



Certification Programs for Advanced Prescribed Procedures Below the Dermis

PROFESSIONAL PRACTICE GUIDELINE

Professional Practice Guidelines

College of Respiratory Therapists of Ontario (Certo) publications contain practice parameters and standards that should be considered by all Ontario Respiratory Therapists (RTs) in the care of their patients/clients and in the practice of the profession. Certo publications are developed in consultation with professional practice leaders and describe current professional expectations. All Members are required to abide by these Certo publications, and they will be used in determining whether appropriate standards of practice and professional responsibilities have been maintained.

It is important to note that employers may have policies related to an RT's ability to perform advanced prescribed procedures below the dermis. If an employer's policies are more restrictive than the Certo's expectations, the RT must abide by the employer's policies. Where an employer's policies are more permissive than the expectations of the Certo, the RT must adhere to the expectations of the Certo.

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Introduction

The [Regulated Health Professions Act](#) (RHPA) sets out the framework for regulating the health professions in Ontario. The primary purpose for the regulation of a health profession is to protect the public by ensuring that practitioners meet minimum qualifications and standards of practice. In order to focus on the issue of public protection the RHPA identifies fourteen “controlled acts”. These controlled acts consist of a variety of activities that could result in serious harm to the public if performed incorrectly.

The [Respiratory Therapy Act](#) (RTA) **authorizes Respiratory Therapists** to perform some of the controlled acts. The CRTC recognizes that some controlled acts require greater expertise to perform than others and that incorrect performance of some controlled acts places the public at greater risk of harm than the performance of others. In order to provide the public with adequate protection with respect to the performance of the most serious of the controlled acts that may be performed by Respiratory Therapists, the CRTC requires that Members performing these controlled acts undergo a certification program.

This guideline is intended to provide direction to Members wishing to perform advanced prescribed procedures below the dermis and to individuals developing required certification programs to ensure that minimum requirements are met.

1. Prescribed Procedures Below the Dermis Regulation

One of the controlled acts authorized to Respiratory Therapists (RTs) is performing a prescribed procedure below the dermis. "Prescribed," in this case, means listing the specific procedures in regulation. The [Prescribed Procedures Regulation](#) (Part VII of O. Reg. 596/94), sets out the prescribed procedures authorized to RTs, which are as follows:

1.1. Basic Procedures

- i. Arterial, venous and capillary puncture
- ii. Insertion, suturing, aspiration, repositioning, manipulation, and removal of an arterial cannula
- iii. Insertion, suturing, aspiration, repositioning, manipulation, and removal of a venous cannula

1.2. Advanced Procedures

- i. Manipulation or repositioning of a cannula balloon
- ii. Chest needle insertion, aspiration, reposition, and removal
- iii. Chest tube insertion, aspiration, reposition, and removal
- iv. Bronchoscopic tissue sample for the purpose of bronchoalveolar lavage and endobronchial brushing
- v. Intraosseous needle insertion
- vi. Subcutaneous electrode placement for intraoperative and perinatal fetal monitoring

2. Requirements when Performing Prescribed Procedures Below the Dermis

Prescribed procedures below the dermis are separated into two categories — basic and advanced. RTs must fulfill specific requirements to perform any of these procedures.

These requirements are outlined below.

Basic Procedures

Members must:

- be competent to perform the procedure
- perform the procedure only if permitted by their certificate of registration (see Table 1)
- not perform if prohibited by their terms, conditions and limitations, and
- adhere to all employer policies.

Advanced Procedures

Members must:

- Satisfy all requirements of a basic procedure, and also:
 - complete a CRTO-approved certification program
 - ensure that their certification program is up to date with the best evidence-based clinical practice, and
 - re-certify every two (2) years.

For information on the **Process for Obtaining Approval for a Certification Program**, please see page 11. Additional information can also be found in the [Prescribed Procedures Regulation](#), and the [Interpretation of Authorized Acts Professional Practice Guideline](#) (PPG).

Please note...

A valid order (direct order or a medical directive) is required to perform both a basic and advanced prescribed procedure below the dermis. For additional information on orders, please review the CRTO's [Orders for Medical Care Professional Practice Guideline](#) (PPG).

3. Certificates of Registration and Prescribed Procedures Below the Dermis

3.1. Registered Respiratory Therapists (RRT)

(I.e., Members registered with General Certificates of Registration)

Members who hold a General Certificate of Registration are permitted to perform basic prescribed procedures below the dermis. In addition, Members who hold a General Certificate of Registration are permitted to perform advanced prescribed procedures below the dermis subject to terms, conditions or limitations on their certificate of registration, and provided they have successfully completed an approved certification or recertification program for each specific procedure within the past two years.

3.2. Graduate Respiratory Therapists (GRT)

(I.e., Members registered with Graduate Certificates of Registration)

Graduate Respiratory Therapists are permitted to perform basic prescribed procedures below the dermis under supervision. Graduate Respiratory Therapists **are not permitted** to perform advanced prescribed procedures below the dermis even if they have successfully completed an approved certification program.

3.3. Practical Respiratory Therapists (PRT)

(I.e., Members registered with Limited Certificates of Registration)

Practical Respiratory Therapists are not permitted to perform advanced prescribed procedures below the dermis and may not perform basic prescribed procedures unless the Member is permitted to perform the procedure by the terms and conditions of their certificate of registration.

3.4. Respiratory Therapists (Emergency) [RT(E)]

(I.e., Members registered with Emergency Certificates of Registration)

Members who hold an Emergency Certificate of Registration are permitted to perform basic prescribed procedures below the dermis under supervision. In addition, Members who hold an Emergency Certificate of Registration are permitted to perform advanced prescribed procedures below the dermis under supervision (and subject to any other terms, conditions or limitations on their certificate of registration) provided they have successfully completed an approved certification or recertification program for each specific procedure within the past two years.

Table 1: Certificates of Registration and Prescribed Procedures Below the Dermis

Procedures	RRT	GRT*	RT (E)**	PRT***
1. Basic prescribed procedures.	✓	✓	✓	***
2. Advanced prescribed procedures.	✓		✓	

* GRTs require general supervision to perform any controlled act and are not permitted to delegate any controlled acts.

** RT(E)s require general supervision to perform any controlled act.

*** PRTs are only able to perform basic procedures below the dermis if permitted to do so by the terms and conditions on their certificate of registration.

4. Certification and Recertification for Advanced Prescribed Procedures Below the Dermis

Only RTs who hold a General or Emergency*¹ Certificate of Registration are authorized to perform an advanced prescribed procedure below the dermis, subject to terms, conditions or limitations on their certificate of registration. Prior to performing an advanced prescribed procedure, the RT must have successfully completed an approved **certification program**. In addition, **recertification** is required every two (2) years [s.49(1) - O.Reg 596/94].

4.1. Components of a Certification Program

The CROTO does not wish to limit the flexibility of organizations in designing certification programs that meet their particular needs. At the same time, the CROTO needs to ensure that each organization's unique certification programs contain some standard and minimum components. Certification programs are approved on a case-by-case basis by the CROTO Registration Committee. Therefore, before an RT can perform an advanced prescribed procedure below the dermis, there must be an appropriate system in place for instruction, certification, recertification, and documentation.

Each certification program curriculum must consider the following:

- Level of evidence of the reference material
- Hours of instruction
- Methods of instruction, and
- Assessment of knowledge and experience (e.g., written examination).

The certification program must be made up of three components:

- i. Knowledge Component
- ii. Observation Component; and
- iii. Demonstration Component.

¹ RT(E) require general supervision for all controlled acts.

I. Knowledge Component

The knowledge component can be evaluated by a written or verbal examination. It is recommended that a minimum mark be required in order to proceed to the observation component. An estimate of the time required to complete this portion should be described. The Knowledge Component should include, at a minimum:

- A. Nature and Purpose of the Procedure
- B. Learning Objectives
- C. Anatomy
- D. Indications and Contraindications
- E. Risk Factors, Complications and their Management; and
- F. Practice Considerations and Technique.

II. Observation Component

After successful completion of the knowledge component, the RT will advance to review the skill under the direction of certified clinician. The intent of this portion of the program is to provide a safe setting for the review of the skill and competencies required in order to be successful in performing the procedure on a patient. An estimate of the time required to complete this portion should be described.

III. Demonstration Component

This portion requires that the procedure be performed on a patient, under direct observation by a clinician certified in the procedure, and who has the skills required to teach effectively. The decision as to who the clinician(s) is should be determined based on internal resources. There is no evidence to support the decision of how many times the procedure should be repeated in order to determine competence. There is only an understanding that proficiency does come with practice and that ongoing evaluation is needed in order to ensure competency.

These components are sequential. RTs must complete each component before moving to the next.

4.2. Recertification Process

A recertification process should include a hands-on demonstration of competence and may include a review of related experience and a verbal/written evaluation of knowledge.

5. Interpretation of Evidence

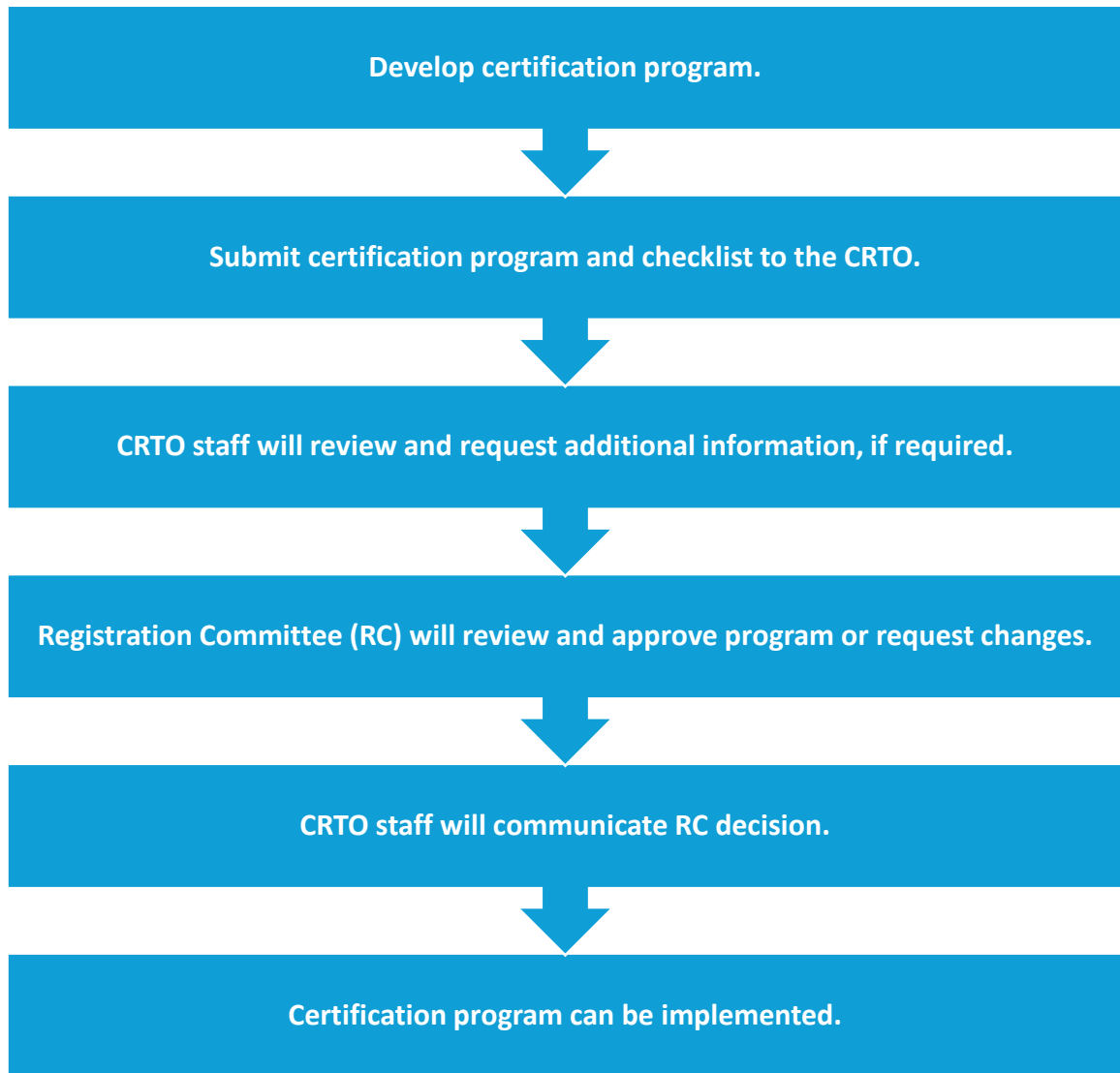
Evidence-based practice requires the retrieval and a critical appraisal of the best available evidence. All sources used in the development of the certification program should be cited and the level of evidence provided. For example, “no observable difference occurs when 0.9% normal saline is used compared with heparinized solutions for maintaining catheter patency and functionality of arterial lines” (Cochrane Database of Systematic Reviews, 2014 ^{LOE1}).

Table 2: Levels of Evidence²

Level I	Evidence obtained from a meta-analysis or systematic review of all relevant Randomized Controlled Trials (RCTs) or evidence-based clinical practice guidelines based on systemic reviews of RCTs or three or more RCTs of good quality that have similar results.
Level II	Evidence obtained from at least one well-designed RCT (e.g., a large, multi-site RCT).
Level III	Evidence obtained from well-designed controlled trials without randomization (i.e., quasi-experimental).
Level IV	Evidence obtained from well-designed case-control or cohort studies.
Level V	Evidence obtained from systematic reviews of descriptive and qualitative studies (meta-synthesis).
Level VI	Evidence obtained from a single descriptive or qualitative study.
Level VII	Evidence obtained from the opinion of authorities and/or report of expert committees.

² This level of effectiveness rating scheme is based on the following: Ackley, B. J., Swan, B. A., Ladwig, G., & Tucker, S. (2008). *Evidence-based nursing care guidelines: Medical-surgical interventions*. (p. 7). St. Louis, MO: Mosby Elsevier.

6. Process for Obtaining Approval for a Certification Program



7. Additional Considerations

7.1. Organizational Policies and Procedures

To support safe and competent practice and ensure consistency between practitioners, each organization develops its own policies and procedures for specific tasks and processes. When a certification program is submitted to the CRTO for consideration, the organization's policy and procedure should also be included because it serves as part of the curriculum that must be reviewed by the learner undertaking the certification program.

7.2. Record Keeping

Institution - Each organization that has obtained approval for a certification program must retain a complete copy of the program along with a record of the date it was implemented. Each subsequent version of a certification program must go through the CRTO's approval process and be retained along with previous versions.

Member - Members must keep documentation related to certification and recertification processes in their Professional Portfolio Online for Respiratory Therapists (PORTfolio^{OM}). Members are required to keep this documentation for the duration of their professional career.

Please note...

RTs who work at multiple sites must ensure that they are following each employer's policies regarding what procedure below the dermis they can perform.

7.3. Keeping Certification Programs Current

- Health care practices are constantly evolving. It is up to each Member to keep up-to-date with current practice standards. If significant revisions are being made to an existing certification package, it will need to be resubmitted to the CRTO. For more information, please contact the CRTO Manager of Quality Practice.
- Any additional training or credentials obtained by a Member (e.g., Anesthesia Assistant) does not alter the fact that in order to perform an advanced prescribed procedure below the dermis, they must still complete a CRTO approved certification program.
- It is an expectation that Members ensure that the certification package they are using has been approved by the CRTO, and the employer's policy governing the procedure has received final organizational approval **prior to beginning the process of certification.**

8. Advanced Prescribed Procedure Certification Program Checklist

To request permission to perform an advanced prescribed procedure below the dermis, the following must be submitted to the CRTO:

- Advanced Prescribed Procedure Certification Program [Checklist](#) (See Appendix A)*
- The certification package; and
- A copy of the organizational policy.

* Please note that a separate checklist must be completed and submitted for each procedure.

Appendix A: Advanced Prescribed Procedure Certification Program Checklist

Advanced Prescribed Procedure Certification Program Checklist

Please Note: a separate form must be completed and submitted for each procedure.

Contact Information

Facility

Address

Contact Person

Telephone

Email Address

Procedure

- ☐ Manipulation or repositioning of a cannula balloon.
- ☐ Chest needle insertion, aspiration, reposition, and removal
- ☐ Chest tube insertion, aspiration, reposition, and removal
- ☐ Bronchoscopic tissue sample for the purpose of bronchoalveolar lavage and endobronchial brushing.
- ☐ Intraosseous needle insertion.
- ☐ Subcutaneous electrode placement for intraoperative and perinatal fetal monitoring.

Patient Population

- ☐ Adult ☐ Pediatric ☐ Neonatal

Submission

- ☐ Initial
- ☐ Revision to an approved program
- ☐ Date of previous submission (if applicable): _____

Authorization

- ☐ The procedure is an advanced procedure below the dermis as defined by O. Reg 596/94, Part VII and the procedure is authorized by the CRTO for performance by Respiratory Therapists.
- ☐ The procedure is being performed by Members of the CRTO who are permitted to perform advanced prescribed procedures (I.e., General certificate of registration).
- ☐ Performance of the procedure by RTs has been approved in a policy by the Member's facility.

Curriculum

1. The certification curriculum considers the following:

- ☐ Hours of instruction
- ☐ Methods of instruction
- ☐ Assessment of knowledge and experience

2. The certification curriculum content includes:

- ☐ Performance based objectives
- ☐ Nature and purpose of the procedure
- ☐ Conditions specific to the individual institution/facility under which the
- ☐ procedure is to be performed
- ☐ Associated anatomy, physiology, pathophysiology and pharmacology
- ☐ Indications and contraindications
- ☐ Risk factors and potential complications
- ☐ Management of complications
- ☐ Technique - demonstration, supervised training, skill evaluation

Quality Assurance

- ☐ The initial certification process requires the member to demonstrate that he/she possesses the appropriate clinical competence for all components of the procedure.
- ☐ The certification process has a system for initial instruction, evaluation and re-evaluation (recertification).
- ☐ A re-certification (minimum schedule of every 2 years) process is in place that includes a hands-on demonstration of competence and may include a review of related experience and a verbal/written evaluation of knowledge.

Records

- ☐ Records: The process identifies the individual(s) within the institution who is (are) responsible for certifying and re-certifying those members performing the procedure.
- ☐ Records of instruction, certification and re-certification are maintained and retained by the institution.

NAME (please PRINT)

TITLE

SIGNATURE

DATE (MM/DD/YYYY)



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