

This guide is designed to provide the nuclear medicine technologist with information about the Computed Tomography Competence Equivalency program approved by the Nova Scotia Association of Medical Radiation Technologists (NSAMRT).

The current Medical Radiation Technology Act identifies the practice of nuclear medicine technology to be uniquely distinct from the practice of radiological technology. As such, registered nuclear medicine technologists are not authorized to apply ionizing radiation in conjunction with medical radiography. The pending Medical Imaging and Radiation Therapy Professionals Act will allow for broader scopes of practice. In the interim, a regulated nuclear medicine technologist who has completed academic and clinical requirements approved by the NSAMRT Board, may be authorized by the Registrar to perform computed tomography (CT) for diagnostic purposes. This decision is based on the 2018 equivalent entry-to-practice competency requirements for CT for both radiological and nuclear medicine technology students.

The objective of the NSAMRT in approving competency equivalency is to ensure that technologists can safely and competently perform stand-alone CT in clinical practice. NSAMRT's current position statement requires nuclear medicine technologists who have graduated prior to 2018 and have not completed formal CT certification to demonstrate equivalent education and clinical skills (as outlined in the national competency profile and entry-to-practice exam) to the NSAMRT's Credentials Committee.

The information contained in this guide describes the evidence and expectations, both academically and clinically, that the technologist must demonstrate in order to be deemed competent to perform stand-alone CT. These components are outlined, and detailed further, in the chart below.

Once equivalency has been granted, it is the responsibility of the technologist to remain current in CT clinical practice.

### Assessment Tools

To evaluate competency equivalency, the NSAMRT is identifying the educational and clinical experience required for a nuclear medicine technologist to perform stand-alone CT safely and competently. Due to differing demographics and experience among our nuclear medicine registrants, the following table illustrates the learning and experience requirements of both new graduates and practiced technologists.

### Assessment Table

		Proof Required	
		Educational Requirements	Clinical Requirements
1	<b>Nuclear medicine graduate from accredited Canadian program (2018-present)</b>	Provide evidence of graduation from Nuclear Medicine Technology program	
2	<b>Nuclear medicine technologists who have completed CTIC program for CT</b>	Provide evidence of successful completion of CTIC	
3	<b>Dalhousie SHS nuclear medicine graduate 2016 -2018</b>	Provide evidence of graduation from SHS Nuclear Medicine Technology program	
4	<b>Dalhousie SHS nuclear medicine graduate 2011 -2015</b>	Provide evidence of successful completion of NUMT 3100	Provide evidence of completion of NSMART clinical hours and competencies
5	<b>SHS nuclear medicine graduate prior to 2011</b>	Provide evidence of completing didactic CT course meeting CAMRT competency profile requirements	Provide evidence of completion of NSMART clinical hours and competencies

#### Note

The above equivalency chart is based on Dalhousie School of Health Sciences (SHS) graduates. It is recognized that there are several nuclear medicine technologists working in Nova Scotia that graduated from other programs. If you are a graduate of a nuclear medicine technology program other than the Dalhousie SHS and wish to have your current CT competency assessed, please contact the NSAMRT for more information on assessment requirements.

#### Final Submission

All applicable items, as outlined in assessment table, must be submitted to the Registrar, for review, prior to receiving authorization to perform stand-alone CT.

Submit the full package including the following completed documents:

- Application form (required for NM technologists' graduation prior to 2016 for Dal SHS or NM technologists that graduated prior to 2018 from any other program)
- Proof of stand-alone CT clinical hours as a learner\*
- Logbook of performed CT clinical procedures\*
- Proof of structured CT Education
- Employment history for last five years in PET-CT, SPECT-CT and CT

\* If original documentation is no longer available, a signed declaration from an academic institution or clinical assessor will be considered.

#### Submit to:

Registrar  
NSAMRT  
Office 310, 380 Bedford Highway  
Bedford NS, B3M 2L4

P| 902.832.3167  
E| info@nsamrt.ca

## Applicant Information

Name: \_\_\_\_\_ NSAMRT # \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

## Practicum Information

Facility: \_\_\_\_\_ Department(s): \_\_\_\_\_

Primary Clinical Supervisor: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

## Competency Assessment

### Performance Expectations

The applicant who is placed in the clinical environment will be assessed according to the following performance expectations:

Application of theoretical knowledge:

1. Accurately interprets the requisition
2. Accurately and independently produces images
3. Provides accurate patient exams/studies in an orderly progression of tasks
4. Adheres to high standards of radiation safety while performing procedures
5. Ensures operational readiness of equipment for a procedure/study
6. Determines and selects optimal factors based on individual case variable
7. Accurately critiques the CT images which are produced
8. Correctly performs quality control procedures according to manufacturers' operational standards
9. Exemplifies a strong understanding of professional and regulatory standards of practice

## Patient Relationships

1. Identifies self and explains the practitioner's role
2. Confirms the identity of the patient
3. Demonstrates respect for patients' rights to make choices and to be fully informed
4. Responds appropriately, and in a timely manner, to all patient inquiries
5. Protects the patient's confidentiality and takes measures to ensure patient privacy
6. Demonstrates sensitivity when dealing with diverse patient populations
7. Provides accurate information and checks for understanding

## Work Team Relationships

1. Supports the work of the team and shares the workload equitably
2. Demonstrates a willingness to learn from various members of the team
3. Exemplifies communication that is meaningful and relevant to the work
4. Demonstrates flexibility to changing routines
5. Seeks and responds appropriately to feedback

## Program Sequencing

It is required that the technologist complete foundational didactic teachings in CT and contrast media theory prior to commencing the clinical component. This can be accomplished by completing the CAMRT CT 1 or NSAMRT approved equivalent didactic course prior to commencing clinical learning.

## Criteria for Competence

In order to have verifiable competence in the following documented procedures, the nuclear medicine technologist must demonstrate, through independent action, the ability to perform CT scans, and prepare and administer contrast media within a reasonable standard of time, regardless of patient presentation.

## Clinical Time Frame

For completion of this program, it is expected that the technologist spends a minimum of 150 clinical hours in a CT environment. This may be in a dedicated CT suite or in a SPECT-CT or PET-CT area. Technologists will record the hours worked in these areas on the *Clinical Time Log*.



## Clinical Competencies

For the competencies listed below, the applicant is to be evaluated according to the Performance Expectations outlined on pgs. 3-4 of this manual.

### Tracking Table

<b>CT Examinations</b> with/without contrast media	<b>Competence Attested –</b> <b>Preceptor Signature</b>	<b>Date</b>
<b>Head (non-enhanced)</b>		
<b>Head (enhanced)</b>		
<b>Chest (non-enhanced)</b>		
<b>Chest (enhanced)</b>		

<b>CT Examinations</b> <small>with/without contrast media</small>	<b>Competence Attested –</b> <b>Preceptor Signature</b>	<b>Date</b>
<b>Abdomen (non-enhanced)</b>		
<b>Abdomen (enhanced)</b>		
<b>Pelvis (non-enhanced)</b>		
<b>Pelvis (enhanced)</b>		
<b>Extremities</b>		

<b>CT Examinations</b> with/without contrast media	<b>Competence Attested –                      Preceptor Signature</b>	<b>Date</b>
<b>Spine</b>		
<b>Neck (unenhanced)</b>		
<b>Neck (enhanced)</b>		