Alberta College of Medical Diagnostic and Therapeutic Technologists

Standards of Practice

Standards Area 2.0 Professional Accountability

Standard 2.3 Restricted Activities

Adopted September 1, 2019

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Alberta College of Medical Diagnostic & Therapeutic Technologists

Mission: Public confidence in receiving safe, competent, and ethical diagnostic and therapeutic care from regulated professionals.

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Introduction

Background

The Alberta College of Medical Diagnostic and Therapeutic Technologists (**ACMDTT**[1] 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), and
>
> (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.

Sections 24 to 33 of the *Health Professions Restricted Activity Regulation* set 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.

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 electroneurophysiology 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 six broad standard areas:

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

Standard Area 6: Continuing Competence Program

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

- **Standard** 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** include a list of documents that provide additional information related to the Standards.

The **Glossary** provides definitions 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]
    - Competency Profile for each specialty[3,4,5,6,7]

Background on Standard 2.3

In December 2020, the Government of Alberta introduced Bill 46, the *Health Statutes Amendment Act, 2020 (No. 2)*, to improve the governance and accountability of health professional regulatory Colleges in Alberta, and to ensure the health-care system and health professions working within the system are meeting the health needs of Albertans. Bill 46 required Colleges to revise their standards of practice to include more detailed information about the restricted activities.

In response to Bill 46, the College reviewed and enhanced its current Standards of Practice to ensure clear restricted activity policy alignment. The following Standards of Practice revisions were made, and registrants should take note that Standard 2.0 now includes:

- Standard 2.3: Restricted Activities
- Standard 2.3.1: Performance of Restricted Activities
- Standard 2.3.2: Supervision of Restricted Activities
- Glossary term clarifications and additions to address restricted activity regulatory requirements.

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[2] ACMDTT. (2015). *Code of Ethics*. Edmonton. Available at: https://acmdtt.com

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

[4] Canadian Association of Medical Radiation Technologists. (2014-Under Review). *Competency Profile Magnetic Resonance Technology*. Ottawa. Available at: https://camrt.ca

[5] Canadian Association of Medical Radiation Technologists. (2014-Under Review). *Competency Profile Nuclear Medicine Technology*. Ottawa. Available at: https://camrt.ca

[6] Canadian Association of Medical Radiation Technologists. (2014-Under Review). *Competency Profile Radiological Technology*. Ottawa. Available at: https://camrt.ca

[7] Canadian Association of Medical Radiation Technologists. (2014-Under Review). *Competency Profile Radiation Therapy*. Ottawa. Available at: https://camrt.ca

Standard Area 2.3
Professional Accountability

Standard 2.3 Restricted Activities

Standard

A **registrant** of the Alberta College of Medical Diagnostic and Therapeutic Technologists may perform only those **restricted activities** that they are authorized and have the required **competence** to perform as follows.

Restricted Activities

The restricted activities that regulated members of the Alberta College of Medical Diagnostic and Therapeutic Technologists are authorized to perform under the *Health Professions Restricted Activity Regulation* are as follows:

RADIOLOGICAL TECHNOLOGIST

(1) A registrant who is registered in the radiological technologist general register or the radiological technologist temporary register, when administering diagnostic examinations in medical radiography may:

a. apply any form of ionizing radiation in conjunction with medical radiography;

b. apply non-ionizing radiation in lithotripsy;

c. administer diagnostic imaging contrast agents for the purpose of conducting diagnostic scans and imaging of body tissue;

d. insert or remove instruments, devices or fingers

   i. beyond the opening of the urethra,

   ii. beyond the anal verge,

   iii. into an artificial opening in the body
   for the purpose of administering diagnostic examinations in medical radiography.

(2) A registrant referred to in subsection (1) who has completed advanced training approved by the College and who has received authorization confirmation from the College may:

a. cut a body tissue or to perform other invasive procedures on body tissue below the dermis for the purpose of starting an intravenous line;

b. apply non-ionizing radiation for the purpose of ultrasound imaging.

NUCLEAR MEDICINE TECHNOLOGIST

(1) A registrant who is registered in the nuclear medicine technologist general register or the nuclear medicine technologist temporary register the may:

a. apply any form of ionizing radiation in conjunction with nuclear medicine;

b. compound or administer blood or blood products to perform autologous procedures;

c. administer radiopharmaceuticals, radio labelled substances, radioactive gases or radio aerosols for diagnostic and therapeutic purposes;

d. cut a body tissue, or administer anything by an invasive procedure on body tissue below the dermis, for the purpose of administering injections or for starting an intravenous line;

e. insert or remove instruments or devices beyond the opening of the urethra for the purpose of administering diagnostic examinations in nuclear medicine.

(2) A Nuclear Medicine Technologist who has completed advanced training approved by the College and who has received authorization confirmation from the College may apply non-ionizing radiation for the purpose of ultrasound imaging.

RADIATION THERAPIST

(1) A registrant who is registered in the radiation therapist general register or the radiation therapist temporary register may:

a. apply any form of ionizing radiation in conjunction with radiation therapy;

b. administer diagnostic imaging contrast agents for the purpose of conducting diagnostic scans and imaging of body tissue;

c. insert or remove instruments, devices, hands or fingers

   i. beyond the cartilaginous portion of the ear canal,

   ii. beyond the pharynx,

   iii. beyond the opening of the urethra,

   iv. beyond the labia majora,

   v. beyond the anal verge, and

   vi. into an artificial opening in the body,

   for the purpose of radiation treatment.

(2) A Radiation Therapist who has completed advanced training approved by the College and who has received authorization confirmation from the College may:

a. cut a body tissue or to perform other invasive procedures on body tissue below the dermis for the purpose of starting an intravenous line;

b. apply non-ionizing radiation for the purpose of ultrasound imaging;

MAGNETIC RESONANCE TECHNOLOGIST

(1) A registrant who is registered in the magnetic resonance technologist general register or the magnetic resonance technologist temporary register may:

a. apply non-ionizing radiation in conjunction with magnetic resonance imaging;

b. administer diagnostic imaging contrast agents for the purpose of conducting diagnostic scans and imaging of body tissue;

c. insert or remove instruments or devices beyond the opening of the urethra or beyond the anal verge for the purposes of conducting diagnostic scans and imaging of body tissue.

(2) A Magnetic Resonance Technologist who has completed advanced training approved by the College and who has received authorization confirmation from the College may:

a. cut a body tissue or to perform other invasive procedures on body tissue below the dermis for the purpose of starting an intravenous line;

b. apply non-ionizing radiation for the purpose of ultrasound imaging.

ELECTRONEUROPHYSIOLOGY TECHNOLOGIST

(1) A registrant who is registered in the electroneurophysiology technologist general register or the electroneurophysiology technologist temporary register, who has completed the training and education approved by the College and who is authorized by the Registrar may:

a. cut a body tissue;

b. administer anything by an invasive procedure on body tissue for the purpose of using needle electrodes.

Standard 2.3.1 Performance of Restricted Activities

A registrant of the Alberta College of Medical Diagnostic and Therapeutic Technologists limits the practice of restricted activities to those that are authorized for their specialty. To seek **additional and enhanced practice authorizations**, a registrant is required to complete College-approved advanced training and to obtain authorization from the College.

Indicators

To demonstrate this Standard, a registrant 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 registrant to perform restricted activities safely, competently and ethically.

Related Standards

1.1 Patient-Centered Care

1.2 Clinical Procedures

2.1 Legislation, Standards and Ethics

2.2 Professional Competence

3.1 Collaboration/Professional Relationships

3.2 Leadership

3.3 Evidence-Informed Practice

4.2 Safe Practice

4.3 Equipment Quality Control

Standard 2.3.2 Supervision of Restricted Activities

A registrant of the Alberta College of Medical Diagnostic and Therapeutic Technologists may supervise the performance of a restricted activity by a person identified in this Standard of Practice, provided the supervising registrant is authorized and has the required competence to perform the restricted activity in question. The supervising registrant is responsible for ensuring the restricted activity performed under their supervision is performed in compliance with legislation and any conditions established by the Standards of Practice.

Indicators

To demonstrate this standard, a registrant will:

a. Provide **direct supervision** to students who are enrolled in an approved medical radiation technology program or an electroneurophysiology technology program approved by the Council.

b. Provide **indirect supervision** to registrants on the temporary register.

c. Provide **supervision** to registrants who require a period of supervised practice to meet a condition on their practice permit, appropriate to the aforementioned condition.

Note: As set out at section 4(5) of the *Medical Diagnostic and Therapeutic Technologists Profession Regulation*, where an appropriate registrant is not available to supervise a temporary member, the temporary member may seek permission from the Registrar or Registration Committee to practise under the supervision of a registrant of another regulated health profession who is authorized to perform the restricted activity that the temporary member is performing.

Expected Outcomes

Patients, family/representatives, employers and the public can expect registrants will provide the appropriate supervision required to ensure restricted activities are performed in a safe, competent and ethical manner.

Related Standards

1.1 Patient-Centred Care

1.2 Clinical Procedures

2.1 Legislation, Standards and Ethics

2.2 Professional Competence

3.1 Collaboration/Professional Relationships

3.2 Leadership

3.3 Evidence-Informed Practice

4.2 Safe Practice

4.3 Equipment Quality Control

Resources

- ACMDTT. (2015). Code of Ethics. Updated September 2021. Edmonton: Author. Available at: https://acmdtt.com/wp-content/uploads/Code-of-Ethics.pdf (acmdtt.com)
- ACMDTT. (2022). Bylaws. Updated April 1, 2023. Edmonton: Author. Available at: www.acmdtt.com Government of Alberta. (2000). Revised Statute of Alberta 2000 Chapter H-7. Health Professions Act. Edmonton: Author. Available at: www.kings-printer.alberta.ca/documents/Acts/h07.pdf
- Government of Alberta. (2005). Alberta Regulation 61/2005 Health Professions Act. Medical Diagnostic and Therapeutic Technologists Profession Regulation. Edmonton: Author. Available at: http://www.kings-printer.alberta.ca/documents/Regs/2005_061.pdf
- Government of Alberta. (2023). Alberta Regulation 22/2023 Health Professions Restricted Activity Regulation. Edmonton: Author. Available at: https://kings-printer.alberta.ca/documents/Orders/Orders_in_Council/2023/2023_050.pdf

Glossary

The existing Standards of Practice glossary serves as main reference point for all College defined terms, including the **bolded** terms contained herein. The current Standards of Practice glossary may be accessed and viewed at acmdtt.com.

The following terms have been amended and/or are now in-force:

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

Additional and enhanced practice authorizations are granted to regulated members upon successful completion of advanced training approved by Council and approval of an application submitted to the ACMDTT 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. Additional authorizations differ from enhanced practice in that the additional competencies/restricted activities are included in the specialty's section of the regulation. Additional and enhanced practice authorizations are developed by the ACMDTT to reflect the requirements for specific practice areas.[1]

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.[2]

A **restricted activity** is a high-risk activity performed by a registrant or under the supervision of a registrant when providing a health service. Restricted activities are set out in section 1.3 of the HPA. A registrant may only perform or supervise the performance of a restricted activity if authorized to do so under the HPA and the *Health Professions Restricted Activity Regulation* and must do so in accordance with the Standards of Practice.[3]

Registrants is a healthcare professional currently registered with the College and:

i. is eligible for registration as a registrant as specified in section 33(1)(a) of the HPA and in accordance with the Regulation[4],

ii. pays the fees and other charges which are prescribed in the Regulation or by the Council, for licensing.[5]

iii. includes a previous registrant whose last day of registration with the College is within the immediately preceding two years.[6]

Supervision includes **direct supervision** and **indirect supervision**.

Direct supervision means that a registrant (e.g., preceptor) providing supervision to an individual (e.g., student) performing a restricted activity must remain within audible distance and available for immediate physical assistance while the individual is performing the restricted activity. Availability by electronic devices is not acceptable.

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[1] Government of Alberta. (2023). *Health Professions Restricted Activity Regulation.* Edmonton. Available at: https://kings-printer.alberta.ca/documents/Regs/2023_022.pdf

[2] Epstein, R. M., & Hundert, E. M. (2002). Defining and Assessing Professional Competence, *Journal of the American Medical Association*, 287, 226–235.

[3] Government of Alberta. (2000). *Government Organization Act*. Edmonton. Available at: https://kings-printer.alberta.ca/documents/Acts/g10.pdf

[4] Government of Alberta. (2000). *Revised Statute of Alberta 2000 Chapter H-7. Health Professions Act.* Edmonton: Author. Available at: www.kings-printer.alberta.ca/documents/Acts/H07.pdf

[5] ACMDTT. (2022). *Bylaws*. Updated April 1, 2023. Edmonton: Author. Available at: www.acmdtt.com

[6] Government of Alberta. (2000). *Revised Statute of Alberta 2000 Chapter H-7. Health Professions Act.* Edmonton: Author. Available at: www.kings-printer.alberta.ca/documents/Acts/H07.pdf

Indirect supervision means that a registrant providing supervision to an individual performing a restricted activity must remain available for immediate physical assistance while the individual is performing the restricted activity. Availability by electronic devices is not acceptable.

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.[7]

[7] International Organization for Standardization. (2013). What is a Standard? Geneva. Available at: https://iso.org/iso/home/about.htm

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;

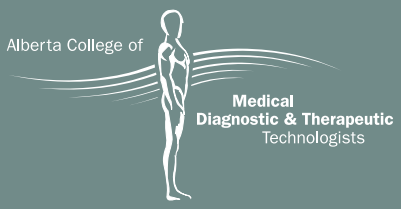
viii. Revision of draft Standards based Government/external stakeholder consultation and feedback;

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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