Certificate in Interventional Radiology for the Radiological Technologist

CANDIDATE HANDBOOK

2026

Tel: 1-800-463-9729 or (613) 234-0012
www.camrt.ca http://www.camrt.ca/
E: specialtycertificates@camrt.ca
EMAIL IS THE PREFERRED MODE OF CONTACT & O NLY EMAILED DOCUMENTS WILL BE ACCEPTED

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Purpose and Benefits

This Certificate in Interventional Radiology (CIR) is intended to provide a mechanism for medical radiation technologists (MRTs) to demonstrate knowledge and competence in the field of Interventional Radiology (IR), to promote standards of excellence within this clinical area, and to identify those who have met a nationally recognized standard in the practice of IR.

This certificate is intended to:
- be dynamic and progressive in nature
- address the current and future practice in IR Imaging
- provide a Canadian credential that is sought by qualified MRTs
- provide a Canadian credential that is advocated by employers
- provide an opportunity for continuing professional development for continued competence
- enhance safe and effective practice as described by the *CAMRT Member Code of Ethics and Professional Conduct– see https://www.camrt.ca/mrt-profession/professional-resources/code-of-ethics/.*

Benefits of the CIR Program

Completion of this program demonstrates that an MRT has proven high-level academic experience and validated clinical competence. Sites thrive when colleagues, new hires and management can all rely on highly skilled and trusted technologists, and technologists are also most confident when they can demonstrate a validated level of excellence. Teamwork is bolstered by experienced MRTs validating clinical skills, leading to cohesive, trusted and safe practice. This certificate program is created with the intent to ensure that successful candidates are highly skilled in IR, are exceptional colleagues and caregivers, and provide exceptional patient care.

Overview of the CIR Program

The CIR programs didactic and clinical components must be completed within 5 years of the successful completion of the first eligible IR course in the series – usually, this is your pre-requisite course.

Candidates who successfully complete the didactic and clinical components from CAMRT are eligible to receive a Certificate in Interventional Radiology and can use the credential “CIR”.

It is the intent that those who earn the credential will continue their professional development. Ongoing continuing education is recommended to remain current in this dynamic field.

The achievement of competence in this program is characterized as follows:

- When presented with situations, the MRT performs relevant competencies in a manner consistent with generally accepted standards and practices in the profession, independently and within a reasonable timeframe. The MRT anticipates what outcomes to expect in a given situation, and responds appropriately, selecting and performing competencies in an informed manner.

- The MRT recognizes unusual, difficult to resolve and complex situations which may be beyond their capacity. The MRT takes appropriate and ethical steps to address these situations, which may include consulting with others, seeking supervision or mentorship, reviewing literature or documentation, or referring the situation to the appropriate healthcare professional.

Individuals with questions about certificate programs are encouraged to contact us. **Email is preferred for the quickest service; French assistance is available via email, but all materials are in English. Do not use postal mail to submit documents**, questions or certificate-related printouts unless directly requested to do so.

CAIR Canadian Association for Interventional Radiology Association canadienne pour la radiologie d'intervention

The Canadian Association of Interventional Radiology (CAIR) has reviewed and endorsed the Interventional Radiology courses and program.

Program Eligibility and Pre-requisites

The CAMRT Certificate in Interventional Radiology is available to:

- Medical Radiation Technologists who have been certified by CAMRT in the practice of radiological technology with proof of 2 years' experience (1950 hours over a 2-year period)
- Internationally educated medical radiation technologists (IEMRTs) in the practice of radiological technology who are graduates of medical radiation technology programs with proof of 2 years' experience (1950 hours over a 2-year period) deemed to be reasonably similar to Canadian accredited programs.

There is additional documentation required from IEMRTs who have not passed the Canadian CAMRT entry-to-practice certification exam:

1. **Original letter** from entry-level education program verifying length of program to include both didactic and clinical components of the program
2. **Notarized copy** of diploma/degree/certificate from entry-level education program (attested true copies by an attorney who is a member of their regulator or WES authenticated documents can also be accepted those as one-offs above/in lieu of a notarized degree)
3. **Letter of Attestation**
    - Required documentation not received within **30 days** of program registration will result in a program cancellation/partial refund. CAMRT strongly recommends candidates obtain required documentation **prior to** program registration
    - Send documents electronically in a SINGLE SCAN or PDF within the required timeframe to CPD@camrt.ca or specialtycertificates@camrt.ca

The pre-requisite requirements for application to the Certificate Program are:

1. Successful completion of CAMRT's **Vascular Anatomy Exam**, with a minimum exam mark of 75%;
2. Successful completion of CAMRT's **Interventional Radiology 1 course**, with a minimum exam mark of 75% (you may also challenge this exam);
3. 2 years as a **certified and practicing radiological technologist** (minimum 1950 hours over a 2-year period): **Download the CIR Verification form.**

Program Registration

After meeting pre-requisite requirements, registration for the program is done through the CAMRT website. You must register in each course individually (didactic components) **and** into the certificate program to access the clinical portion of the program (the SCC). You must do this **after** meeting any prerequisite requirements. The SCC is updated annually, and you are to submit the SCC from the year of your registration.

The Summary of Clinical Competence (SCC) for the CIR Program will be made available at the time of program registration in the candidate's personal profile on the CAMRT website. Candidates may only begin working on the SCC requirements upon confirmation of receipt of the signed Clinical Experience form by CAMRT.

Competencies performed before registration into the certificate program will not be considered for this program.

NOTE: CAMRT both advises and expects that the candidate will hold sufficient personal liability coverage and any other employer-required insurance coverage (ex: WSIB, AD & D) and receive the required permissions needed to complete the clinical requirements as outlined in the SCC. It is the candidate's responsibility to ensure they have the appropriate insurance coverage and permissions from their employer to complete this certificate program.

Didactic Component (Courses)

The CIR program has both didactic and clinical components. You must register in each course individually (didactic components) *and* into the certificate program to access the Summary of Clinical Competence ("SCC", the clinical component) after meeting any prerequisite requirements.

The didactic component consists of the following:

- CAMRT's Vascular Anatomy exam: this is a challenge exam and pre-requisite.
- CAMRT's Interventional Radiology 1 course: This can be completed by taking the full-length course, or challenging the course's exam, this is a pre-requisite.
- CAMRT's Interventional Radiology 2 course: This can be completed by taking the full-length course, or challenging the course, this is a corequisite.

- CAMRT's Cardiac Catheterization virtual lecture: This is a short short online modules, which must be completed within 4 months from registration and by the five-year deadline for SCC submission.

Candidates must pass all didactic components and achieve a minimum score of **75%** on the final exams/quizzes to apply these to the CIR program.

If unsuccessful at the Vascular Anatomy exam, candidates may reattempt this as many times as required until a minimum mark of 75% is achieved. Candidates are allowed two rewrites within two years of their initial attempt on each of the exams for the full-length IR courses (if required). A rewrite fee will apply.

For the virtual lecture, candidates who are unsuccessful in obtaining the pass mark have one full year from the original date of registration to apply for a rewrite. An administrative fee applies.

Candidates who feel that they have the essential knowledge gained through relevant work experience and professional development may challenge the final exams in each of the IR courses. A minimum mark of 75% must be achieved on each challenged exam. **No rewrites are allowed for challenge exams.** If the candidate fails a challenged exam and wishes to continue in the program, they must take the required course. Full course policies are shared upon registration.

The CIR program must be completed within 5 years of successful completion of the **Interventional Radiology 1** course.

Clinical Component

The **Summary of Clinical Competence (SCC)** is a list of procedures and associated competencies that must be assessed by a clinical advisor and/or delegated assessors. This represents the clinical component of the certificate program. **Only competencies performed *after* program registration will be accepted in the SCC.**

The clinical component is a clinical practicum that requires the candidate to practice in IR with the following conditions:

- Practice under the supervision of an eligible clinical advisor
- Complete a Summary of Clinical Competence
- Provide proof of 1950 hours in a **dedicated IR department** within the 5 years allowed for the CIR program.
- Please ensure that you include a full start and end date (day, month, year) for the experience beginning and being achieved on the experience form.

The candidate is responsible for ensuring that all sections of the Summary are complete. A resubmission fee will apply for any incomplete submission, including any outstanding didactic requirements.
The candidate is responsible for ensuring that all sections of the SCC are complete**. All procedures and competencies must be completed within two (2) years of the first entry.**

Dates and signatures must be full (no initials, please make the date, month, and year clearly identifiable) and in "ink" (digital signatures are not accepted at this time).

Audits will be conducted at the Committee's discretion to ensure the proper process has been followed. Approximately 10% (or higher) of SCCs are audited per year.

Clinical Advisor/Delegated Assessors

It is the candidate's responsibility to obtain a CA and site for the clinical component of the program. If multiple sites are used, a CA must be identified at each site. Please ensure that the CA completes all SCC introductory forms (contact information, checklist, roles, and responsibilities form) once you register into the program to ensure the clinical advisor/delegated assessor is made aware of their role. Each Advisor is responsible for assigning their own Delegated Assessor (DA), if applicable, and to ensure they have signed all forms and pages where these signatures appear. All signatures throughout the SC must match. The following criteria also apply to international CAs for international candidates.

The clinical advisor/delegated assessor must:

1. be a medical radiation technologist practicing in interventional radiology
2. have a minimum of five years' experience in the practice of interventional radiology
3. not be currently registered in the CIR program
4. perform the assessment on the candidate's procedures/associated competencies or delegate assessment to another assessor.
    - Note: a clinical advisor with a CIR is preferred but not mandatory.
    - It is appreciated that a medical radiation technologist with this experience may not be available. If this is the case, please contact CAMRT for alternate options.
5. Identify others delegated to assess the candidate and ensure they are credentialed and competent in their practice
6. Perform the assessment on the candidate for all procedures/associated competencies or delegate the assessment to another credentialed technologist

7. Attest to overall consistent competency of the candidate by signing at the end of each module.

Additional Information for Clinical Advisors outside of Canada:

The following must be submitted within 30 days of program registration or the registration will be withdrawn:

1. A notarized copy or a certified true copy by a regulated attorney of the advisor's credentials (degree, diploma, or certificate)
2. Internationally Educated Medical Radiation Technologist Clinical Advisor Verification of Experience form with a hospital seal affixed to this form*
3. Clinical Advisor (CA) Check List

   * All internationally educated clinical advisors without a completed CTIC certification or who have passed the CAMRT's entry-to-practice certification exam must submit the IEMRT Clinical Advisor Verification of Experience Form.

Role of a Clinical Advisor

The CA's responsibilities include:

- Reviewing the Program Handbook and SCC with the candidate
- Mentoring and supporting candidates in their skill development, especially in developing transferrable skills
- Assessing **firsthand** competency/procedures performed by the candidate and verify competence by signing and dating each procedure in the SCC at the time competence is established and/or to delegate assessment duties to individuals who have the required expertise and qualifications
- Ensuring all delegated assessors have read the most **current** version of the Program Handbook and SCC and are verifying competence in a method consistent with the program Handbook and SCC guidelines for supervision
- Attesting to the candidate's overall competency in a module by signing at the end of each module, as outlined in the SCC
- Verifying the overall competence of the candidate at the end of the clinical placement by signing the Declaration of Completion.

During clinical placements, the following criteria must be upheld:

- All competencies must be **performed** independently by the candidate on a patient under supervision of a CA (or their DA)

- A candidate cannot be deemed competent if they have only observed or simulated a procedure, unless otherwise indicated in the SCC.

The clinical advisor/delegated assessor must **witness competent practice for a procedure/competency multiple times** prior to the date of the final assessment. A signature in the SCC verifies that the technologist has **consistently shown they have the knowledge, skill and judgement to be declared competent in each aspect of practice.**

It is recognized in some circumstances that procedures are not performed frequently; however, it is appreciated that there is a transference of skills between many procedures. **It is the responsibility of the clinical advisor or delegated assessor to ensure this expected level of competence as evidenced by their signatures in the appropriate areas.**

Delegated Assessor(s)

It is the **Clinical Advisor's** responsibility to identify and assign a Delegated Assessor (DA) at their clinical site, if they wish to use one, and to ensure they are aware of their role. These DAs may supervise and sign off on SCC competencies when the CA is not available.

The delegated assessor must:

1. be a medical radiation technologist practicing in interventional radiology
2. have a minimum of five years' experience in the practice of interventional radiology
3. not be currently registered in the CIR program
4. perform the assessment on the candidate's procedures/associated competencies as delegated by the CA
5. Observe and assess each procedure/competency and sign/date the SCC on the date it has been verified and confirmed with the same rigor as the CA, as outlined in the program Handbook and SCC
    a. NOTE: The DA may **not** complete the **module** sign-off, this is the responsibility of the **CA**.

Detailed guidelines for assessment of competency are found in each module of the SCC. The guidelines provide an overview of the expectation for assessment by the clinical advisor or **delegated** assessor.

Though we recognize their utility, please ensure that you do use your DA(s) judiciously and that they sign the contact confirmation – too many DA contacts may cause confusion and slow down review of the SCC.

It is recognized that being a CA or DA adds to your already heavy workload and responsibilities in your daily practice. The CAMRT appreciates your professionalism and commitment to help the candidate continue their education in an ever-changing healthcare environment.

All professionals signing in the SCC must be identified on the Delegated Assessors form. You may duplicate forms as needed.

Format of the Summary of Clinical Competence

You must retain a record (or have access to a record) of the completion of all mandatory competencies in case of audit. The following provides an overview of the requirements in the SCC:

- Demographic information
- Verification of practice in a dedicated interventional radiology department
- Guidelines for performance and assessment of procedures and associated competencies
- Professional Accountability Form
- Declaration of Completion
- List of procedures and associated competencies required, presented in the following modules:
    - Module 1 – Patient Care
        - CPR Certification
        - Practice medical aseptic technique
        - Practice surgical aseptic technique
        - Manage universal precautions
        - Monitor patient status and/or vital signs
    - Module 2 – Role of the technologists
        - Practice techniques used to reduce does to personnel
        - Perform techniques used to reduce dose to the patient
        - Assist in patient education pre and post procedure
        - Practice professionalism in interactions with patient and patient's family
        - Practice professionalism in interactions with the team
        - Assess patient's blood work results
        - Has the ability to work independently
        - Identify anatomy, physiology and pathology in the patient population
        - Assists in the administration of contrast media
        - Follows departmental policy and procedures
        - Demonstrate appropriate knowledge in the event of a contrast reaction
        - Understand the need for appropriate IR devices and supplies for specific procedures
        - Assist with sterile tray set up
    - Module 3 – Equipment, Imaging and Post-Processing
        - Operate power injector
        - Select the most appropriate procedure techniques

- Select procedure specific accessory equipment
- Perform post-processing and critique final image quality
- Archive image accurately
- Troubleshooting of imaging equipment
- Demonstrate basic knowledge of ultrasound technology
- Perform volume rendering
- Perform 3D reconstruction

- Module 4 – Procedures – *It is mandatory to perform at least 40 from the following list.*
  - Angioplasty Peripheral
  - Angioplasty Abdominal/Thoracic
  - Angioplasty with Stenting
  - Biliary Drainage/PTC
  - Biliary Stent Insertion
  - Biopsy – Fine Needle Aspiration or Core Biopsy (CT or US)
  - Cerebral Aneurysm intervention
  - Cerebral embolization
  - Chemo embolization
  - Colonic Stenting
  - Coronary Angiogram
  - Coronary Angioplasty
  - Cryotherapy
  - Diagnostic Angiogram Peripheral
  - Diagnostic Angiogram Abdominal/Thoracic/Pelvic
  - Diagnostic Cerebral Angiogram
  - Dialysis fistulas – PTA +/- stenting
  - Dialysis fistulas +/- thrombolysis
  - Embolization – gastrointestinal
  - Embolization AVM
  - Embolization AV fistulas
  - Epidural injections
  - Esophageal stenting
  - EVAR (Endovascular aneurysm repair)
  - Facet joint block/injection
  - Fallopian tube re-canalization
  - Foreign Body Retrieval
  - IVC Filter Insertion
  - IVC Filter Retrieval
  - Nephrostomy
  - Nerve root block
  - Neurovascular angioplasty +/- stenting
  - Neurovascular AVM intervention
  - Non-tunneled central venous catheters

- Paracentesis/Thoracentesis
- Percutaneous Abscess Drainage (CT or US)
- Percutaneous AVM Embolization
- Percutaneous Cholecystostomy
- Percutaneous Gastronomy/Jejunostomy
- Percutaneous Liver Biopsy (CT or US)
- Percutaneous nephrolithotomy
- Portal Vein Embolization
- Port-a-cath – implanted vascular access devices
- Radio frequency ablation/Microwave Ablation
- Renal Biopsy
- Sclerotherapy
- Stone removals
- Stroke protocol
- Structural Heart Procedure
- TAVI (Transcatheter aortic valve implantation)
- TEVAR (Thoracic aortic endovascular repair)
- Thrombectomy
- Thrombolysis
- Thyroid Biopsy
- TIPS (Transjugular Intrahepatic Portosystemic Shunt)
- Transjugular Liver Biopsy
- Ureteric Stents
- Uterine Fibroid Embolization
- Varicocele embolization/Venous Malformation Embolization
- Venous Access PICC line
- Venous Access Tunneled line
- Vertebroplasty/Kyphoplasty
- Yttrium 90 Radioembolization

A total of 40 procedures listed must be performed clinically and assessed for competency.

Program Extension

Extensions beyond the five-year time frame are available under **exceptional circumstances**. Contact specialtycertificates@camrt.ca **prior to the end of your program** for information.

There is a fee associated with an extension request. Extensions are not guaranteed. You can view your program end date in your Portal.

Submission of Summary of Clinical Competence

Candidates must submit the completed Summary of Clinical Competence to the CAMRT for review and approval by the CIR Committee. Electronic copies submitted as one file will be accepted. Email to specialtycertificates@camrt.ca.

Incomplete Summary of Clinical Competence – Resubmission Fee

Any Summary of Clinical Competence deemed incomplete by a reviewer will be subject to a resubmission fee. This includes any incomplete didactic components.

Continuing Professional Development Component

It is the intent that those who earn the CIR credential will continue their professional development. Continuing education is recommended to remain current in the dynamic field of IR.

The CAMRT is committed to lifelong learning and therefore advocates continuing professional development (CPD) for maintenance of competence in interventional radiology. This can be managed by maintaining a professional portfolio.

APPENDIX A

INTERNATIONALLY EDUCATED MEDICAL RADIATION TECHNOLOGISTS
CERTIFICATE PROGRAM REGISTRATION ATTESTATION STATEMENT

Included with this signed statement, is the required documentation to finalize my Certificate Program Application with the Canadian Association of Medical Radiation Technologists.

Candidate Name: _____

Certificate Program: _____

Title of Program Completed: _____

Name of Diploma/Degree: _____

Educational Institution for theoretical instruction: _____

Institution for Clinical Training: _____

Length of Total Program: Theoretical (months) ☐ **Clinical (months)** ☐

By signing below, I verify that:

- ✓ All statements and documentation in this application are accurate. I understand that a false or misleading statement, omission or misrepresentation may compromise my registration request.
- ✓ The documentation attached regarding my education program and/or my clinical advisor is original and has not been modified in any way.
- ✓ I authorize CAMRT to contact any authority, institution, association, body or person in any jurisdiction to verify the statements in my application and related documents.
- ✓ I understand that I may be required to submit further information if required.

_____ _____

Signature of Applicant Date (month/day/year)

APPENDIX B

Interventional Radiology 1 – COURSE OBJECTIVES

CHAPTER 1 OBJECTIVES

At the end of this chapter, the learner will be able to

- Explain the term professionalism;
- Define the roles and responsibilities of an interventional radiological (IR) technologist;
- Discuss the role of the IR technologist as it applies to expanding roles within health care;
- Discuss the importance of interprofessional collaboration in interventional radiology (IR);
- Discuss patient care as it relates to treatment within the IR department; and
- Discuss the potential role of advanced practice for IR technologists.

CHAPTER 2 OBJECTIVES

At the end of this chapter, the learner will be able to:

- Define and explain the following terms as they relate to equipment used in interventional radiology (IR):
    - Flat detector
    - Liquid crystal display (LCD) monitor
    - Picture archiving and communication systems (PACS)
    - Matrix, pixel, voxel, bit depth
    - Dynamic range
    - Rotational angiography
- Explain flat panel detector technology and digital imaging systems
- Discuss image acquisition and the advantages of flat panel detector technology
- Explain the benefits of pulsed fluoroscopy
- Explain the techniques used to improve image quality
- Discuss the importance of digital processing algorithms and how they can be set to optimize image quality
- Outline multiple versus single-element flat detectors
- Explain rotational angiography and how it has added to the capabilities of the angiography suite
- Identify the components and differences required to develop a hybrid operating room
- Demonstrate a basic understanding of ultrasound technology as it is used in interventional imaging

CHAPTER 3 OBJECTIVES

At the end of this chapter, the learner will be able to:

- Identify molecular and cellular effects of x-radiation;
- Describe the differences between stochastic and deterministic effects;
- Identify approximate levels of radiation sensitivity of various cell populations;
- List current and future trends in personal dosimetry;
- Differentiate between three types of dose and discuss where each may be used;
- Discuss the radiation dose-reduction strategies used in interventional radiology (IR);
- Explain the principles of protection required in IR;
- Explain radiation protection strategies as it relates to the patient;
- Explain the difference between medical and surgical asepsis;
- Discuss concepts related to the cycle of infection;
- Explain the impact of multi drug resistant organisms;
- Discuss hazards in the IR suite including needlestick injuries and splashes;
- Explain the importance of hand hygiene as it relates to surgical asepsis;
- Discuss how to create and maintain a sterile field;
- Explain the responsibilities of the team i.e., circulating/scrub technologists;
- Identify the equipment required to maintain a sterile field in IR; and
- List the common causes of contamination to a sterile field.

CHAPTER 4 OBJECTIVES

At the end of this chapter, the learner will be able to:

- Demonstrate an understanding of the major anatomical structures and associated medical terminology for the following body systems:
  - skeletal
  - digestive
  - urinary
  - respiratory
  - cardiovascular
  - nervous
  - reproductive
- Distinguish between the appearance of normal anatomy from abnormal anatomy/pathology using a variety of imaging modalities,
- Explain common pathological processes, and
- Discuss the significance of a variety of pathologies based on the following classification system

- congenital
- acquired
- inflammatory/degenerative
- neoplastic
- traumatic
- metabolic
- miscellaneous.

CHAPTER 5 OBJECTIVES

At the end of this chapter the learner will be able to:

- List the ancillary equipment used in a typical interventional suite,
- Describe each piece of equipment and its basic function,
- Indicate the function of the fundamental instruments and tools necessary in interventional radiology,
- Understand a generic product label and explain the package components, and
- Outline the benefits of cost-effective inventory management.

CHAPTER 6 OBJECTIVES

At the end of this chapter, the learner will be able to:

- Describe the patient care trajectory through a procedure in interventional radiology,
- Explain the difference between informed consent and implied consent,
- Identify major points in patient education pre and post-procedure,
- Understand contrast media sensitivity based on patient pre-procedural work-up,
- Explain contrast induced neuropathy (CIN) and anaphylaxis,
- List commonly used patient medications in the interventional department and define their use, and
- Explain the difference between analgesics and sedatives.

Interventional Radiology 2 – COURSE OBJECTIVES

1. Identify indications, contraindications, techniques, complications and post procedural care for the procedures outlined by each chapter
2. Recognize normal and abnormal images to complement the reviewed procedures.
3. Recommend accessory equipment introduced in Interventional Radiology Course 1 that will be necessary for each procedure.
4. Predict imaging pre/post-processing parameters or modalities required for the reviewed procedures.
5. Identify procedurally unique techniques and patient care tasks associated with different patient populations.
6. Reinforce the pharmacology requirements of the outlined procedures as learned in Interventional Radiology Course 1.
7. Devise a workflow strategy that demonstrates organizational skills and efficiency
8. Anticipate the needs of the multidisciplinary team
9. Explain the common indications for each procedure or group of procedures
10. Analyze acquired images for interpretation by the interventionalist
11. Identify complications and appropriate actions
12. Describe and have a basic understanding of the most common arterial, venous and non-vascular interventions currently performed in an IR Suite
13. Indicate the function of the fundamental instruments and tools necessary for the basic interventions outlined
14. Outline the major risks and complications associated with each procedure and the management of these complications

APPENDIX C

CAMRT Vascular Anatomy Exam Blueprint

Item presentation - % of question types
Multiple Choice: 100%
Exam structure
Exam length: 2 hours Number of questions: 100
Exam delivery format
On-line
Content and question weighting

Vascular Anatomy	**Percentage weighting of number of questions/topic**
1- Head and Neck	12-17%
2 – Thorax	21-27%
3 – Abdomen and Pelvis	21-25%
4 – Upper Extremities and Lower Extremities	32-39%

CAMRT Interventional Radiology 1 – Exam Blueprint

Item presentation - % of question types	
Multiple Choice: 100%	
Exam structure	
Exam length: 2 hours Number of questions: 100	
Exam delivery format	
Online	
Course Content and question weighting	
Chapters	**Percentage weighting of number of questions/topic**
1 - Role of the Technologist	5-10%
2 - Imaging Systems	20-25%
3 - Radiation Safety and Infection Control	25-30%
4 - Pathology	20-25%
5 - Accessory Equipment/Devices and Tools	10-15%
6 - Patient Management and Pharmacology	15-20%

CAMRT Interventional Radiology 2 - Exam Blueprint

Item presentation - % of question types
Multiple Choice: 100%
Exam structure
Exam length: 2 hours Number of questions: 100
Exam delivery
Online

Course content and question weighting	
Chapter	**Percentage weighting of number of questions/chapter**
1. Non-Vascular Interventions	20-23%
2. Vascular Arterial Interventions	35-38%
3. Vascular Venous Interventions	19-21%
4. Interventional Neuroradiology	17-21%
5. Cardiac Catheterization	10-12%
6. Pediatric Interventions	6-8%

APPENDIX D

The Role of a Clinical Advisor

To maintain the integrity of CAMRT Certificate programs, it is essential that all parties involved in the training and evaluation of certificate program candidates follow the procedures set out in the Program Handbook and Summary of Clinical Competence (SCC). A CAMRT Certificate indicates a level of competence above entry-to-practice that has been verified through the requirements of the program.

Clinical Advisor's responsibilities include:

- Review the Program Handbook and SCC with the candidate.
- Mentor and support candidates in their skill development
- Assess firsthand competency/procedures performed by the candidate and verify competence by signing and dating each procedure in the SCC at the time competence is established and/or
- Delegate assessment duties to individuals who have the expertise and qualifications outlined in the Program Handbook.
- Ensure all delegated assessors have read the most current version of the Program Handbook and SCC. These documents are updated on an annual basis, so clinical advisors and delegated assessors must review the handbook and SCC with each new candidate.
- Attest to overall competency by signing at the end of each module
- Verify the overall competence of the candidate at the end of the clinical placement by signing the Declaration of Completion.

During clinical placements, the following criteria must be upheld:

All competencies must be **performed** independently by the candidate on a patient. A candidate cannot be deemed competent if they have only observed or simulated a procedure, unless otherwise indicated in the SCC.

The clinical advisor/delegated assessor must witness competent practice for a procedure/competency multiple times prior to the date of the final assessment. A signature in the SCC verifies that the technologist has **consistently shown** they have the knowledge, skill and judgement to be declared competent in each aspect of practice. It is recognized in some circumstances that procedures are not performed frequently; however, it is appreciated that there is a transference of skills between many procedures. ***It is the responsibility of the clinical advisor or delegated assessor to ensure this expected level of competence as evidenced by their signatures in the appropriate areas.***

If there are procedures in the SCC that are not performed at your clinical site it is the responsibility of the candidate to contact CAMRT to determine an alternate option (if any).

Detailed guidelines for assessment of competency are found in each module of the SCC. The guidelines listed provide an overview of the expectation for assessment by the clinical advisor or delegated assessor.

It is recognized being a clinical advisor or delegated assessor adds to your already heavy workload and responsibilities in your daily practice. The CAMRT appreciates your professionalism and commitment to help the candidate continue their education in an ever-changing healthcare environment.

APPENDIX E

Internationally Educated Medical Radiation Technologist
Clinical Advisor Verification of Experience

Hospital/Organization: _____

Name of Supervisor: _____

Supervisor Credential(s): _____

Supervisor Email: _____

NAME OF CIR CANDIDATE: _____

To CAMRT Certificate Programs:

This is to confirm _____ (name of Clinical Advisor) is a current employee of the above noted hospital/organization.

The Clinical Advisor listed above is:

- A registered medical radiation technologist with a minimum of five years' experience in the practice of Interventional Radiology
- Currently practicing in IR

.

My signature below confirms the above meets the CAMRT's eligibility requirement to act in a Clinical Advisor (CA) role for the purpose of the Certificate in Interventional Radiology (CIR) program.

The affixed hospital seal confirms the authenticity of this submission.

_____ _____

Signature of Clinical Advisor Supervisor/Employer **Date**

APPENDIX F

Clinical Advisor (CA) Check List

To maintain the integrity of CAMRT Certificate programs, it is essential all parties involved in the training and evaluation of certificate program candidates follow the procedures set out in the Program Handbook and Summary of Clinical Competence (SCC). A CAMRT Certificate indicates a level of competence above entry-to-practice that has been verified through the requirements of the program. As such, CAMRT must ensure all Clinical Advisors meet the same standards and are eligible to take on this assessment role.

This form must be submitted to the CAMRT along with the notarized documentation required for all internationally educated medical radiation technologists.

I, _____, acknowledge by my initials, the following to be true.

	I am a medical radiation technologist* with a CAMRT CIR credential **OR**** a medical radiation technologist having a minimum of five years' experience in the practice of Interventional Radiology **or other:* _____
	I am **currently practicing** in IR.
	I am not currently registered in the CAMRT CIR program.
	I have no conflicts of interest* with the CIR candidate. ***Conflicts of interest may include:** • Close personal relationships that could threaten independence or objectivity during assessments • Spouse or family member • A direct report (i.e. the assessor reports to the candidate)

I understand that any false or misleading statement, omission or misrepresentation may result in the candidate's automatic withdrawal from the program and/or revocation of the CIR designation.

_____ _____

Clinical Advisor Signature Date