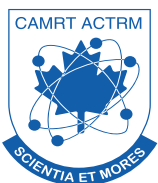


# Advanced Practice in Medical Radiation Technology



## *Executive Summary*



Canadian Association of  
Medical Radiation Technologists  
Association canadienne des  
technologues en radiation médicale



As the healthcare system evolves to meet the changing needs of the Canadian public, significant shifts are taking place in the way patient care is delivered. One of the more notable evolutions is the drive to ensure healthcare professionals can all practice to the fullest scope of their practice, which has led to the rise of advanced practice. It is a model for modern healthcare which has been tested and embraced in many countries, including Canada.

The Canadian Association of Medical Radiation Technologists (CAMRT) firmly believes there is a place for advanced medical radiation technologist (MRT) practice in Canada. Examples from MRT practice in other countries and advanced practice in other healthcare professions show how it can improve patient care by increasing access to care, enhancing quality of care, and contributing to system innovation and potential cost savings.

For advanced MRT practice to become a reality across Canada there needs to be a concerted and coordinated effort from MRTs. This framework has been developed to define and illustrate the core principles of advanced MRT practice in the Canadian context. It is hoped that this discussion will help establish a common vision of advanced MRT practice and help MRTs as they begin building the advanced practice roles of the future.

## Definition

**Advanced practice in Medical Radiation Technology is defined as a higher level of practice wherein clinical responsibilities routinely exceed the current principal expectations of practice. Advanced practice roles require analytical skills to synthesize evidence-based knowledge to autonomously work towards optimal patient outcomes.**

**The Advanced Practice MRT is able to practice in these roles due to their advanced clinical and theoretical knowledge, skill and judgment acquired through a relevant graduate level education program or equivalent.**

## Principles of advanced practice

In the extensive literature on advanced practice in the healthcare professions, the higher level of practice that characterizes advanced practice is captured in several distinct principles. These principles are reflected in the definition above and are a helpful focus for an examination of advanced MRT roles in practice.



All advanced practice roles should exist to improve outcomes for patients, whether through enhanced access, quality of care or satisfaction with the care received. The principle of **improving patient outcomes** is central to advanced practice and its successful uptake and implementation in any profession.

The requirement for **critical thinking**, demonstrated by interpretation, analysis, synthesis, evaluation, inference and reflection must be a core part of any advanced practice role. Similarly, a responsibility for **complex decision making**, allows for roles that truly advance the scope of MRT responsibilities and function with increased levels of autonomy.

Advanced practice roles are characterized by an increased level of **autonomy**, with a greater independent contribution to the multidisciplinary care of the patient. The right to be more autonomous is enabled by education and training, and it is of critical importance to the acceptance of advanced roles.

**Leadership** is an expected quality of all advanced roles. Within organizations, advanced practitioners are expected to grow in their capacity as leader, advocate and mentor to improve the delivery of care.

## Advanced roles in practice

Each of the principles is an important element of advanced practice in its own right, but all concepts are inter-related and complementary. Within an advanced role, all principles would be woven into the scope and expectations of practice and employed in day-to-day activities to elevate scope and influence. For roles to truly reflect a higher-level of MRT practice, they will need to be built around activities that not only exceed the principle expectations of MRT practice in Canada, but that incorporate the principles of advanced practice in a fundamental way. It is critical that advanced activities make up the core of a new role and are incorporated into a practitioner's primary day-to-day work.

This framework avoids identification of specific activities that would be considered advanced in the Canadian context. The continual evolution of MRT practice and differences in practice across Canadian provincial jurisdictions make it difficult to find examples that can be applied nationally and fixed in time. Instead, it provides examples from Canada and around the world to illustrate models that could be followed.



## Educational preparation for advanced roles

The CAMRT views education as a critical element for any future advanced practice roles. Training and education beyond entry-level qualification that is at once thorough, accessible and standardized will form the foundation for robust and lasting advanced MRT roles. Based on the reported experiences of others, including the leaders of the Clinical Specialist Radiation Therapist (CSRT) initiative in Ontario, the CAMRT has included in its recommendation a requirement for graduate level education or its equivalent. The combination of advanced studies and independent research typically pursued in graduate education provides both the structure and latitude for an individual to develop the necessary understanding and comfort with the complex subject matter central to advanced practice. Equivalency in this case, would consist of a level of achievement that is considered to be on the same level as finishing a course of study.

## Into the future

Despite the unique challenges presented by the structure and diversity of the Canadian health-care system, it is believed that advanced practice is attainable across jurisdictions. Indeed, the CSRT initiative has recently been expanded and represents a model on which to innovate advanced practice in radiation therapy across all provinces. In addition, innovative ventures already underway suggest there is potential for advanced MRT roles that mirror and extend beyond what has been developed internationally, within all the disciplines.

This framework represents an important first step in the advanced practice discussion for MRTs. We hope that the publication of this document will stimulate interest around advanced practice in the MRT community and provide the common language and starting point regarding advanced MRT practice and its place in the evolving Canadian healthcare model.