedural care (e.g., transfer of care, release of the patient, follow-up), when applicable.

Expected Outcomes
Patients, family/representatives, the public and employers can expect the regulated member to consider patients’ individual needs during delivery of care and to provide sufficient information to ensure appropriate consent is obtained.

Related Standards
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.4 Professional Boundaries
2.5 Privacy/Confidentiality
2.6 Communication
4.1 Record Keeping and Information Management
Standard 1.2 Clinical Procedures

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists employs clinical procedures in a safe, competent and ethical manner.

Indicators

To demonstrate this Standard, a regulated member will:

a. Take actions to prepare for the procedure (e.g., verify procedure ordered, ensure procedure requisition/prescription contains required patient information, verify correct patient/anatomical location).

b. Obtain relevant patient history.

c. Ensure the patient has been assessed for contraindications to the procedure and respond appropriately (e.g., allergies, medications, conflicting treatments/examinations, medical condition, implants/devices or other items).

d. Clearly explain the procedure and obtain appropriate informed consent.

e. Possess the necessary competence to perform the procedure safely and ethically.

f. Follow relevant federal and provincial regulations, professional guidelines and employer/organization policies and procedures.8

g. Ensure patient safety (e.g., transfers, physical environment).

h. Support patient comfort, as appropriate, while performing procedures (e.g., position the patient, utilize positioning aids and immobilization devices).

i. Assess and monitor the patient during the procedure (e.g., watch for adverse reactions, sudden changes in patient status or condition) and take appropriate action, when required (e.g., provide direct assistance, call for emergency assistance).

j. Select appropriate equipment and parameters considering the individual patient (e.g., imaging, data acquisition, treatment, optimum settings, transducers, settings, coils).

k. Appropriately identify anatomical orientation on imaging/recordings (e.g., utilize radio-opaque markers, utilize annotation, differentiate patient positioning such as left/right).

8 Note: If the College’s Standards are more restrictive than related policies and procedures of the organization/employer, the member is expected adhere to the College’s expectations.
Standard Area 1 (continued)

l. Optimize, capture and archive information (e.g., images, recordings).

m. Identify and communicate with the appropriate healthcare provider any procedural concerns or patient’s expressed wishes (e.g., appropriateness of or modifications to the procedure, patient’s gender expression).

n. Modify procedure based on evidence from previous data, images and reports.

o. Assess results (e.g., images, data sets, recordings) for acceptability and completeness.

In addition, regulated members in the specialty of nuclear medicine technology will:

p. Ensure that radioactive materials utilized meet appropriate standards for safety as well as manufacturing (e.g., acceptable radiopharmaceutical quality control, appropriate shielding).

q. Prepare radiopharmaceuticals according to manufacturers’ specifications.

r. Dispense and administer radiopharmaceutical preparations as per employer/organization policies and guidelines and physician orders (e.g., procedural requisition and facility protocol).

s. Ensure appropriate measures are in place and followed to safely prepare blood products as radiopharmaceuticals.

In addition, regulated members in the specialties of nuclear medicine technology and radiological technology will:

t. Utilize shielding in accordance with radiation protection principles without compromising the exam (e.g., determine location of radiosensitive tissues/reproductive organs).

u. Collimate and direct the x-ray beam to the area of interest to produce images that demonstrate only the required anatomy and/or pathologies that is/are of diagnostic interest.

v. Expose the patient to the lowest practicable amount of radiation, consistent with clinical objectives and without loss of essential diagnostic information.

In addition, a regulated member in the specialty of radiation therapy will:

w. Modify treatment, as required, based on image guidance.

In addition, regulated members in the specialty of electroneurophysiology technology will:

x. Modify/adapt recording and/or procedure based on physical, clinical or electrographic observations.

In addition, regulated members in the specialty of electroneurophysiology technology will:

y. Communicate technical impressions of examinations to the most appropriate healthcare provider.

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to have the necessary competence to perform the clinical procedures, safely, competently and ethically.
Related Standards

1.1 Patient-Centred Care
2.1 Legislation, Standards and Ethics
2.2 Professional Competence
2.4 Professional Boundaries
2.6 Communication
3.1 Collaboration/Professional Relationships
3.3 Evidence-Informed Practice
4.1 Record Keeping and Information Management
4.2 Safe Practice

Resources

ACMDTT. (2016). Competency Profile Electroencephalography. Edmonton: Author. Available at: https://acmdtt.com
ACMDTT. Additional and Enhanced Authorizations Edmonton: Author. Available at: https://acmdtt.com
Standard Area 2:
Professional Accountability

Standard 2.1: Legislation, Standards and Ethics
A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists adheres to the legislative requirements governing the practice of the member’s specialty, the College’s Code of Ethics and Standards of Practice.

Indicators
To demonstrate this Standard, a regulated member will:

a. Assume personal responsibility for the quality and competence of the member’s practice.
b. Maintain and apply the knowledge, skills, judgments and behaviours necessary for safe, competent and ethical practice.
c. Perform restricted activities only as authorized by the College.
d. Protect patient confidentiality within policy and legislated parameters.
e. Recognize, avoid and/or manage real or perceived conflict of interest situations.
f. Report abuse, incapacity or unprofessional activity in the work environment.
g. Adhere to legal obligations required by the College (e.g., use of protected title, mandatory registration requirements, professional liability insurance).
h. Engage in conduct that does not harm the integrity of the member’s profession.
i. Ensure that information provided by the member about services offered is accurate and verifiable.
j. Be accurate and transparent in interactions related to patient billing (e.g., accurately report procedures performed).

Expected Outcomes
Patients, family/representatives, the public and employers can expect the regulated member to provide services in compliance with applicable legislation, regulations and professional requirements.

Related Standards
1.2 Clinical Procedures
2.2 Professional Competence
2.3 Restricted Activities/Enhanced Practice
2.4 Professional Boundaries
2.5 Privacy/Confidentiality
3.3 Evidence-Informed Practice
4.2 Safe Practice
Standard 2.2: Professional Competence

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists limits their professional practice to those techniques and procedures that the member is competent to perform, and which are consistent with the College's Standards. The member is responsible for life-long learning to maintain competence in their practice.

Indicators

To demonstrate this Standard, a regulated member will:

a. Possess the competencies set out in all competency profiles that are applicable to the member’s areas of practice.
b. Practice within the limits of the member’s competence.
c. Maintain knowledge of current and evolving technologies and integrate new learning into practice, as appropriate.
d. Use self-reflection and develop performance goals to enhance professional competence.
e. Undertake continuing professional development.
f. Comply with all of the requirements of the College’s Continuing Competence Program.

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to possess the necessary competence for safe and ethical service delivery.

Related Standards

1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.3 Restricted Activities/Enhanced Practice
3.3 Evidence-Informed Practice
4.2 Safe Practice
Standard Area 2 (continued)

Resources
ACMDTT. (2016). *Competency Profile Electroencephalography*. Edmonton: Author. Available at: https://acmdtt.com/

Standard 2.3 Restricted Activities/Enhanced Practice

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists limits the practice of restricted activities to those that are appropriate for the member’s areas of practice and for which competence and authorization have been determined, as outlined in the College regulations. To seek additional and enhanced practice authorizations, a regulated member is required to complete College-approved advanced training and to obtain authorization from the College.

Indicators
To demonstrate this Standard, a regulated member will:

a. Perform only those restricted activities for which they have the required competence and current authorization.
b. Assess the benefits and risks associated with performing the restricted activity and ensure that a decision is appropriately undertaken on whether or not to perform the restricted activity.
c. Be responsible and accountable for safely performing the restricted activity.
d. Understand the risks associated with performing the restricted activity and ensure that measures are in place to manage any critical or unexpected events associated with performing it.

Expected Outcomes
Patients, family/representatives, the public and employers can expect the regulated member to perform restricted activities safely, competently and ethically.

Related Standards
2.1 Legislation, Standards and Ethics
2.2 Professional Competence
4.2 Safe Practice
Standard 2.4: Professional Boundaries

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists maintains clear professional boundaries in relationships with patients, families and colleagues.

Indicators

To demonstrate this Standard, a regulated member will:

a. Adhere to the Code of Ethics of the College.

b. Explain to the patient the need for removing clothing and other items that may interfere with diagnostic or therapeutic procedures.

c. Provide the opportunity, where appropriate, of having a third party in attendance for specific procedures.

d. Ensure informed consent is obtained when required to touch the patient for diagnostic and/or therapeutic purposes.

e. Ensure that patients, families or colleagues do not infringe upon the member’s personal boundaries.

f. Utilize the member’s position to establish only appropriate professional relationships with a patient, their family or a colleague.

g. Avoid expression of views or information to the patient, which is not related to the professional relationship (e.g., includes interactions through social media).

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to maintain appropriate professional boundaries.

Related Standards

1.1 Patient-Centred Care
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.6 Communication

Resources

Standard Area 2 (continued)

Standard 2.5: Privacy/Confidentiality

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists respects patients’ rights to privacy and maintains confidentiality of patients’ personal information within the boundaries of the law.⁹

Indicators

To demonstrate this Standard, a regulated member will:

a. Comply with applicable privacy legislation and employer/organization policies and procedures relating to confidentiality of patient information.

b. Respond to the questions and concerns of a patient's family/representatives within the parameters of patient confidentiality.

c. Ensure privacy and confidentiality during discussions and provision of services.

d. Utilize information and archival systems, only as required, for the provision of services specific to the patients who are under the direct care of the member or for other authorized activities (e.g., teaching, research, training).

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to maintain privacy and confidentiality of the patients’ personal information in accordance with ethical and legal requirements.

Related Standards

1.1 Patient-Centred Care

2.1 Legislation, Standards and Ethics

2.6 Communication

4.1 Record Keeping and Information Management

Resources


⁹For example, Alberta Health Information Act, Personal Information Protection Act (PIPA).
Standard 2.6: Communication

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists communicates effectively to ensure safe, competent and ethical service delivery.

Indicators

To demonstrate this Standard, a regulated member will:

a. Utilize appropriate strategies to communicate with intended audiences (e.g., use verbal and non-verbal, written communication, plain language or an interpreter when available).

b. Provide the patient and/or family/representatives opportunities to ask questions and to respond within the parameters of patient confidentiality and scope of practice.

c. Adhere to principles of professionalism regardless of the type of communication (e.g., verbal, non-verbal, written, electronic text, e-mail or social media).

d. Provide effective communication in adherence to the College’s Code of Ethics and employer/organization policies.

In addition, regulated members in the specialty of electroneurophysiology technology will:

e. Communicate technical impressions of examinations to the most appropriate healthcare provider.

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to communicate with them clearly, effectively and professionally.

Related Standards

1.1 Patient-Centred Care
1.2 Clinical Procedures
2.5 Privacy/Confidentiality
3.1 Collaboration/Professional Relationships
4.1 Record Keeping and Information Management

Resources


Standard Area 3: Professional Roles

Standard 3.1: Collaboration/Professional Relationships

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists works effectively as a member of an interprofessional team to facilitate safe, competent and ethical service delivery, and to contribute to a positive work environment.

Indicators

To demonstrate this Standard, a regulated member will:

a. Exhibit professionalism as a member of an interprofessional team, serving the best interests of the patient.

b. Respect a diversity of opinions and values.

c. Consult with other colleagues, as required, to facilitate timely, appropriate, safe, competent and ethical practice.

d. Refer questions and patient care outside of scope of practice to appropriate healthcare provider(s).

e. Contribute to integrated health records, as required, to facilitate the coordination of patient services.

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to interact effectively and collaboratively with colleagues, as required, to ensure safe, competent and ethical service delivery.

Related Standards

1.1 Patient-Centred Care
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.4 Professional Boundaries
2.5 Privacy/Confidentiality
2.6 Communication
4.1 Record Keeping and Information Management

Resources


Standard 3.2: Leadership

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists demonstrates **leadership** through the sharing of professional knowledge and by supporting professional activities.

**Indicators**

To demonstrate this Standard, a regulated member will:

a. Support and promote the profession (e.g., mentoring, interprofessional collaboration, team contribution, public education).

b. Facilitate the sharing of professional knowledge with students, colleagues, patients and the public (e.g., preceptorships, presentations, journal clubs, public information sessions).

c. Promote understanding of self-regulation.

d. Follow College requirements related to the **supervision** of students or any regulated members required to practice under supervision.

**Expected Outcomes**

Patients, family/representatives, the public and employers can expect the regulated member to engage in leadership activities that contribute to overall safe, competent and ethical service delivery.

**Related Standards**

2.6 Communication  
3.1 Collaboration/Professional Relationships  
3.3 Evidence-Informed Practice

**Resources**


ACMDTT. (2016). *Competency Profile Electroencephalography*. Edmonton: Author. Available at: https://acmdtt.com


Standard Area 3 (continued)

Standard 3.3 Evidence-Informed Practice

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists uses evidence-informed practice to ensure safe, competent and ethical service delivery. The regulated member also supports the development of new knowledge, when possible.

Indicators

To demonstrate this Standard, a regulated member will:

a. Strive to use appropriate, current and evolving/emerging knowledge and skills to ensure safe, competent and ethical service delivery.

b. Reflect on clinical practice and take necessary action, as appropriate, to ensure safe, competent and ethical service delivery.

c. Support the development of new knowledge when possible (e.g., participating in/contributing to research activities).

d. Support evidence-informed change initiatives, when appropriate (e.g., change of protocol, new technology).

Expected Outcomes

Patients, family/representatives, the public and employers can expect the regulated member to provide services based on knowledge and skills that are current and appropriate.

Related Standards

1.1 Patient-Centred Care
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.2 Professional Competence

Resources


ACMDTT. (2016). Competency Profile Electroencephalography. Edmonton: Author. Available at: https://acmdtt.com


Standard Area 4: Practice Management

Standard 4.1 Record Keeping and Information Management

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists is responsible for contributing to accurate and complete confidential records, charts and other documentation relevant to the provision of safe, competent and ethical service delivery.

Indicators

To demonstrate this Standard, a regulated member will:

a. Maintain comprehensive records appropriate to service delivery and employer/organization policies (e.g., document pertinent aspects of patient care and procedures performed including adverse reactions, relevant identifiers and demographic information).

b. Ensure records and access to records complies with applicable legislation intended to protect the privacy and confidentiality of personal information.

c. Utilize information and archival systems (e.g., integrated health records) according to employer/organization policies and procedures (e.g., paper and electronic systems).

d. Distribute/share patients’ records, patient’s expressed wishes, images and pertinent data to/with appropriate recipients, as required, in accordance with applicable legislation and employer/organization policies and procedures.

Expected Outcomes

The patient, family/representatives, the public and employers can expect that the regulated member follows processes to ensure the creation and maintenance of accurate and complete confidential records relevant to the provision of safe, competent and ethical service delivery.

Related Standards

1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.5 Privacy/Confidentiality
2.6 Communication
3.1 Collaboration/Professional Relationships

Resources

ACMDTT. (2016). Competency Profile Electroencephalography. Edmonton: Author. Available at: https://acmdtt.com
Standard Area 4 (continued)

Standard 4.2 Safe Practice
A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists exercises due diligence for the safety of patients, colleagues, self and the general public when conducting procedures and providing services. The member also maintains safe work practices and effectively manages any potential risk to safety by adhering to relevant provincial and federal regulations and employer/organization policies and procedures.

Indicators
To demonstrate this Standard, a regulated member will:

a. Ensure the patient has been assessed for contraindications to the procedure and respond as appropriate (e.g., allergies, medications, conflicting treatments/examinations, medical conditions, implants/devices or other items).

b. Participate in quality improvement and risk management activities (e.g., job hazard assessments, training activities, appropriate management of bloodborne fluid exposures and needle stick injuries).

c. Apply the applicable standards for the safe handling, use, storage and disposal of materials (e.g., WHMIS, nuclear safety legislation).

d. Adhere to the standards defined in workplace health and safety legislation.

e. Apply the appropriate infection prevention and control standards to prevent contamination of persons, equipment and environment (e.g., perform aseptic or sterile technique, isolation precautions, use and reprocessing of reusable medical devices and employ routine practices).

f. Recognize an emergency situation and take appropriate action (e.g., seek help, administer first aid/basic life support).

g. Perform procedures in a manner that maintains the integrity of patient ancillary devices and equipment.

h. Seek clarification of orders, when required (e.g., an identified patient safety issue, radiation safety, patient suitability for procedure).

i. Determine if the patient is pregnant and take appropriate action, as required.

j. Take necessary measures to ensure patient safety (e.g., hearing protection, dental protection, shielding, side rails).
In addition, regulated members in the specialties of nuclear medicine technology, radiological technology and radiation therapy will:

k. Apply the principles of as low as reasonably achievable (ALARA) in work practices.

l. Implement safety practices that adhere to the standard of relevant radiation protection and/or nuclear safety legislation.

m. Utilize personal radiation monitoring devices according to relevant legislation and employer/organization policies and procedures.

n. Respond to questions/concerns about radiation exposure risk, as appropriate to the procedure.

In addition, regulated members in the specialty of nuclear medicine technology will:

o. Determine if the patient is breast-feeding and take appropriate action, if required.

In addition, regulated members in the specialties of nuclear medicine technology and radiation therapy will:

p. Ensure radiation safety/protection for sealed and unsealed sources (e.g., post warning signs as appropriate; receive, store, handle and dispose of radioactive material according to regulations).

q. Contain and restrict access to areas of radioactivity.

In addition, regulated members in the specialty of magnetic resonance technology will:

r. Apply the principles of as low as reasonably achievable (ALARA) in work practices.

s. Ensure magnet/magnetic field safety of patients and personnel (e.g., emergency response in the case of a quench, MR safe/MR compatible equipment, appropriate warning signage is in place).

t. Adhere to appropriate magnetic resonance legislation. 10

In addition, regulated members in the specialty of electroneurophysiology technology will:

u. Ensure electrical safety for patients (e.g., indwelling catheters, proper grounding of patients).

In addition, regulated members in the specialty of electroneurophysiology technology with applicable enhanced practice authorization will:

v. Apply the principles of as low as reasonably achievable (ALARA) in work practices.

w. Implement safety practices that adhere to the standard of relevant radiation protection and nuclear safety legislation.

x. Utilize personal radiation monitoring devices according to relevant legislation and employer/organization policies and procedures.

y. Respond to questions/concerns about radiation exposure risk, as appropriate to the procedure.

z. Determine if the patient is pregnant and/or breast-feeding and take appropriate action.

aa. Ensure radiation safety/protection (e.g., post warning signs as appropriate, receive, store, handle and dispose of radioactive material according to regulations).

ab. Contain and restrict access to areas of radioactivity.

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Expected Outcomes
Patients, family/representatives, the public and employers can expect the regulated member to deliver services safely and to manage adverse events effectively to minimize the impact on the patient, the member, colleagues and the general public.

Related Standards
1.1 Patient-Centred Care
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.6 Communication
4.3 Equipment Quality Control

Resources
Standard 4.3 Equipment Quality Control

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists operates equipment for which appropriate training has been completed; verifies equipment and materials meet appropriate and applicable safety and operational standards; and follows established quality control (QC) measures.

Indicators

To demonstrate this Standard, a regulated member will:

a. Have the necessary knowledge, skills and judgment to operate the equipment and utilize materials for procedures.

b. Perform or verify regular QC measures on equipment used for procedures, as per applicable legislation and employer/organization policies and procedures.

c. Verify equipment is functioning properly before and/or during performing procedures.

d. Respond, as appropriate, to any equipment issues so that they may be addressed in a timely fashion.

e. Operate equipment in accordance with manufacturers’ specifications.

f. Ensure cleanliness of equipment.

g. Regularly inspect equipment for functional and mechanical integrity.

h. Perform basic troubleshooting and correct or report, as appropriate.

In addition, regulated members in the specialty of nuclear medicine technology will:

i. Perform or verify that appropriate QC has been completed on radiopharmaceutical preparations and their components (e.g., radionuclide purity, particle number).

In addition, regulated members in the specialties of nuclear medicine technology and radiation therapy will:

j. Perform or verify that appropriate QC has been completed on sealed sources.

In addition, regulated members in the specialty of electrophysiology will:

k. Perform or verify QC for leakage current.
Standard Area 4 (continued)

Expected Outcomes
Patients, family/representatives, the public and employers can expect the regulated member to operate equipment for which appropriate training has been completed and to verify equipment and materials meet safety and operational standards.

Related Standards
1.2 Clinical Procedures
2.1 Legislation, Standards and Ethics
2.2 Professional Competence
4.2 Safe Practice

Resources
ACMDTT. (2016). *Competency Profile Electroencephalography*. Edmonton: Author. Available at: https://acmdtt.com/


Standard Area 5:  
Protection of Patients From Sexual Abuse and Sexual Misconduct

A regulated member of the Alberta College of Medical Diagnostic and Therapeutic Technologists ensures that they will not enter into a relationship of a sexual nature with their patient and will take measures to prevent sexual abuse and sexual misconduct.

For the purposes of this standard:

i) 'Patient' shall mean a person who has received medical diagnostic and/or therapeutic services administered by a regulated member of the College within the immediately preceding year except in the cases of an episodic care. A person receiving episodic care is considered a patient while they receive episodic care; however, they cease to be considered a patient upon its conclusion.

ii) A spouse, adult interdependent partner or person with whom there is an existing personal and/or sexual relationship, is not a patient.

Indicators
To demonstrate this Standard, a regulated member will:

a. Maintain and manage professional boundaries with patients at all times.

b. Refrain from providing professional diagnostic and/or therapeutic services to their current or ongoing spouse, current or ongoing adult interdependent relationship partner or any other individual with whom they have a current or ongoing personal and/or sexual relationship, unless there is an emergent situation in which the regulated member is the most competent healthcare professional present to perform the required duties and/or the patient is restricted by geography, or other factors, that prevent them from receiving services from an alternate authorized healthcare professional. In addition, a regulated member providing professional diagnostic and/or therapeutic services in these circumstances is expected to take reasonable steps to transfer the individual’s care to another authorized healthcare professional as soon as reasonably possible.

c. Explain to the patient the need for removing clothing or other items that may interfere with diagnostic or therapeutic procedures.

d. Ensure informed consent is obtained when required to touch the patient for diagnostic and/or therapeutic purposes.

e. Provide the opportunity, where appropriate, of having a third party in attendance for procedures.

f. Take measures to perform procedures in a manner that maintains the patient’s dignity (e.g., providing gowns, appropriate draping, private space).

g. Report any sexual abuse and/or sexual misconduct to the appropriate authority (e.g., duty to report, self-report).

h. Comply with the College’s Code of Ethics.
Standard Area 5 (continued)

Expected Outcomes
Patients, family/representatives, the public and employers can expect that regulated members will not engage in, and will take appropriate measures to prevent, sexual abuse and/or sexual misconduct.

Related Standards
1.1 Patient-Centred Care
2.1 Legislation, Standards and Ethics
2.4 Professional Boundaries
2.6 Communication

Resources

Glossary

*Note: For an up-to-date list of references and resources, please consult the College’s website at acmdtt.com.*

**ACMDTT** is the acronym for the Alberta College of Medical Diagnostic and Therapeutic Technologists.

Section 3(1) of the Adult Interdependent Relationship Act says one person is **adult interdependent partner** of another if:

a) the person has lived with the other person in a relationship of interdependence
   i. for a continuous period of not less than 3 years, or
   ii. of some permanence, if there is a child of the relationship by birth or adoption, or
b) the person has entered into an adult interdependent partner agreement with another person but does not include a former adult interdependent partner.11

An **adult interdependent partner relationship** is a relationship outside of marriage in which two people: share one another’s lives; are emotionally committed to one another; and function as an economic and domestic unit. A person who is a spouse cannot be part of an adult interdependent relationship.12

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**ALARA** is the acronym for "As Low as Reasonably Achievable," an optimization tool in radiation protection to keep dose limits as low as reasonably achievable, social and economic factors being taken into account. ALARA is not a dose limit; it is a practice that aims to keep dose levels as far as possible below regulatory limits.13

**Ancillary devices** are devices that provide necessary support to the primary activities or operation (e.g., IV pump, oxygen).14

**Colleagues** refer to peers, other healthcare providers (both regulated and non-regulated) and the staff of the College with whom the member interacts.

Professional **competence** is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served. Competence depends on habits of mind, including attentiveness, critical curiosity, self-awareness and presence. Professional competence is developmental, impermanent and context-dependent.15

**Conflict of Interest** refers to a conflict between the private interests and the professional responsibilities of a person in a position of trust.16

**Decontamination** is the process of removing or neutralizing contaminants that have accumulated on personnel and equipment.17

**Due diligence** refers to such judgment and activity as a reasonable, prudent member of the profession under the same circumstances would use.18

**Duty to Report** is broken into:

*Reporting another regulated member*

If a regulated member acting in their professional capacity (e.g., providing professional services) has reasonable grounds to believe that the conduct of another regulated member of their College or another College constitutes sexual abuse or sexual misconduct, the regulated member must report the unprofessional conduct to the Complaints Director in writing. However, if the information regarding unprofessional conduct was obtained in the course of the regulated member providing professional services to the other regulated member, a report is not required.19

*Employer Reporting*

An employer who has reasonable grounds to believe the conduct of a regulated member constitutes unprofessional conduct based on the behaviour that, in the employer’s opinion, is sexual abuse and/or sexual misconduct must, as soon as possible, give notice of that conduct to the Complaints Director.20

**Enhanced practice** refers to practice that requires the practitioner to perform restricted activities that are not primarily authorized for the member’s area of practice in which they are registered. Members seeking this type of authorization are required to complete advanced training approved by the Council.21

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16 Adapted from: Merriam-Webster Dictionaries (2017). Author. Available at: https://www.merriam-webster.com/dictionary
21 ACMDTT. *Additional and Enhanced Authorizations*. Edmonton: Author. Available at: https://acmdtt.com
Glossary (continued)

Episodic Care is a single encounter with a patient in which health services are provided where neither the regulated member nor the patient has the expectation of an ongoing care.22

Evidence-informed practice refers to practice that is based on successful strategies that improve patient outcomes and are derived from a combination of various sources of evidence, including client (patient) perspective, research, national guidelines, policies, consensus statements, expert opinion and quality improvement data.23

Expected outcomes describe what patients, family/representatives, the public and employers may expect when a member provides services.

Indicators describe the application of standards by a member, which can also be used to determine if the standards are being achieved.

Informed consent refers to obtaining the permission from a patient “based on reasonable disclosure of the facts, risks and alternatives, to use identified intervention procedures.”24 Informed consent may be expressed verbally, in writing or implied. Implied consent refers to consent inferred from the patient’s or alternate decision maker’s (if applicable) actions and surrounding circumstances.25

Interprofessional team collaboration is the process of developing and maintaining effective interprofessional working relationships with learners, practitioners, patients/families and communities to enable optimal health outcomes. Elements of collaboration include respect, trust, shared decision-making and partnerships.26

Leadership involves engaging with others to contribute to a vision of a high-quality healthcare system and taking responsibility for the delivery of excellent patient care through activities such as clinical service delivery, administration, scholarly activity or teaching.27

A patient is a person who has received medical diagnostic and/or therapeutic services administered by a regulated member of the College within the immediately preceding year.

Patient-centred care is an approach in which planning, coordination and delivery of care/services are centred around the patient’s unique needs and preferences. The patient participates in decision-making and their choices are respected as much as possible.28

Additional and Enhanced Authorizations are developed by ACMDTT to reflect the requirements for specific Practice Areas requiring additional and enhanced practice authorizations.29


29 ACMDTT. Additional and Enhanced Authorizations. Edmonton: Author. Available at: https://acmdtt.com
Schedule 12(3)(1) of the HPA sets out the **Practice Statement** for the profession of medical diagnostic and therapeutic technologists as follows:

3(1) In their practice, medical diagnostic and therapeutic technologists do one or more of the following:

(a) apply ionizing radiation, non-ionizing radiation and other forms of energy to produce diagnostic images,
(b) evaluate the technical sufficiency of the images,
(c) use ionizing radiation, non-ionizing radiation and other forms of energy for treatment purposes,
(d) teach, manage and conduct research in the science, techniques and practice of medical diagnostic and therapeutic technology,
   (d.1) assess the medical condition of patients before, during and after the procedure described in (a)
(e) provide restricted activities authorized by the regulations.

Schedule 12(3)(2) of the HPA sets out the practice statement for the profession of electroneurophysiology technologists as follows:

(2) In their professional practice, electroneurophysiology technologists do one or more of the following:

(a) use sensitive electronic equipment to record and evaluate the electrical activity of patients’ central and peripheral nervous systems to assist physicians, surgeons and other health professionals in diagnosing diseases, injuries and abnormalities;
   (a.01) evaluate the technical sufficiency of the recordings made under clause (a);
   (a.02) assess the medical condition and needs of patients before, during and after the procedure described in clause (a);
   (a.1) teach, manage and conduct research in the science, techniques and practice of electroneurophysiology;
(b) provide restricted activities authorized by the regulations.

Schedule 7.1 of the Government Organization Act and sections (14), (15), (16), (17) of the Regulation sets out restricted activities for the practice of medical radiation technology.

**Professional boundaries** set limits to define the parameters of a safe, diagnostic and therapeutic connection between healthcare professionals and their patients.

A **Regulated member** is a healthcare professional currently registered with College and:

i. is eligible for registration as a regulated member as specified in Section 33(1)(a) of the HPA and in accordance with the Regulations; and
ii. pays the fees and other charges which are prescribed in the Regulations or by the Council, for licensing and membership.
iii. includes a previous regulated member whose last day of registration with the College is within the immediately preceding two years.

**Risk management** is the identification, assessment and prioritization of risks followed by economical application of resources to minimize, monitor and control the probability or impact of unfortunate events.

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33 ACMDTT. Current ACMDTT Bylaws. Edmonton: Author. Available at: http://www.acmdtt.com


A **Restricted Activity** is a high-risk activity performed by a member, when providing a health service, which requires the member to have specific competencies, skills and authorization, by the regulations under the *Health Professions Act*, to perform the activity safely and competently.\(^{36}\)

**Routine Practices** are a set of infection control strategies and standards designed to provide protection to the healthcare provider from potential sources of infectious diseases. They are established to prevent the transmission of microorganisms that cause infections in healthcare settings, from patient to healthcare provider, patient to patient and healthcare provider to patient. These practices include five main components: risk management, hand hygiene, personal protective equipment, environmental and administrative controls.\(^{37}\)

**Self-reflection** is a personal evaluation of how an activity has impacted some aspect of the work duties, interactions with patients or colleagues or other areas of professional practice.\(^{38}\)

A regulated member must **Self-Report** to the College any finding of professional negligence to the registrar in writing, as soon as reasonably possible after the finding has been made. If a regulated member in more than one college or in another jurisdiction, and the other college and/or the other jurisdiction makes a decision of unprofessional conduct, the regulated member must report the decision and provide a copy of that decision, if any, to the College. If a regulated member has been charged or convicted of an offence under the *Criminal Code* (Canada), the regulated member must report the offence in writing to the College, as soon as reasonably possible.\(^{39}\)

**Sexual abuse** is defined in section 1(1) (nn.1) of the HPA as “the threatened, attempted or actual conduct of a regulated member towards a patient that is of a sexual nature and includes any of the following conduct:

- sexual intercourse between a regulated member and a patient of that regulated member;
- genital to genital, genital to anal, oral to genital, or oral to anal contact between a regulated member and a patient of that regulated member;
- masturbation of a regulated member by, or in the presence of, a patient of that regulated member;
- masturbation of a regulated member’s patient by that regulated member;
- encouraging a regulated member’s patient to masturbate in the presence of that regulated member;
- touching of a sexual nature of a patient’s genitals, anus, breasts or buttocks by a regulated member.”\(^{40}\)

**Sexual misconduct** is defined in section 1(1) (nn.2) of the HPA as: “any incident or repeated incidents of objectionable or unwelcome conduct, behaviour or remarks of a sexual nature by a regulated member towards a patient, that a regulated member knows, or ought reasonably to know will or would cause offence or humiliation to the patient or adversely affect the patient’s health and wellbeing but does not include sexual abuse.”\(^{41}\)

**Sexual nature**, according to section 1(1) (nn.3) of the HPA, does not include any conduct, behaviour or remarks that are appropriate to the service provided.\(^{42}\)

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A **Spouse** a person who is legally married to another.\(^{43}\)

A **Standard** is a document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.\(^{44}\)

**Social Media** means various forms of electronic communication through which end users are allowed to create online communities to share interests, post comments, ideas, personal messages, and other contents.\(^{45}\)

**Supervision** means that a regulated member with a permit appropriate to the area of practice shall be in the immediate area to assist/consult in the delivery of restricted activities performed by a member in the regulated or non-regulated category. The supervising regulated member is required to be physically present, remain within audible distance and to be immediately available for assistance while the regulated or non-regulated member is performing the restricted activity. Availability by electronic devices is not acceptable.\(^{46}\)

A **Third Party** is a person or group besides the two primarily involved in a situation (e.g., a care-giver or guard accompanying a patient, colleague, interpreter).\(^{47}\)

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**Appendix A**

**Development of the 2019 Standards of Practice**

Steps used to develop the 2019 Standards of Practice included:

i. Establishment of an Advisory Group representing all five of the specialties and feedback on development of the draft and final Standards of Practice documents;

ii. Development of an Environmental Scan Summary that included a review of comparators Standards of Practice and other foundational materials;

iii. Development of draft Standards based on the results of the environmental scan and the Advisory Group;

iv. Revision of draft Standards based on the Advisory Group feedback;

v. Stakeholder validation of draft Standards using an electronic survey;

vi. Preparation of final Standards;

vii. Government/external stakeholder consultation and feedback;

viii. Revision of draft Standards based Government/external stakeholder consultation and feedback;

ix. Revision of draft Standards based on the Advisory Group feedback;

x. Preparation of final Standards;

xi. Council approval of document; and

xii. Publication of final Standards of Practice document.

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\(^{45}\) Merriam-Webster Dictionaries. (2019). *Social Media*: Author. Available at: https://www.merriam-webster.com

\(^{46}\) ACMDTT. *Supervision*. Edmonton: Author. Available at: https://acmdtt.com
