



The National Alliance of
Respiratory Therapy Regulatory Bodies

L'Alliance nationale des organismes de
réglementation de la thérapie respiratoire

2024

NATIONAL COMPETENCY FRAMEWORK

for Entry-to-Practice Respiratory
Therapists in Canada

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INTRODUCTION

The National Alliance of Respiratory Therapy Regulatory Bodies (NARTRB) is the national body representing provincial respiratory regulators who have been given the legislative authority to regulate the profession of respiratory therapy in their respective jurisdiction. The mission of the NARTRB is to facilitate collaboration on regulatory issues, while respecting the autonomy of each member organization to fulfill their legislated mandate. The NARTRB is responsible for:

1. Establishing minimum entry-to-practice standards.
2. Facilitating labour mobility across Canadian jurisdictions.
3. Harmonizing registration practices across Canadian jurisdictions.
4. Sharing information on regulatory issues as it relates to each member organization's regulatory mandate.
5. Collaborating, sharing information, and developing strategies to address professional practice issues as it relates to the protection of the public.
6. Participating as a key interested party with many individuals and organizations on issues and initiatives that impact the regulatory environment and the practice of respiratory therapy.

Respiratory therapists are committed to providing safe, ethical, and effective care to their patients. They work to ensure the well-being and betterment of individuals and communities. To guide the development and assessment of these healthcare professionals, the Entry-to-practice National Competency Framework was established in 2016.

As the profession evolves, so must its competencies. The competencies listed in this updated profile continue to provide a single, pan-Canadian entry-level benchmark for practitioners, regulators, educators, assessment and accreditation providers, other interested parties, and the public. They also serve as a springboard for continuous professional development and lifelong learning.

The updated profile acknowledges the diverse roles and responsibilities within the profession, and addresses the specific expectations of respiratory therapists across various settings, including intensive care units, emergency departments, operating rooms, cardiopulmonary diagnostic units (including sleep studies and pulmonary function), as well as in delivering community-based care. The competencies integrate both clinical and non-clinical statements that are relevant to all practitioners, regardless of their level of education or previous experience.

The updated competencies are based on consultation with subject-matter experts, collaboration with interested parties, and a nationwide validation survey. They reflect the evolving needs of the healthcare landscape, taking into account the latest evidence-based practices, technological advancements, and changing demographics.

The profile:

SUPPORTS the development of respiratory therapists who possess the knowledge, skills, attitudes, behaviours, and judgement required to deliver safe, effective, and patient-centred care

EMPHASIZES the importance of interprofessional collaboration, cultural competence, ethical decision-making, and continuous quality improvement

PROMOTES a learner-centred approach, encouraging respiratory therapists to take an active role in their own professional development. It recognizes the importance of lifelong learning, reflective practice, and ongoing self-assessment to ensure competence in the rapidly evolving healthcare landscape

By upholding these competencies, respiratory therapists contribute to the well-being of their patients, and the success of the health care system. They accomplish this while also complying with the provisions of relevant legislation, professional codes of practice and standards, and employer requirements.

THE JOURNEY TOWARD RECONCILIATION

In recent years, societies around the world have engaged in profound conversations about truth and reconciliation with Indigenous peoples, recognizing the historical injustices and systemic marginalization they have endured. As we strive for a more inclusive and equitable society, it becomes increasingly important to acknowledge and address the historical and ongoing injustices faced by Indigenous peoples, while working together to build bridges of trust and respect. As such, this document's competencies, including their sub-competencies, skills, and knowledge statements, have been carefully formulated to reflect the Calls to Action published in the Truth and Reconciliation Commission of Canada's report (December 2015).

The National Alliance of Respiratory Therapy Regulatory Bodies recognizes that navigating the complexities of reconciliation is not a one-time event, nor addressed through simple inclusion in a competency profile, but an ongoing process that requires dedication, humility, and collective action. Ongoing dialogue and future actions will serve to forge a more inclusive and equitable future for all.

ACKNOWLEDGEMENTS

The development of the 2024 National Competency Framework for Entry-to-Practice for Respiratory Therapists in Canada was made possible through the collaboration of numerous organizations and individuals. The initiative was led by the National Alliance of Respiratory Therapy Regulatory Bodies. Contributing organizations include NARTRB’s regulatory members and the Canadian Society of Respiratory Therapists.

The Steering Committee, consisting of representatives of the NARTRB, provided leadership for the project. The Steering Committee included:

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The above contributions have ensured that the information presented is both valid and grounded in the realities of day-to-day practice.

Key Terms

Entry-to-practice

The initial career stage, at which a respiratory therapist is registered as licensed to practise. Rather than a specific point in time, the NARTRB considers this career stage to include the first 3,500 practice hours, which is equivalent to up to four years of part-time practice.

Patient

A patient is the recipient of respiratory therapy services, and may be an individual, family, group, organization, community, or population. In some circumstances, a patient may be represented by their substitute decision-maker. In this document, *patient* is used synonymously with “client” and “resident”.

Patient groups

From a clinical perspective, the NARTRB distinguishes three principal patient groups:

Neonatal: Patients from birth to 28 days of age, corrected for premature birth. Neonates require a variety of special considerations such as those relating to their physical size and development, legal status, and inability to communicate and make decisions.

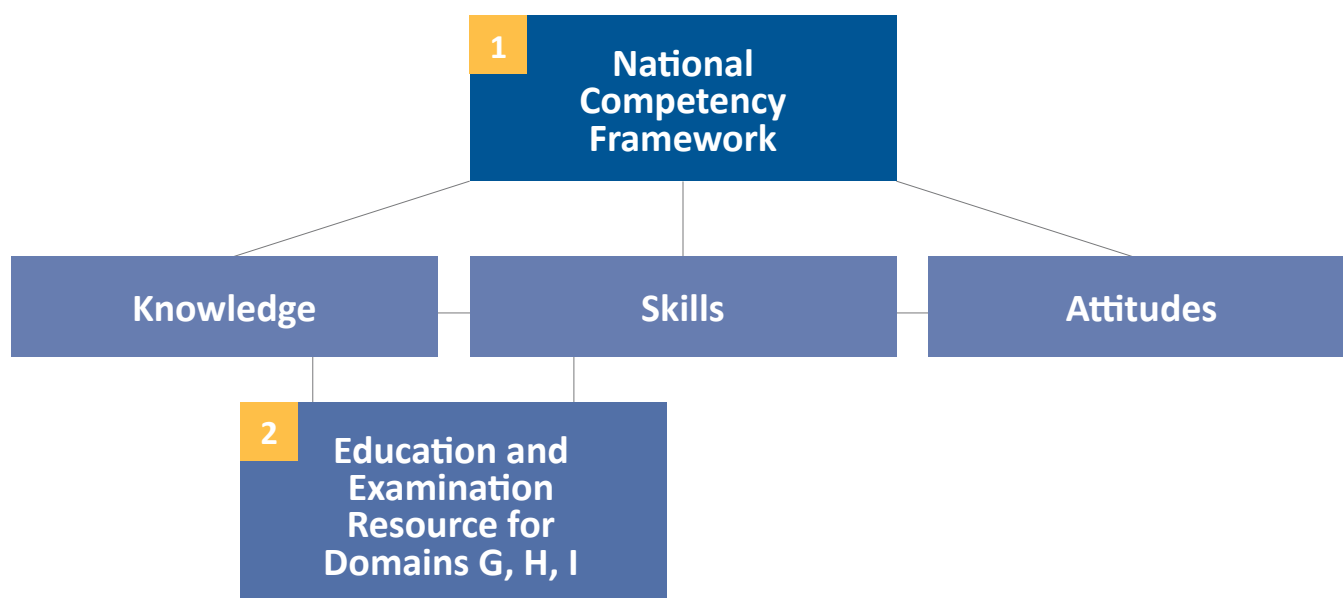
Pediatric: Patients between neonates and adults, who also require a variety of special considerations such as those relating to their physical size and development, legal status, and ability to communicate and make decisions.

Adult: Adulthood is defined as the stage of life when an individual has completed physical growth and sexual maturation. This includes the development of secondary sexual characteristics as well as the attainment of reproductive capability. N.B. The transition to adulthood is a complex process that varies from person to person and typically involves a combination of biological, psychological, social, and legal factors. Only the biological factors are considered here.

The National Competency Framework

The National Competency Framework (NCF) is the first of two documents that are meant to address the needs of a number of audiences. The NCF focuses on high-level outcomes that combine knowledge, skills, and attitudes that are required for safe, effective practice. Attitudes underpin all competencies, and are expected of all practising respiratory therapists; as such, they are embedded within the competencies themselves rather than being expressed as distinct statements.

The Education and Examination Resource is an expanded list of foundational knowledge and minimum entry-to-practice skills for the more “clinical” aspects of the respiratory therapist’s practice: Clinical Assessment and Care Planning (Domain G), Therapeutic Interventions (Domain H), and Prevention, Health Promotion, and Education (Domain I).

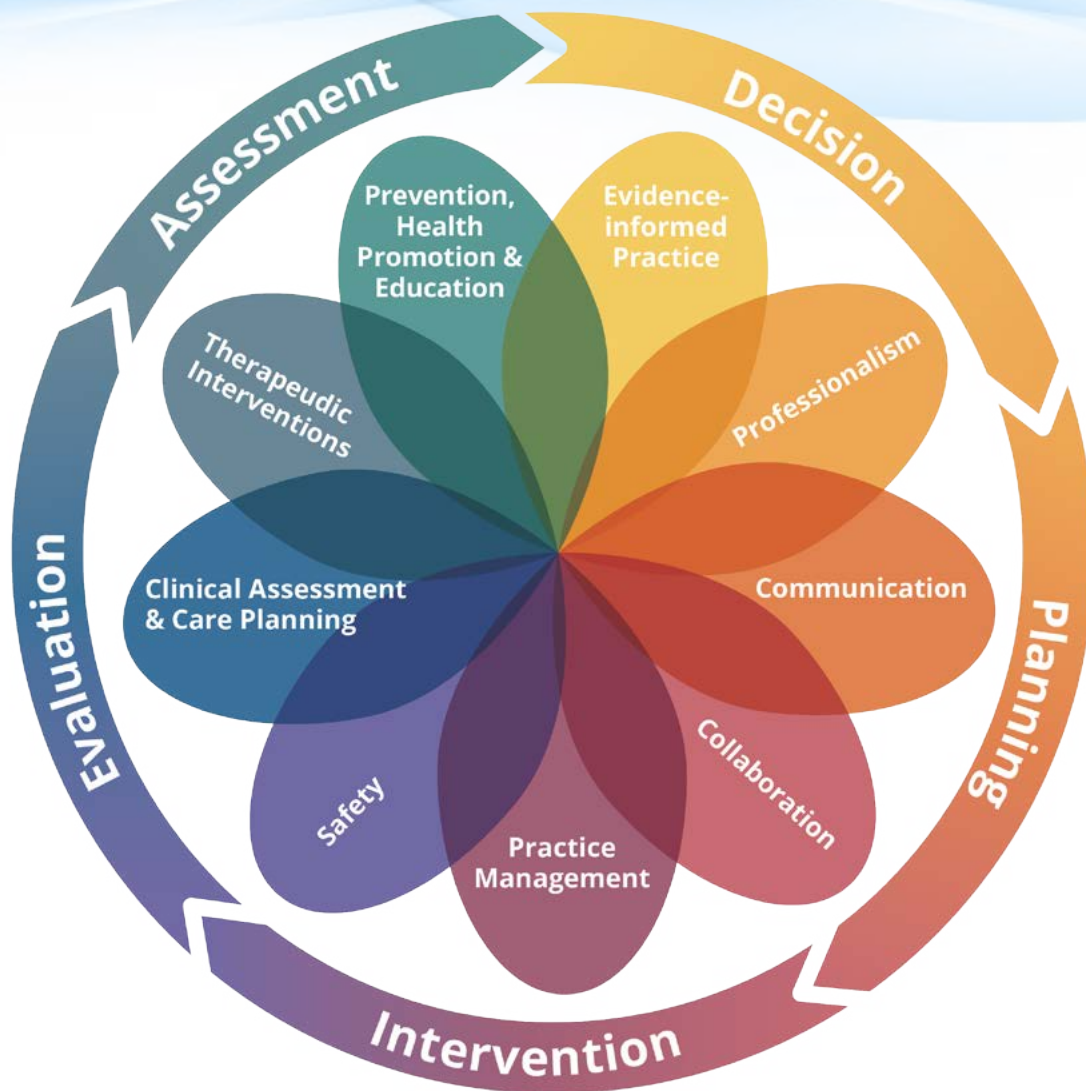


1 The National Competency Framework will be useful for all audiences, but was specifically designed to meet the needs of regulators (including the NARTRB), provincial governments, accreditation bodies, educators, employers, and the public.

2 The Education and Examination Resource will be most useful for educators (including preceptors/clinical supervisors), exam item writers, and respiratory therapists — most notably for the development of their learning plans.

The domains of the respiratory therapist’s expertise are captured in the image below, which was based on the CanMEDS Physician Competency Diagram¹. The image depicts each of the nine domains or areas of competence. The overlapping colours in the centre of the diagram capture the complementary nature of the domains, highlighting that a competent respiratory therapist will continually draw from each of the domains, at times simultaneously.

¹Adapted from the CanMEDS Physician Competency Framework with permission of the Royal College of Physicians and Surgeons of Canada. Copyright ©2015.



The outer ring — Assessment, Decision, Planning, Intervention, Evaluation — is inspired by the ADPIE framework (Assessment, Diagnosis, Planning, Implementation, and Evaluation, American Nursing Association, 2022). This framework is commonly used in healthcare to refer to the process of care. The steps represent a systematic approach to patient care and are used to direct the delivery of care, ensure comprehensive and effective intervention, and guide continuous learning. ADPIE is a cyclical process, which has been integrated throughout the competency profile. Respiratory therapists continually repeat these steps to ensure that the care provided is evidence-based, individualized, and responsive to the changing needs of the patient.

The ADPIE ring serves to highlight key behaviours contained within the process and their applicability to all domains of expertise.

“Diagnosis” is not used in this profile, as it is considered a controlled/reserved act in most jurisdictions. This means that it can only be performed by qualified healthcare professionals who are authorized by law to do so. While respiratory therapists contribute to the determination of a patient’s diagnosis, they are not permitted to do so autonomously. As a result, the term “Decision” is used in this profile.

How to Read the Competencies

A **competency** is made up of a number of elements that present a detailed description of the knowledge, skills, and attitudes required for a profession. Each competency is defined using a short action statement describing what a trained professional must be able to perform to be considered minimally competent at an entry-to-practice level. The verb used provides guidance as to the required level of performance. For example, “assess” is a higher level of performance than “describe”.

The **performance** criteria for each competency detail the behaviours required for proficiency and what is to be assessed. Competence requires all performance criteria to be met.

Clarifications provide explanations or additional information for the competency or performance criteria. Words or phrases that are clarified are shown underlined throughout the document.

For competencies in domains A to F, respiratory therapists must be fully competent and autonomous at entry-to-practice.

Levels of proficiency are identified for competencies in domains G, H, and I.

Clinical Proficiency

All competencies included in this document are required at entry-to-practice. The competencies included in domains A to F require that respiratory therapists be fully competent and autonomous when they enter practice. The degree of proficiency varies for the competencies that pertain to the more “clinical” aspects of the respiratory therapist’s practice (i.e., domains G to I). With end users of the competencies in mind (i.e., students, licensed/registered respiratory therapists, employers, educators, and the public), the expected proficiency for the clinical entry-to-practice competencies that follow is presented from different perspectives. The quick reference icons are used solely for the clinical competencies in domains G to I.

Quick Reference Icons	Education Bloom’s Taxonomy (minimum levels are listed)	Assessment Miller’s Pyramid	Employment Competence
(full circle) 	Cognitive ≥ 5 Affective ≥ 3 Psychomotor ≥ 5	“Does” (as in clinical practice)	Fully competent, autonomous
(partial circle) 	Cognitive 3-4 Affective 2 Psychomotor 3-4	“Knows how”, “Shows how” (as in didactic or simulated contexts)	Not yet fully competent, requires support, additional training, supervision, and/or experience
(blank circle) 	Cognitive 2 Affective 1 Psychomotor 1-2	“Knows” (as in didactic contexts)	Extensive on-the-job training required
n/a	Competency does not apply to one or more patient groups at entry-to-practice		

Those who wish to delve deeper into Miller’s Pyramid or the particulars of the prescribed Bloom’s Taxonomy levels in the cognitive, psychomotor, and affective domains (e.g., educators) may wish to consult Appendix A in this document, as well as Appendices B and C in the Education and Examination Resource.

Assessment Environments and the Assessment of Competence and Learning

The NCF 2024 does not specify assessment environments for the assessment of competence in respiratory therapy education programs. All competencies described in the NCF 2024 must be achieved and assessed in either a clinical, simulated or didactic environment.

In clinical education, assessment is both formative and summative, and verification of competency attainment is best conducted in various ways and at numerous points. It is expected that the competencies included in this profile be assessed in the clinical environment.

Simulation should only be used as a substitute for clinical exposure when a task is either clearly academic or for situations where students will not get sufficient participatory experience due to limited opportunities for exposure while on clinical placement. In examining the evidence, the NARTRB reviewed two key reports on the use of simulation in educational programs (Charania et al., 2016, and Davis et al., 2022). Recognizing that human simulation can only approximate reality, and that single point assessments using human simulation may not be effective to adequately determine the attainment of clinical competency, the reports concluded that competency evaluation in an authentic clinical practice environment (i.e., summative evaluation) remains the “gold standard”.

The authors further stated that summative assessment in the human simulated environment may be acceptable only under exceptional circumstances such as those involving neonatal, pediatric, or advanced cardiac life support resuscitation competencies, such as to address limitations in achieving and/or accessing clinical exposure.

For accreditation purposes, the education program should document any cases where competence cannot be verified clinically. It is the responsibility of the education program to ensure, through the assessment of competencies, that the graduate respiratory therapist is competent to practice safely and effectively at an entry-to-practice level in the current healthcare environment.



THE COMPETENCIES

A — Evidence-informed Practice

COMPETENCY		PERFORMANCE CRITERIA
A1	Apply evidence to practice	A1.1 Use the best available <u>evidence</u> in making decisions about patient care A1.2 Consider the patient’s individual health state, risks, and benefits from potential interventions A1.3 Consider patient’s beliefs, values, and goals in development of care plan A1.4 Access <u>reliable</u> evidence A1.5 Analyze evidence while reflecting on one’s observations and experience
A2	Use critical thinking, problem-solving, and reasoning skills	A2.1 Assess complex <u>issues</u> from many points of view A2.2 Apply a methodical and scientific approach to solving problems A2.3 Develop approaches for managing ambiguities, incomplete information, and uncertainty A2.4 Use evidence and other knowledge sources to draw conclusions A2.5 Assess the outcome of a decision A2.6 Apply experiential knowledge to guide future actions
A3	Participate in projects and professional initiatives to support and improve service delivery	A3.1 Participate in activities, programs, and <u>quality improvement processes</u> A3.2 Reflect on progress, impact, and necessary changes to practice A3.3 <u>Participate</u> in research projects

CLARIFICATIONS

Evidence	e.g., standards of practice, clinical practice guidelines, protocol, policies, literature, dissemination of scientific knowledge through social media
Issues	applies to clinical issues, system issues that directly impact the care and safety of the patient, and equipment-related problems
Participate	e.g., collect data, participate in a literature review or Delphi survey
Projects and professional initiatives	e.g., developing or improving team collaboration, implementation of new electronic health record system
Quality improvement processes	e.g., reflective practice, surveys, organizational procedures, informal feedback
Reliable	e.g., recent peer-reviewed journals, guidelines published by regulatory bodies and learned societies, credible media sources

B — Professionalism

COMPETENCY		PERFORMANCE CRITERIA
B1	Exhibit professional behaviour	B1.1 Conduct oneself in a <u>professional manner</u> at all times B1.2 Act in an impartial and objective manner B1.3 Manage conflicts of interest B1.4 Maintain organizational and public trust in the profession
B2	Act in accordance with professional responsibilities	B2.1 Adhere to the <u>scope</u> of respiratory therapy practice B2.2 Adhere to professional clinical, legal, and ethical guidelines/regulations B2.3 Adhere to organizational policies and procedures B2.4 Report unsafe, unethical, or incompetent practices to the relevant authorities
B3	Maintain personal <u>health and well-being</u>	B3.1 Reflect on the impact of practice on personal health and wellbeing B3.2 Pursue opportunities to maintain health and well-being B3.3 Take action when ability to practise safely, competently, or ethically is at risk B3.4 Report situations in the practice environment that may affect well-being or ability to practise safely
B4	Demonstrate a commitment to continuous learning	B4.1 Engage in <u>reflective practice</u> B4.2 Set personal goals and formulate a plan for personal professional development B4.3 Seek <u>opportunities</u> for professional development B4.4 Integrate new knowledge and skills into practice

CLARIFICATIONS

Health and well-being	physical health, psychological and emotional stability, and social engagement; not merely the absence of disease or impairment
Opportunities	e.g., informal (both outside work and at work), formal programs (education and training), assessment, gaining a qualification, continuing education required by the regulatory body
Professional manner	behaviour and presentation in accordance with professional standards and expectations, and articulation of a positive role and professional image
Reflective practice	the ability to reflect on one's actions so as to engage in a process of continuous learning
Scope	legislative, employment, personal

C — Communication

COMPETENCY		PERFORMANCE CRITERIA
C1	Demonstrate effective verbal and non-verbal communication skills	C1.1 Communicate in a transparent, clear, and timely manner
		C1.2 Use effective <u>methods</u> to obtain a comprehensive medical history
		C1.3 Employ active listening techniques
		C1.4 Adapt communication according to patient's needs and <u>health literacy</u>
		C1.5 Provide accurate <u>transfer of information</u>
		C1.6 Adjust communication style according to urgency of the situation
		C1.7 Use respectful <u>cross-cultural communication</u>
C2	Communicate effectively through <u>documentation</u>	C2.1 Document pertinent information in the health <u>record</u> according to legislative and organizational requirements
		C2.2 Ensure private, confidential, and timely delivery of requests, reports and correspondence outside the health record
		C2.3 Use <u>electronic and information technologies</u> according to organizational protocols
		C2.4 Complete <u>administrative reports</u> according to organizational protocols
C3	Demonstrate empathy and respect towards the patient and family	C3.1 Respect the rights, privacy, and dignity of all individuals
		C3.2 Minimize the effects of <u>psychosocial stress factors</u> on the patient and family
		C3.3 Establish a caring, supportive attitude and behaviour towards the patient and family
		C3.4 Communicate in a manner that is respectful of individual <u>diversity</u>
		C3.5 Practise <u>cultural humility</u>
		C3.6 Practise <u>cultural safety</u>

C — Communication

CLARIFICATIONS

Administrative reports	e.g., equipment reports, requisitions, incident reports, workload measurement reports
Cross-cultural communication	a dialogue or any kind of interaction (both verbal and non-verbal) between people of different cultures, which aims to foster strong relationships with people from diverse backgrounds
Cultural humility	a process of self-reflection to understand personal and systemic biases, and to develop and maintain respectful processes and relationships based on mutual trust. Cultural humility involves humbly acknowledging oneself as a learner when it comes to understanding another's experience (First Nations Health Authority, 2023)
Cultural safety	an outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the health care system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care (First Nations Health Authority, 2023)
Diversity	e.g., age, ancestry, colour, citizenship, disability, family status, gender, marital status, place of origin, political beliefs, religion, sexual orientation, or source of income
Documentation	includes written, recorded or drawn and stored on paper, digitally or on a recording device
Electronic and information technologies	e.g., computer software, multimedia products, telepractice technologies, web-based information and applications – including social media
Health literacy	the degree to which patients can find, understand, and use information and services to inform health-related decisions and actions for themselves and others
Methods	such as interview techniques (e.g., structured interview questionnaire, open-ended questions, paraphrasing, summarizing, focusing, using silence, non-verbal encouragement)
Psychosocial stress factors	include beliefs, concerns, expectations, and illness experience
Record	includes records of medication and substance administration
Transfer of information	e.g., during shift reports, handover of care, transition points

D — Collaboration

COMPETENCY		PERFORMANCE CRITERIA	
D1	Establish professional relationships with patients and families	D1.1	Establish a mutual understanding of presenting problem and circumstances
		D1.2	Obtain informed consent, or seek assent on behalf of those who are unable to provide informed consent
		D1.3	Collaborate with patients and families in decision-making and care planning
		D1.4	Promote autonomy and <u>self-determination</u>
D2	Collaborate within an <u>interprofessional health care team</u>	D2.1	Build mutual trust by being fair, reliable, consistent, and credible
		D2.2	Collaborate with health care team in decision-making and care planning
		D2.3	Support team members through <u>encouraging behaviours and practices</u>
		D2.4	Take appropriate <u>steps</u> if a care plan or order may compromise a patient's health or well-being
		D2.5	Clarify overlapping scopes of practice to support a collaborative approach to patient care
		D2.6	Use conflict management strategies

CLARIFICATIONS

Encouraging behaviours and practices	e.g., communicate frequently, remain available, encourage expression of ideas, set reasonable expectations, offer praise and constructive feedback
Interprofessional health care team	e.g., occupational therapist, social worker, public health staff, general practitioner, nurse practitioner
Self-determination	a person's ability to make choices and manage their own life, which in turn influences their health and well-being
Steps	e.g., discuss, consult, seek guidance, document, refuse to act

E — Practice Management

COMPETENCY		PERFORMANCE CRITERIA
E1	Use <u>resources</u> responsibly and efficiently	E1.1 Reflect on the <u>impact</u> of one's use of resources
		E1.2 Use effective organizational and time management skills
		E1.3 Prioritize clinical activities according to the situation
		E1.4 Contribute to an environmentally responsible culture within the practice setting
E2	Participate in organizational or professional activities	E2.1 Participate in <u>meetings or committees</u>
		E2.2 Assist with student and new staff orientation
		E2.3 Participate in peer and student training/assessment

CLARIFICATIONS

Impact	e.g., on the environment, on the cost of care
Meetings or committees	e.g., professional body, professional association, committees
Resources	e.g., energy, time, equipment, material, and other physical resources

F — Safety

COMPETENCY		PERFORMANCE CRITERIA
F1	Adhere to workplace health and safety standards	F1.1 Continuously <u>assess</u> the practice environment
		F1.2 Perform <u>point-of-care risk assessment</u>
		F1.3 Handle and safely dispose biohazardous materials
		F1.4 <u>Handle</u> dangerous substances and materials in accordance with safety standards
		F1.5 Utilize equipment and supplies in accordance with safety standards
		F1.6 <u>Utilize and store</u> medical gases and liquids in a safe manner
		F1.7 Apply <u>preventive measures</u> to maximize health and safety according to the occupational safety, health, and wellness program
F2	Manage patient safety risks	F2.1 Implement current infection prevention and control measures
		F2.2 Assess the potential for <u>harm</u>
		F2.3 Determine <u>measures</u> to be taken based on assessed risks
		F2.4 Seek assistance with novel or unfamiliar situations and equipment
		F2.5 Select the best available equipment for the required intervention
F3	Respond to patient safety incidents	F3.1 Manage immediate risks for patients and others affected
		F3.2 <u>Disclose</u> the occurrence of a patient safety incident
		F3.3 Take part in timely event analysis, reflective practice and planning to prevent recurrence

CLARIFICATIONS

Assess	e.g., for health and safety, risks, prevention/management of incidents or accidents
Disclose	e.g., to patient, supervisor, employer, relevant authorities to the patient and/or their families in keeping with relevant legislation
Handle	as outlined in Workplace Hazard Information and Material System (WHMIS 2015)
Harm	consider causes, effects, constraints, and mitigation strategies
Health and safety standards	includes legislated safety standards, ministerial orders
Measures	e.g., optimizing patient positioning when prone or supine, using exposure control practices, barriers, personal protective equipment
Point-of-care risk assessment	a routine practice that is conducted before every patient interaction to assess the likelihood of exposure to infectious agents
Preventive measures	e.g., lifts and transfers of patients, ergonomics, vaccination, violence in the workplace
Utilize and store	according to Transport Canada regulations

G — Clinical Assessment and Care Planning

COMPETENCY		PERFORMANCE CRITERIA	PROFICIENCY		
			ADULT	PEDS	NEO
G1	Assess patient's <u>clinical status</u>	G1.1 Collect pertinent information	●	●	●
		G1.2 Analyze and interpret data collected	●	●	●
G2	Utilize cardiopulmonary testing	G2.1 Perform pulmonary function testing	●	●	n/a
		G2.2 Perform electrocardiogram and cardiac stress testing	●	◐	◐
		G2.3 Perform tests for sleep related breathing disorders	◐	◐	n/a
		G2.4 Perform other point-of-care testing	◐	◐	◐
		G2.5 Analyze and <u>interpret results</u> from cardio-pulmonary tests	●	●	n/a
G3	Create and implement care plan	G3.1 Determine patient needs that can be met through cardiorespiratory intervention	●	●	●
		G3.2 Design the care plan using a collaborative process	●	●	●
		G3.3 Monitor and respond to patient's clinical status during intervention	●	●	●
		G3.4 Adjust care plan as required	●	●	●
		G3.5 Develop a discharge or transition of care plan	●	●	●

CLARIFICATIONS

Clinical status	overall condition of a patient's health based on various clinical factors. Used to assess and monitor a patient's progress, response to intervention, and overall prognosis
Interpret results	ventilator waveforms and pulmonary mechanics

H — Therapeutic Interventions

COMPETENCY			PERFORMANCE CRITERIA			PROFICIENCY		
						ADULT	PEDS	NEO
H1	<u>Administer medications or other substances</u>	H1.1	Ensure appropriateness and safety of medication or other substances					
		H1.2	Prepare medications or other substances following <u>monograph and workplace hazard best practice guidelines</u>					
		H1.3	Administer medications or other substances using various routes and techniques					
		H1.4	Evaluate response to medication or substance administration					
H2	<u>Manage airway</u>	H2.1	Assess patency of the airway					
		H2.2	<u>Manage artificial airway devices</u>					
		H2.3	Perform manual ventilation					
		H2.4	Perform humidity therapy					
		H2.5	Perform broncho-pulmonary hygiene					
		H2.6	Assist with bronchoscopy procedures					n/a
H3	<u>Manage ventilation</u>	H3.1	Optimize invasive and non-invasive mechanical ventilation support					
		H3.2	Perform lung volume recruitment manoeuvres					n/a
H4	<u>Perform resuscitation</u>	H4.1	Distinguish, assess, and rapidly intervene as per <u>resuscitation guidelines</u>					
		H4.2	Perform basic life support					
		H4.3	Perform adult advanced life support				n/a	n/a
		H4.4	Perform pediatric life support			n/a		n/a
		H4.5	Perform neonatal resuscitation			n/a	n/a	

H — Therapeutic Interventions

COMPETENCY		PERFORMANCE CRITERIA	PROFICIENCY		
			ADULT	PEDS	NEO
H5	Perform (assist with) invasive vascular access	H5.1 Select sites and procedures appropriate to the <u>clinical situation</u>			
		H5.2 <u>Manage vascular access</u>			
		H5.3 <u>Manage arterial lines</u>			
		H5.4 Perform arterial punctures			
		H5.5 Collect samples using an indwelling catheter			
		H5.6 Assist with vascular access through central lines/ pulmonary artery catheter			
H6	Assist or provide supplementary therapies	H6.1 Provide thermal regulation			
		H6.2 Assist with <u>gastric and thoracic suction and drainage techniques</u>			
H7	Implement interventions associated with anesthesia assistance and analgesic sedation	H7.1 Maintain homeostasis of a patient during anesthesia and sedation			
		H7.2 Manage the patient during anesthesia and sedation			

H — Therapeutic Interventions

CLARIFICATIONS

Administer	according to scope and standards of practice
Artificial airway devices	e.g., endotracheal tube, tracheostomy tube, laryngeal mask, oropharyngeal and nasopharyngeal airway, Heat and Moisture Exchange (HME) device
Clinical situation	includes critical care, emergency care, intensive care, community care, transport of a patient
Gastric and thoracic suction and drainage techniques	according to provincial and territorial scope of practice
Manage	includes select, insert, position, remove
Manage arterial lines	according to provincial and territorial scope of practice, "manage" may include "insert"; includes basic operation of ultrasound equipment
Manage vascular access	according to provincial and territorial scope of practice, "manage" may include "inserting, withdrawing, repositioning"; includes basic operation of ultrasound equipment
Manage ventilation	includes select, apply, adjust, wean based on patient condition and response
Monograph	information provided by the drug manufacturer to the health care team
Resuscitation guidelines	ATLS, STABLE, ACORN, PALS/APLS, BLS, ACLS, NRP
Workplace hazard best practice guidelines	in compliance with current Workplace Hazardous Materials Information System (WHMIS)

I — Prevention, Health Promotion, and Education

COMPETENCY		PERFORMANCE CRITERIA	PROFICIENCY		
			ADULT	PEDS	NEO
I1	Teach patients and those involved in care	I1.1 Promote cardio-respiratory health and illness prevention	●	●	●
		I1.2 Consider relevant <u>determinants of health</u> and readiness to learn	●	●	●
		I1.3 Raise awareness in the care team to support the cardio-respiratory health of others	●	●	●
		I1.4 Provide education to support development of self-management skills	●	●	●
		I1.5 <u>Consult</u> on the use of cardiorespiratory equipment	●	●	●
I2	Advocate for access to care	I2.1 Explore approaches for issues in need of advocacy	●	●	●
		I2.2 Participate in advocacy <u>activities</u> that promote cardio-respiratory health and illness prevention	●	●	●
		I2.3 Collaborate with the care team to address the needs of patients who are vulnerable or marginalized	●	●	●
		I2.4 Support patients in <u>system navigation</u>	◐	◐	◐

CLARIFICATIONS

Access to care	may involve finding providers, obtaining insurance, or receiving care not delivered in a traditional clinical setting
Activities	e.g., smoking cessation, anaphylaxis in schools, asthma, sleep hygiene, telemedicine
Consult on	includes virtual consultation on the use of respiratory therapy equipment by another health care professional (e.g., respiratory therapist provides direction to physician who is in a remote location)
Determinants of health	includes physical, social, structural
System navigation	e.g., transitioning from pediatric to adult system; identifying available resources such as community-based services, other health professionals
Teach	provide education to, and engage in, activities with patients, family members, community, advocates, caregivers, colleagues, and health care professionals

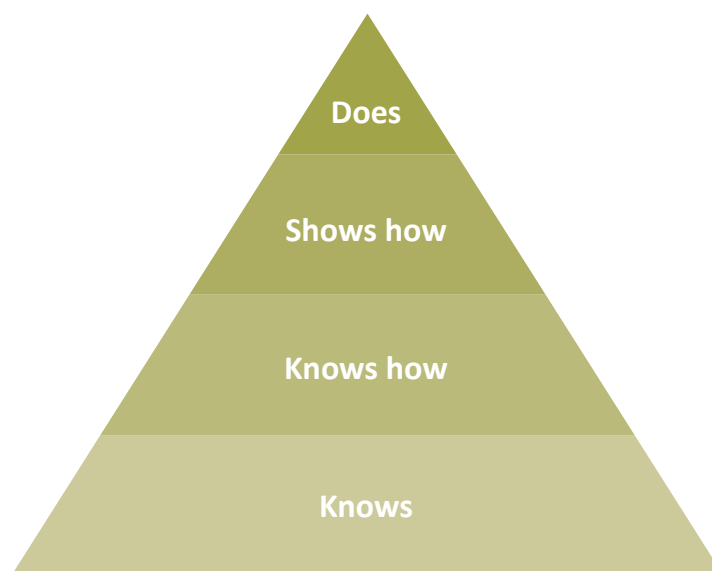
APPENDIX A



Miller's Pyramid

Miller's Pyramid of clinical competence (Miller, 1990) is a theoretical framework that describes the stages of development and progression of clinical skills and competence. The pyramid was proposed by George Miller, an American psychologist, in 1990.

Miller's Pyramid consists of four levels, each representing a different stage of competency acquisition: knowledge (*knows*), competence (*knows how*), performance (*shows*), action (*does*):



The pyramid illustrates that knowledge alone is insufficient to ensure competent clinical practice. As learners progress through the levels, they develop the necessary skills, judgment, and experience to become competent healthcare professionals.

Bloom's Taxonomy

The Taxonomy of Educational Objectives, known as Bloom's Taxonomy (Bloom, Engelhart, Furst & Krathwohl, 1956) is a hierarchical framework that classifies educational objectives and learning outcomes. It has become a widely used tool by educators to create learning outcomes that target not only subject matter, but also the depth of learning they want students to achieve, and then to create assessments that accurately report on students' progress towards these outcomes (Anderson & Krathwohl, 2001).

Bloom's Taxonomy comprises three learning domains: the cognitive, affective, and psychomotor, and assigns to each of these domains a hierarchy that corresponds to different levels of learning. In other words, each level subsumes the levels that precede it.

The following table, which is an adaptation of Bloom's Taxonomy, outlines the various levels for each domain, along with their associated descriptor. These are accompanied by a list of key verbs that are associated with each of the levels.

The Domains of Learning (Sherbino & Frank, 2011)

LEVEL	DESCRIPTOR	KEY VERBS
COGNITIVE DOMAIN		
1	Knowledge	Recalls data or information
2	Comprehension	Demonstrates understanding
3	Application	Applies what was learned to clinical practice
4	Analysis	Separates material into component parts and shows relationship between parts
5	Synthesis	Uses diverse elements to form a whole with new meaning
6	Evaluation	Makes judgments about the value of ideas or materials

AFFECTIVE DOMAIN		
1	Receiving	Willingly hears and considers
2	Responding	Attends and reacts to a particular phenomenon
3	Valuing	Attaches worth to a particular object, phenomenon or behaviour
4	Organizing	Organizes values into priorities, with an emphasis on comparing, relating, and synthesizing
5	Internalizing	Acts consistently in accordance with internalized values

PSYCHOMOTOR DOMAIN		
1	Perception	Uses sensory cues to guide motor activity
2	Set	Possesses a mental, physical, or emotional state underpinning a readiness to act
3	Guided response	Imitates, follows instruction, trial and error
4	Mechanism	Applies learned responses habitually and with increasing confidence
5	Complex overt response	Performs without hesitation or automatically
6	Adaptation	Modifies skills to fit special requirements
7	Origination	Shows creativity based on highly developed skills

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