



## **Advanced Practice Registered Technologist (Radiation Therapy)**

# **Competency Profile**

**Advanced Practice  
in Medical Radiation  
Technology**



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## Introduction

An Advanced Practice Registered Technologist (Radiation Therapy) ("APRT(T)") is an experienced radiation therapist with advanced knowledge, skills and judgment in radiation therapy. The APRT(T) employs graduate level educational preparation to practice at a higher cognitive level in clinical radiation therapy. The central focus of the APRT(T) is optimizing radiation treatment and improving patient health outcomes in the realm of radiation therapy overall, and specifically in their area of expertise. APRT(T)s can work at all stages of the patient journey with a focus on effectiveness, efficiency and evidence-based practice.

It is expected that the APRT(T) will practice:

- with the patient as the central focus
- in accordance with national and provincial Codes of Ethics · within their respective scope and standards of practice
- in accordance with all relevant provincial and national legislation
- in accordance with departmental protocol, practice and policy
- as guided by Delegation or as outlined in a Medical Directive (where such legislation permits)
- with due regard for radiation protection and overall safety

In addition, certified APRT(T)s are accountable for:

- their decisions and actions
- working within their scope of practice
- limiting their practice to the patient population and aspects of practice for which they have the necessary knowledge, skills and judgment to manage
- collaborating with the members of the interprofessional team in the best interest of their patients
- employing best practices in all aspects of patient care and treatment
- maintaining competence through regular clinical practice of advanced radiation therapy practice in their area of specialization.

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### CORE CLINICAL COMPETENCIES

**Works as a member of the interprofessional care team to provide optimal patient care for patients**

Competency	Practical Interpretation
C1. Ensure that all relevant patient information is available for clinical decision making	<ul style="list-style-type: none"> <li>Includes the knowledge of what clinical information needs to be ordered and/or collected to inform decision making</li> <li>Triage and initiation of referrals</li> </ul> <p><i>Integrates with: C2, C3</i> <i>Informs: C5, T2</i></p>
C2. Assess the patient's physical condition	<ul style="list-style-type: none"> <li>Extends beyond informal assessment of patient physical condition when presenting for daily appointments</li> <li>Includes entire trajectory from consultation to follow-up and covers general vitals, physical examination, and other clinical assessment skills (i.e., patient reported outcomes, etc.)</li> <li>Includes entirety of history and physical examinations</li> <li>Appreciating significance of related findings</li> </ul> <p><i>Integrates with: C1, C3</i> <i>Informs: C5, C7, T2</i></p>
C3. Assess the patient's cognitive condition and psychosocial status	<ul style="list-style-type: none"> <li>Extends beyond informal assessment of patient psychosocial condition when presenting for daily appointments and includes knowing what cognitive tools should be used and when/why</li> <li>Includes entire trajectory from consultation to follow-up using cognitive assessment tools and evaluation of psychosocial condition through history-taking</li> <li>Appreciating significance of related findings</li> </ul> <p><i>Integrates with: C1, C2</i> <i>Informs: C4, C5, C6, C7, T2</i></p>
C4. Obtain informed consent for required diagnostic procedures, therapeutic interventions or radiation therapy treatments	<ul style="list-style-type: none"> <li>Includes elements legally required for informed consent at all stages of the patient trajectory</li> <li>Identification of issues related to capacity, substitute decision-makers, power of attorney and related actions</li> </ul> <p><i>Acting on: C3</i> <i>Integrates with: C5, C6</i></p>

## APRT(T) Competency Profile

Competency	Practical Interpretation
C5. Formulate and implement an appropriate approach for medical management	<ul style="list-style-type: none"> <li>Determination of appropriate overall medical management of a patient's diagnosis, including surgery, chemotherapy, radiation therapy, other, and the timing and concurrency of each</li> <li>Includes revisions of care plan as necessary based on new information from a variety of sources</li> <li>Referrals to other providers or services to support navigation of patient journey, concordant with scopes of practice and patient needs</li> </ul> <p><i>Acting on C1, C2, C3</i>  <i>Integrates with: C4, C6, C7</i></p>
C6. Communicate results that will impact patient's course of treatment	<ul style="list-style-type: none"> <li>Meeting the standards to support delegation of disclosure of results of diagnostic tests</li> <li>Ability to convey information and engage in discussion using language and a style that is appropriate to the situation and the patient, including conversations about diagnosis, prognosis, and compliance</li> </ul> <p><i>Acting on: C1, C5, T2</i></p>
C7. Prescribe/dispense pharmaceutical from defined and approved formulary	<ul style="list-style-type: none"> <li>Meeting the standards to support delegation of ordering pharmaceuticals from a specific formulary per specialization</li> <li>Uses knowledge of indications, contraindications, interactions that would bear on decisions to start, continue, taper, stop specific medications</li> </ul> <p><i>Acting on: C1, C2, C3, C5</i></p>

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### CORE TECHNICAL COMPETENCIES

**Uses advanced oncologic, radiobiological and dosimetric knowledge to optimize the use of available technology for the provision of tailored radiation therapy treatment to patients**

Competency	Practical Interpretation
T1 <i>Provide objective interpretation and evaluation of technical and radiobiological information</i>	<ul style="list-style-type: none"><li>Assessing and weighing of the relative significance of technical radiation therapy information necessary to inform technical, radiobiological, or clinical decisions</li><li>Using, where necessary, established tools/approaches to interpret the impact of the technical and/or radiobiological issue</li><li>Includes information that spans the radiation therapy trajectory from prescription through simulation, treatment planning, image guidance, and treatment</li></ul> <p><i>Integrates with: C1</i> <i>Informs: T2, C5</i></p>
T2. <i>Formulate and implement sound technical radiation therapy decisions based on integration of clinical, technical, and radiobiological information.</i>	<ul style="list-style-type: none"><li>Acting on clinical and/or technical information or data gathered through assessment/evaluation to render technical decisions related to radiation therapy</li><li>Includes decisions that span the radiation therapy trajectory from prescription through simulation, treatment planning, image guidance, and treatment delivery</li></ul> <p><i>Acting on: C1, C2, C3, T1</i> <i>Integrates with: C5</i></p>

## CORE PROFESSIONAL COMPETENCIES

**Uses research and evidence-based practice principles to serve as a quality champion, influencer, role model, mentor and innovator in radiation therapy and particularly in their area of specialization.**

Competency	Practical Interpretation
<b>A) RESEARCH AND EVIDENCE-BASED PRACTICE</b>	
R1. Conduct original research to contribute to the professional knowledge base	<ul style="list-style-type: none"> <li>Executes research as a leader including study design, research ethics board (REB), statistical analysis, knowledge translation and understands how results contribute to the knowledge base and to future work</li> <li>Uses accepted tools/models/approaches</li> </ul>
R2. Conducts quality improvement of program/service/department as a member of the interprofessional health care team	<ul style="list-style-type: none"> <li>Identifies elements of practice that require examination, selects methods and metrics, works as part of the team to execute the project, communicates findings and formulates and executes changes as a result of findings</li> <li>Uses accepted tools/models/approaches</li> </ul>
R3. Lead the ongoing development of best practices using evidence-based approaches	<ul style="list-style-type: none"> <li>Is familiar with the standard sources of best practice information and engages in activities that facilitate adoption of identified best practices</li> <li>Uses accepted tools/models/approaches</li> </ul>
<b>B) LEADERSHIP</b>	
L1. Optimize the function of the health care team through continual assessment, audit, evaluation and strategic visioning as a key member of the interprofessional health care team	<ul style="list-style-type: none"> <li>Leads/engages in activities/discussions that plan for achieving articulated goals and in response to anticipated issues expected to impact practice</li> <li>Uses relevant tools/models/approaches</li> </ul>
L2. Create and maintain a functioning team	<ul style="list-style-type: none"> <li>Can lead and support team function to meet stated goals/objectives (in any domain) through identifying optimal team composition, team building, conflict resolution, division of labour, tracking progress, documentation, etc.</li> <li>Uses relevant tools/models/approaches</li> </ul>
L3. Coach and mentor staff, students, other health care providers	<ul style="list-style-type: none"> <li>Engages in effective coaching and mentorship relationships</li> <li>Understands the challenges and pitfalls inherent in the various models/approaches to coaching and mentorship</li> <li>Uses accepted tools/models/approaches</li> </ul>

## APRT(T) Competency Profile

Competency	Practical Interpretation
<b>C) EDUCATION</b>	
E1. Develop an educational activity to address an identified need/gap	<ul style="list-style-type: none"><li>• Adopts/adapts common approaches to engage in effective educational activities at any level of learning including trainees, continuing education learners, and patients/public</li><li>• Includes needs assessment, curriculum building, instructional design and delivery, and evaluation</li><li>• Uses relevant tools/models/approaches</li></ul>