
NATIONAL OCCUPATIONAL COMPETENCY PROFILES

FOR

PARAMEDIC PRACTITIONERS



Paramedic Association of Canada

June 2001

National Occupational Competency Profiles for Paramedic Practitioners

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Introduction

National Occupational Competency Profiles for Paramedic Practitioners, June 2001

This document contains a set of four integrated competency profiles that define the work of paramedic practitioners nationally.

A competency profile is included for each of the following practitioner levels:

- Emergency Medical Responder
- Primary Care Paramedic
- Advanced Care Paramedic
- Critical Care Paramedic

The Paramedic Association of Canada (PAC) introduced these practitioner levels in March 2000, together with an initial competency profile for each. This was done to promote national consistency in paramedic training and practice, and to enhance job mobility for practitioners.

The initial competency profiles were reviewed and refined to produce the new profiles contained in this document. The new profiles do not expand the practitioner roles that were introduced in March 2000. They provide a more precise definition of the occupational competencies, and better indicate how competency can be determined. The Board of Directors of PAC approved the new profiles on June 29 2001.

Practitioner Levels

The Emergency Medical Responder (EMR) has successfully completed a recognized training program in emergency patient care and transportation. EMRs are part of the foundation upon which Canadian emergency medical systems are built. They are often associated with volunteer emergency services organizations in rural and remote areas, and may be

the sole provider of emergency services in some communities. EMRs may be responsible for initial assessments, the provision of safe and prudent care, and the transport of a patient to the most appropriate health care facility. "First Responders" (as found in a tiered response, industrial and / or recreational setting) may be included within the EMR level, although in many settings First Responders do not provide patient transport. The EMR competency profile does not include controlled or delegated medical acts.

The Primary Care Paramedic (PCP) has successfully completed a recognized educational program in paramedicine at the primary care level. PCPs may be volunteer or career paramedics associated with urban, suburban, rural, remote, industrial, air ambulance and / or military services. PCPs constitute the largest group of paramedic practitioners in Canada. They are expected to demonstrate excellent decision-making skills, based on sound knowledge and principles. Controlled or delegated medical acts¹ identified in the PCP competency profile include semi-automated defibrillation and the administration of certain medications.

The Advanced Care Paramedic (ACP) has successfully completed a recognized educational program in paramedicine at the advanced care level. Such programs often require prior certification at the PCP level (or equivalent). ACPs are most often employed by urban, suburban, air ambulance and / or military services. Currently relatively few ACPs are found in rural areas. ACPs are expected to build upon the foundation of PCP competencies, and apply their added knowledge and skills to provide enhanced levels of assessment and care. This includes the added responsibilities and expectations related to an increased number of controlled or delegated medical acts available. Controlled or delegated medical acts¹ identified in the ACP competency profile include advanced techniques to manage life-threatening problems affecting patient airway, breathing, and circulation. ACPs may implement treatment measures that are invasive and / or pharmacological in nature.

The Critical Care Paramedic (CCP) has successfully completed a recognized educational program in paramedicine at the critical care level. This is currently the highest level of paramedic certification available. CCPs are most often associated with large urban and / or air ambulance services, and are not found in all provinces. The CCP is expected to perform thorough assessments that include the interpretation of patient laboratory and radiological data. CCPs' high levels of

¹ Successful completion of an educational program that has provided instruction in the provision of controlled or delegated medical acts does not sanction a paramedic practitioner to implement these acts without formal, defined medical control.

decision-making and differential discrimination skills relating to patient care, result in their implementing treatment measures both autonomously and after consultation with medical authorities. Many controlled or delegated medical acts¹ are available to the CCP. Those identified in the CCP competency profile include the use of invasive hemodynamic monitoring devices and advanced techniques to manage life-threatening problems affecting patient airway, breathing, and circulation. CCPs typically implement treatment measures that are invasive and / or pharmacological in nature.

The competencies at each practitioner level are cumulative, in that each level includes, and exceeds, the competencies of the previous level. Furthermore the competencies defined in these profiles are the minimum required at each practitioner level. Employment jurisdictions can, and frequently do, exceed these requirements.

Regulation of Paramedic Practice and Approval of Training Programs

The practice of paramedicine in Canada is regulated by each province or, in the case of federal jurisdictions such as the military, by an appropriate federal authority.

Each regulator is free to determine the scope of practice and practitioner classification system that applies in its jurisdiction. Similarly the regulator may approve training program(s) that are a prerequisite to employment.

A number of regulators are aligning their practitioner classifications with PAC's levels.

In addition to complying with local regulatory requirements, many training programs across the country have elected to participate in the voluntary national accreditation process for paramedic training administered by the Canadian Medical Association (CMA). CMA issues *Requirements for Accreditation* that include an expectation that a program ensures that its graduates possess the competencies determined by the national professional association.

¹ Successful completion of an educational program that has provided instruction in the provision of controlled or delegated medical acts does not sanction a paramedic practitioner to implement these acts without formal, defined medical control.

CMA accredits paramedic programs at the PCP, ACP and CCP levels. In order to be eligible for CMA accreditation, programs must identify the level that applies to them and must demonstrate that their graduates meet (or exceed) every specific competency listed in corresponding profile contained in this document.

The profiles include requirements related to the physical skills of lifting patients and performing certain other physical acts. Employment opportunities may exist wherein paramedics are not required to perform such physical acts. In some jurisdictions regulators require that an individual be fully credentialed as a practitioner, prior to entering a position that does not require such physical acts. PAC does not intend that the competency profiles be used to as a barrier to training for a physically disabled individual who wishes to practice as a non-classic paramedic. In these situations PAC recommends that educational institutions allow such individuals to complete training in relevant competencies, and provide a graduation credential that clearly identifies appropriate restrictions.

Related Publications for Educators

During the development of the competency profiles, PAC has produced some related documents that assist in defining the paramedic profession:

- *Essential Skills Profile (June 8 2000)*
- *Links Between Essential Skills and Occupational Competencies (March 2001)*

The Essential Skills are enabling skills that provide individuals with part of the foundation necessary to learn paramedic-specific knowledge and skills, and to function in the workplace. Essential Skills include the following:

- Reading Text
- Use of Documents
- Writing
- Numeracy
- Oral Communication

- Thinking Skills (problem solving, decision making, job task planning and organizing, significant use of memory and finding information)
- Working with Others
- Computer Use

In general, paramedic training programs do not include training in the Essential Skills. It is common practice, however, for programs to require incoming students to have demonstrated some degree of mastery of Essential Skills through either general educational prerequisites (such as grade 12 graduation, completion of English 12, etc) or through informal assessment (such as an admission interview process).

Certain Essential Skills areas, particularly Thinking Skills, are commonly not addressed in a formal manner through prerequisite requirements or informal assessment. Nor are they typically included as training program content. It is assumed instead that students either have developed these skills already through their life experiences, or that they will do so informally as they complete their paramedic training. Students unable to do so may fail to successfully complete their training program, or may have difficulty gaining or retaining employment.

Although incorporation of the Essential Skills is not a requirement, PAC encourages training programs to address the need for these skills in a comprehensive and formal manner, either through prerequisite requirements or through coursework within the program.

- *Foundation Knowledge Profile (August 2001)*

Foundation Knowledge is enabling knowledge that provides part of the foundation necessary to learn paramedic-specific knowledge and skills.

The Foundation Knowledge Profile defines knowledge in two areas:

- Life sciences (biochemistry, human biology, anatomy and physiology)
- Physical sciences (chemistry, physics)

Paramedic training programs vary in their approach to the Foundation Knowledge areas. Some programs require incoming students to have completed specific educational prerequisites (such as chemistry 12, a human anatomy and physiology course, etc). Other programs provide this material as formal coursework within paramedic training.

Although the incorporation of Foundation Knowledge is not a requirement, PAC encourages programs to address this need in a comprehensive and formal manner, either through prerequisite requirements or through coursework within the program.

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Structure of the Profiles and Definition of Terms

Organization of the Profiles

This document contains four distinct competency profiles. These appear in a single listing to facilitate review and comparison of practitioner levels.

Although the profiles are distinct, they utilize the same basic structure and format. Furthermore, the four profiles are *progressive*, in that the knowledge and skills of the PCP incorporate, and build further upon, the knowledge and skills of the EMR. Similarly ACP incorporates and builds on PCP, and CCP incorporates and builds on ACP.

The profiles are structured as follows.

Seven *Competency Areas* are identified:

1. Professional Responsibilities
2. Communication
3. Health and Safety
4. Assessment and Diagnostics
5. Therapeutics
6. Integration
7. Transportation

Within each Competency Area, a number of *General Competencies* are listed. General Competencies in Area 1 are numbered 1.1, 1.2 and so on.

For each *General Competency* there are a series of *Specific Competencies* that are numbered 1.1.a, 1.1.b etc.

Each Specific Competency is further broken down into a number of *Sub-Competencies*. The Sub-Competencies define the Specific Competency in more detail. Sub-Competencies are not numbered.

The work of developing Sub-Competencies is sometimes termed “curriculum blueprinting” because, in effect, it establishes the curriculum outline for a training program in terms of *learning outcomes* or *enabling competencies*.

The Sub-Competencies are not intended to dictate learning strategies, instructional processes or assessment techniques to be utilized by trainers. Rather, the profiles are intended as a tool for educators and program reviewers, to assist in determining whether a particular educational program includes the competency requirements of PAC.

Performance Environment and Performance Actions

For each Specific Competency the profiles list a *Performance Environment*.

The Performance Environment specifies the setting in which the practitioner must demonstrate competence. The following notation and definitions apply to Performance Environments:

Performance Environment	DEFINITION
N	The competency is <i>not applicable</i> to the practitioner.
X	The practitioner should have a <i>basic awareness</i> of the subject matter of the competency. The practitioner must have been provided with or exposed to basic information on the subject, but evaluation is not required.
A	The practitioner must have demonstrated an <i>academic understanding</i> of the competency. Individual evaluation is required.

Performance Environment	DEFINITION
S	<p>The practitioner must have demonstrated the competency in a <i>simulated setting</i>. Individual evaluation of physical application skills is required, utilizing any of the following:</p> <ul style="list-style-type: none"> practical scenario skill station mannequin cadaver live subject (human or non-human). <p>In Competency Areas 4 and 5, skills must be demonstrated on a human subject where legally and ethically acceptable.</p>
C	<p>The practitioner must have demonstrated the competency in a <i>clinical setting</i> with a patient. Individual evaluation of physical application skills is required. An acceptable clinical setting is any of the following:</p> <ul style="list-style-type: none"> hospital health clinic medical office nursing home. <p>Alternate clinical settings must be appropriate to the Specific Competency being evaluated.</p>
P	<p>The practitioner must have demonstrated the competency in a field <i>preceptorship</i> with a patient. Individual evaluation of physical application skills is required. An acceptable field preceptorship setting is a land ambulance service. Alternate field preceptorship settings must be appropriate to the Specific Competency being evaluated.</p>

Every Sub-Competency statement includes a specific *performance action verb*. Performance action verbs indicate precisely what is expected of the practitioner in order to demonstrate competence. Performance action verbs are defined in the following table. Although many of these verbs are in everyday usage, users of the profiles are cautioned that Sub-Competency statements should be interpreted only in the context of the following definitions.

COGNITIVE ACTIONS (knowledge) (Ranked in order of increasing complexity)		
1	<i>List</i>	To create a related series of names, words or other items.
2	<i>Identify</i>	To ascertain the origin, nature or definitive characteristics of an item.
3	<i>Define</i>	To state the precise meaning.
4	<i>Describe</i>	To give an account of, in speech or in writing.
5	<i>Discuss</i>	To examine or consider (a subject) in speech or in writing.
6	<i>Organize</i>	To put together into an orderly, functional, structured whole.
7	<i>Distinguish</i>	To differentiate between.
8	<i>Explain</i>	To make plain or comprehensible.
9	<i>Apply</i>	To prepare information for use in a particular situation.
10	<i>Analyze</i>	To separate into parts or basic principles so as to determine the nature of the whole; to examine methodically.
11	<i>Solve</i>	To work out a correct solution.
12	<i>Modify</i>	To change in form or character; to alter.
13	<i>Infer</i>	To reason from circumstance; to surmise.
14	<i>Synthesize</i>	To combine so as to form a new, more complex product.
15	<i>Evaluate</i>	To examine and judge carefully; to appraise.

AFFECTIVE ACTIONS (attitudes / beliefs) (Not rank ordered)	
<i>Assist</i>	To give help or support.
<i>Choose</i>	To select from a number of alternatives.
<i>Justify</i>	To show to be reasonable.
<i>Receive</i>	To acquire and accept.
<i>Acknowledge</i>	To recognize as being valid.
<i>Value</i>	To place worth and importance.

	PSYCHOMOTOR ACTIONS (skills) (Grouped as Low, Medium, High complexity)	
L	<i>Demonstrate</i>	To show clearly and deliberately a behaviour.
L	<i>Set-up</i>	To gather and organize the equipment needed for an operation, a procedure, or a task.
M	<i>Communicate</i>	To convey information about; to make known; to impart.
M	<i>Operate</i>	To perform a function utilizing a piece of equipment.
M	<i>Perform</i>	To take action in accordance with requirements.
H	<i>Adapt</i>	To make suitable to or fit for a specific use or situation.
H	<i>Adjust</i>	To change so as to match, or fit; to cause to correspond.
H	<i>Integrate</i>	To make into a whole by bringing all relevant parts together.

In the cognitive and psychomotor areas, the ranking of performance action verbs in order of increasing complexity has enabled the Sub-Competencies to be written in a manner that differentiates the performance expectations between practitioner levels.

For example, consider the following Sub-Competency statements:

	EMR	PCP	ACP	CCP
5.2.a Recognize indications for oxygen administration.	Identify indications for oxygen administration.	Describe indications for oxygen administration.	Discuss indications for oxygen administration.	Discuss indications for oxygen administration.

Here the knowledge level related to indications for oxygen administration of the PCP is expected to be greater than that of the EMR. The ACP is expected to have greater knowledge than the PCP. The ACP and the CCP are expected to possess identical knowledge levels.

In the following example:

	EMR	PCP	ACP	CCP
5.5.a Conduct infant, child and adult CPR according to accepted cardiac care guidelines.	Perform CPR.	Perform CPR.	Perform CPR.	Perform CPR.

all four practitioner levels are expected to possess the same level of this psychomotor competency.

This can be summarized as a general rule:

- When comparing Sub-Competency statements across practitioner levels:
- If the performance action verbs are identical, the expectations of practitioner competence are identical.
 - If the performance action verbs are different, the expectations of practitioner competence are different.

This rule applies in all Competency Areas except Area 6, Integration. In the Integration area the competency expectations always increase across practitioner levels even if the performance action verbs are identical. This expectation is inherent in the Integration Sub-Competencies since it is here that practitioners are expected to blend their total knowledge and experience base in providing patient care.