

---

# NATIONAL OCCUPATIONAL COMPETENCY PROFILE

## FOR EMERGENCY MEDICAL RESPONDERS



Paramedic Association of Canada

[www.paramedic.ca](http://www.paramedic.ca)

## Contents

1.	Introduction .....	3
2.	Method .....	5
3.	Today's EMR .....	5
4.	Current Challenges with EMR's in Canada .....	6
I.	Regulatory Shortcomings .....	6
II.	Educational Shortcomings.....	7
III.	Practice Shortcomings .....	8
5.	Vision for the Redeveloped NOCP .....	8
6.	Competencies and the Profile .....	12
7.	Sub-Competencies & Performance Criteria.....	13
8.	Skills, Knowledge, Abilities and Personal Characteristics.....	16
9.	Proficiency Continuum and Measurable Standards.....	17
I.	Evaluating and Measuring Technical Competencies .....	17
II.	Evaluating and Measuring Behavioral Competencies and Personal Characteristics	19
10.	Proficiency as per the Association of Canada.....	19
11.	PAC's Approach to Competencies.....	20
12.	Competency Areas and General Competencies .....	20

13. Educating to the Competency Profile.....	22
14. Emergency Competency Profile.....	23
AREA #1 - Professional Responsibilities.....	23
AREA #2 - Communication.....	28
AREA #3 - Health and Safety.....	32
AREA #4 - Assessment and Diagnostics.....	35
AREA #5 - Therapeutics.....	42
AREA #6 - Integration.....	50
AREA #7 - Transportation.....	53
AREA #8 - Health Promotion and Public Safety.....	54
Appendix -1 Pathophysiology.....	56
Appendix -2 Pharmacologic Agents.....	60
(INSERT REFERENCES).....	61
Acknowledgements.....	61

## I. Introduction

The 2015 *Emergency Medical Responder (EMR)* Competency Profile is a component of the Paramedic Association of Canada’s (PAC) commitment to modernize paramedic practice across the country. PAC’s goals for 2015-2017 include:

- Providing Member Services (bylaws, database and electronic newsletters)
- Improving Professional Practice -

1. National Occupational Competency Profile renewal process, and the creation of a new Canadian Paramedic Profile
2. A partner in setting education standards for the practice of paramedicine
3. Collaborate with the Society for Prehospital Educators in Canada in the education of Paramedics
4. Collaborate with the Paramedic Chiefs of Canada to further the profession
5. Collaborate on national research initiatives to develop best practice guidelines for the profession.
6. Engage with the Canadian Patient Safety Institute
7. Develop standards for the profession in collaboration with the Canadian Standards Association
  - Promoting the Paramedic Profession (database, registration, examination, national and international partnerships, baccalaureate and advanced degree programs, national liability insurance, recruiting new chapters, Benevolent Society)

PAC first established the National Occupational Competency Profile (NOCP) in March 2000, with an update published in June 2001. Commencing in October 2007 and, following a broad national consultation, a revised NOCP was approved by PAC's Board of Directors in October 2011.

The October 2011 version contains bilingual occupational competency profiles for Emergency Medical Responders, Primary Care Paramedics, Advanced Care Paramedics and Critical Care Paramedics. Planning for 2025, as approved by PAC's Board of Directors, envisions two stand-alone designations: Paramedic (encompassing PCP, ACP and CCP) and Emergency Medical Responder.

The Canadian Paramedic Framework Redevelopment Steering Committee tasked a working committee to develop a stand-alone EMR "competency-based" document. This initiative has proceeded in parallel with redevelopment of the Canadian Paramedic Profile (formerly the National Occupational Competency Profile for Primary Care Paramedics and Advanced Care Paramedics).

The *National EMR Competency Profile* is a consensus-based document. It is guided by data and expert opinion reflecting the skills, knowledge and abilities representing the *minimum* required competencies for EMR level practitioners. This document has been prepared with the understanding that the practice of the profession is regulated provincially, with each province determining the legislative authorities (“scope of practice”) of their practitioners.

This document is intended to be used to guide the development of educational standards, educational program approval processes, performance evaluation and assessment matrix, certification examinations, practice standards, legislative practice authority (“scope of practice”), practice guidelines, continuing education/competence programs and regulatory policies and procedures. It includes references to specific and sub-competencies, which are detailed in the full NOCP document.

Future *National EMR competency profile* updates should be driven by changes in professional expectations, changes in professional practice models, new medical science conclusions, changes in technology, and when evidence-based research conclusions are reached and published. Consistent with previous practice, PAC will be revisiting the contents of this document as needed and on a recurrent basis.

## **2. Method**

The working committee first completed a comprehensive review and assessment of the existing EMR profile and an environmental scan on the status of EMR’s across Canada. This initiative was influenced by the previous competency profiles, literature reviews of other similar professions, analysis of policy documents associated with EMR education, licensing, regulation, scope of practice, practice settings requirements and presentations by other credentialing bodies in various Canadian provincial jurisdictions.

## **3. Today’s EMR**

In Canada, EMR’s are often the first medically trained individuals at the scene of medical and/or trauma incidents. EMR are most often deployed in rural and remote areas to provide immediate medical interventions while more highly educated health care resources are mobilized. This document cannot account for every situation, but rather is designed to establish a comprehensive Canadian overview of the system for entry-level EMR’s under normal circumstances.

EMR's often work with more highly educated and trained medical professionals; occasionally assist with transport of stable patients who require further medical assessment, on-going care and monitoring. Their work functions appear to also be linked to the comprehensive emergency and/or health care team systems.

Most EMR's work for organizations that provide first response and emergency services. They usually serve as part of the tiered emergency response system, sometimes providing transportation services for non-urgent, medically stable inter-facility patient transfers. They also often provide "stand by" medical coverage at public and recreation venues, mass gatherings events and industrial sites.

Beyond the more traditional practice settings, EMR's have also been deployed in non-traditional work settings which include; emergency/triaging departments, long-term care hospital units, physician's offices and clinics, urgent care facilities, long-term care geriatric facilities and community care programs.

EMR's are expected to meet the emergent care needs of various patient groups across the medical and trauma landscape. They most often provide immediate emergent care to special patient population groups which include; obstetrical patients, children, neonates, older patients, bariatric patients, patients with disabilities, patients with terminal and chronic illnesses, and patients with psychological illnesses. They also often serve as first point of medical contact for patients with limited access to health care due to geographic, demographic, socioeconomic, or other reasons. The care they provide is most often consistent with the training they have received and which is tailored to local or event needs.

## **4. Current Challenges with EMR's in Canada**

### **I. Regulatory Shortcomings**

EMR's are regulated in only five Canadian provinces. British Columbia, Alberta, Saskatchewan, Manitoba and Newfoundland identify EMR's (or a similar title) in their legislation, their licensing or registration processes, their regulation of professional practice and obligate some form of continuing education, and set standards for educational preparation.

Among the provinces that regulate EMR's, there are numerous regulatory models used, including regulatory self-governance model and Provincial Government/civil service.

There are considerable differences in health services and practice activities permitted in each province. This results in many negative implications for EMR, including different "scopes of practice" which yields practice and reciprocity challenges including more complex inter-provincial labour mobility processes and the need to reconcile practice differences across provincial jurisdictional borders (e.g., for those practising in two provinces at the same time).

Provincial regulatory frameworks, including those for first aid provision, may also complement but often conflict. Anecdotally, there are likely thousands of unregulated practitioners across the country working in patient transfer services, recreational and industrial practice settings, who are trained as EMR's but practicing as first aid attendants. This assumption can be made by comparing the number of EMR graduates to those who register in regulated provinces and/or who claim to be working for employers and services which are not recognized as meeting the standards for regulated practice.

## **II. Educational Shortcomings**

Most EMR educational programs are comprised of short didactic sessions and usually do not require students to complete any clinical experiential practicums. At best, this condensed training results in a general and simplistic understanding of anatomy and physiology and "emergency care" for all patient population groups. Many graduates have little appreciation of the limits of their knowledge and skills.

There appears to be very little educational time dedicated to broaching the important topic of the associated implications of being a regulated medical professional. Often there is a lack of appreciation for regulatory expectations and requirements, including continuing professional development and on-going maintenance of competencies.

Additionally, EMR educational programs are not formally accredited (unlike paramedic programs). While some regulators report having educational program approval mechanisms these system vary in requirements, quality and consistency.

EMR graduates often do not receive formal education on the depth and breadth of competencies required to strengthen their practice in the various and specific practice settings. While some EMR's receive ongoing workplace training, there is most often, modest continuing and higher educational professional development opportunities specifically designed for EMR's.

### **III. Practice Shortcomings**

Emergency Medical Responders often work in rural, remote and low call volume employment positions - across many practice settings, for example; ground ambulance, fire departments and industry. They are however expected to demonstrate and maintain a high degree of competence and proficiency when they deal with requests for assistance for patients who suffer from complex medical or traumatic conditions. This translates in the need for EMR's to possess considerable knowledge, skill, and judgment and which require them to have high degree of competence in performing invasive and potentially harmful medical activities.

Individuals who have graduated from Emergency Medical Responder educational program and who do not provide EMR level care but instead offer first aid type services and those who do not or are not offered opportunities to maintain or enhance their competence are thus subject to skill degradation which enhances patient risk.

### **5. Vision for the Redeveloped NOCP**

There was wide acceptance, among consulted stakeholders, that future EMR's will work largely in industrial and occupational health and safety settings, stable patient ground transfer services, in voluntary and paid capacities at public events, and in rural and remote areas. It was further accepted that these practitioners would be engaged in providing *basic* health services such as; providing basic patient assessments, providing life sustaining type treatments, assisting in mobilizing additional health care and emergency resources and assisting with best transport methodology decisions.

In the pre-hospital environment, they will primarily focus on initiating life and limb saving measures and performing procedures and skills which limit and/or prevent further patient condition deterioration. Their practice may be as part of a tiered emergency response system, where they are called upon to stabilize, package and prepare patients for transport while higher medically trained practitioners are responding.



In the interest of optimal system quality, safety and the need for effective patient care, EMR practice in this version of the National Occupational Competency Profile reflects the following criteria:

- (i) Standardized education that considers the appropriate length, depth and breadth of education and which includes clinical experiential practicum(s). Education which also focuses on regulation (in an increased number of provinces), professional responsibilities, employment policies, the importance of continuing professional development, and continuing competence.
- (ii) Consideration for their work deployment in non-traditional settings which include consideration for; emergency triage departments, physicians' and clinical offices, urgent care centers, long-term care community facilities and other setting where EMR's can work cooperatively with other health care professionals.
- (iii) They must possessing the appropriate depth and breadth of knowledge, skills and abilities to manage the basic health needs of adult, geriatric and disabled adult populations, including those in rural and remote areas.
- (iv) They must be able to initiate, in the most emergent circumstances, assessment and basic care for neo-natal, pediatric, obstetrical, psychiatric, bariatric and palliative patients, and those who have chronic illnesses and multiple co-morbidities while additional more highly trained resources are activated and respond.
- (v) They must be able to closely work with Paramedics and other regulated health professionals and their practice must be guided by a strong commitment to teamwork, safety, collaboration, quality service and best possible patient outcomes.
- (vi) They must be graduates of approved educational programs, which are recognized by each province's regulator, who in turn recognizes and adopts the national competency profile and enforces standardized educational program approval and accreditation standards.
- (vii) The practicing EMR must meet entry to practice requirements which includes being regulated and accountable to professional Standards of Practice, Code of Ethics, and continuing competence/continuing education requirements.

(viii) They must have a full understanding of the limitations of their skills, and the importance of seeking assistance from more highly credentialed and trained health professionals.

(ix) They must be motivated to promote their designation through continuing professional development, must be motivated by the ideology of and their systems must support additional formal education, on-going workplace training and the formal development of special competencies for example occupational health and safety competencies.

The following charts serve as a visual representation of the EMR abilities across a landscape of level of diagnostics/assessment, treatment, interventions, transport and on-going care delivered across various patient population groups.

**Patient Population Groups vis. Patient Care Ability Requirements for EMR's**

Population Groups	Problem Identification/ Patient Assessment/ Diagnostic Abilities Knowledge and Competency		
	Basic	Fundamental	Complex
Adult		X	
Pediatric	X		

Neonate	x		
Geriatric		x	
Obstetrical	x		
Psychological	x		
Bariatric	x		
Palliative	x		
Chronic Health	x		
Disabled		x	
Limited Access		x	

Population Group	Application of Appropriate Treatment Therapies			
	Life Sustaining	Basic Health Care	Advanced Health Care	Specialized Care
Adult		x		
Pediatric	x			
Neonate	x			
Geriatric		x		
Obstetrical	x			
Psychological	x			
Bariatric	x			
Palliative	x			
Chronic Health		x		
Disabled		x		
Limited Access		x		

Population Groups	Transport Abilities			Ongoing Care Abilities	
	Emergent*	Non-emergent	with higher level providers	For independent transport monitoring	In-facility and transport with higher level health team members
Adult	X	X		X	X
Pediatric			X		X
Neonate			X		X
Geriatric	X	X		X	X
Obstetrical			X		X
Psychological			X		X
Bariatric			X		X
Palliative		X		X	X
Chronic Health			X		X
Disabled	X	X		X	X
Limited Access	X	X		X	X

\*In emergent situations where there are no viable alternatives, transportation decisions need to be made in conjunction with the EMR's employer and Paramedics and must be consistent with the legislative authority.

## 6. Competencies and the Profile

Competencies are measurable and observable knowledge, skills, abilities and behaviors critical to successfully practicing the profession.

There are two basic levels of competencies: technical and behavioral.

1. Technical competencies are predominantly associated with acquired knowledge, technical abilities and skills. These competencies are often easier to see, train and develop.
2. The second level of competencies, behavioral competencies are harder to see and develop and often tend to be linked to deep-seated personal qualities which affect an individual approach to their work.

- |  |
|--|
| <ol style="list-style-type: none"><li>1. Knowledge Competencies<ul style="list-style-type: none"><li>○ Refers to practical and/or theoretical understanding of a subject.</li></ul></li><li>2. Skills and Ability Competencies<ul style="list-style-type: none"><li>○ Refers to a natural and/or learned capacity to perform an act.</li></ul></li><li>3. Behavioral Competencies<ul style="list-style-type: none"><li>○ Refers to a pattern of action and/or conduct.</li></ul></li></ol> |
|--|

A professional competency profile is a listing of professional knowledge, skills abilities and behaviors which are observable and measurable which can be used to guide professional development and management initiatives. Establishing an accurate EMR competency profile allows the profession to:

- Plan how they develop and train the workforce
- Organize the professional workforce and employment systems
- Establish professional assessment, evaluation and examination standards
- Establish minimum professional practice standards and accountabilities.
- Develop educational pathways and professional continuing education / competence programs
- Self-evaluate and inform on-going professional development

## 7. Sub-Competencies & Performance Criteria

For each Specific Competency, there may be several Sub-Competencies and Performance Criteria. Sub-Competencies and Performance Criteria are measurable outcomes used to assess an individual's capacity to perform the Specific Competency.

Each Sub-Competency and Performance Criteria includes a specific *performance action verb*. These verbs have been selected from taxonomies to delineate their relative complexities.

The ability to perform Sub-Competencies requires Performance Criteria actions from one or more of three domains: Cognitive (knowledge and thinking skills), Affective (attitudes and values) and Psychomotor (physical actions). The taxonomies are shown below.

Although many of the verbs in the taxonomies are in everyday usage, users of the profile are cautioned that Sub-Competency and Performance Criteria statements should be interpreted only in the context of definitions in the following tables.

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.

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.

PSYCHOMOTOR ACTIONS (physical 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	Adjust	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.

## 8. Skills, Knowledge, Abilities and Personal Characteristics

Personal characteristics may impact one's ability to attain or demonstrate competency proficiency. While being mindful of human rights implications, identified personal characteristics linked to the EMR profession includes but is not limited to the need for:

- **Physical strength**, including power, endurance and speed
- **Physical agility**, including flexibility, strength, balance and coordination
- **Sensory abilities**, including sensitivity, perception, clarity of vision, recognition of auditory and olfactory stimuli and ability to speak clearly
- **Gross and fine motor skills**, including movement control, precision, dexterity, coordination, reaction time and speed of movement



- **Mental abilities**, including ability to concentrate, perceive, mobilize muscle, memorize and recall from memory, attentiveness, reasoning, decision-making, sequencing, problem-solving, interpretation of sensory stimuli, oral expression and comprehension, written expression and comprehension and spatial aptitudes.

## 9. Proficiency Continuum and Measurable Standards

### I. Evaluating and Measuring Technical Competencies

The EMR proficiency continuum scale serves as an instrument to measure the ability of an individual to demonstrate a technical competency and serves as a guide to understanding the expected proficiency level expected of practitioners as they grow within the profession. The scale organizes ability levels into five steps; from ‘Fundamental Awareness’ to ‘Expert’, establishes the minimum entry to practice requirement level and captures post-entry to practice development levels.

<b>PRE-ENTRY TO PRACTICE DEVELOPMENT</b>	<b><i>Fundamental Awareness</i></b> (basic knowledge)	Common knowledge or an understanding of basic techniques and concepts. <ul style="list-style-type: none"> <li>• Focus is typically on learning</li> </ul>
	<b><i>Novice</i></b> (limited experience)	Has the level of experience gained in a classroom and/or experimental scenarios or as a trainee on-the-job. Is expected to need help with application of knowledge and performance of skills. <ul style="list-style-type: none"> <li>• Focus is on developing through on-the-job experience;</li> <li>• Understand and can discuss knowledge items such as terminology, concepts, principles, and issues related to the competencies;</li> <li>• Utilizes a full range of reference and resource materials associated with the competency.</li> </ul>
	<b><i>Intermediate</i></b> (practical application)	Successfully completes tasks associated with a competency as requested. Help from an ‘Advanced’ or ‘Expert’ may be required from time to time when situations are difficult and unusual, but can usually perform the skill independently under regular applications.

		<ul style="list-style-type: none"> <li>• Focus is on applying and enhancing knowledge or skill;</li> <li>• Can apply the competency to situations while occasionally needing minimal guidance to perform successfully;</li> <li>• Understands and can discuss the application and implications of changes to processes, policies, and procedures related to the competency.</li> </ul>
<b>ENTRY TO PRACTICE LEVEL - EVALUATION/ASSESSMENT/EXAMINATION</b>		
<b>POST-ENTRY TO PRACTICE DEVELOPMENT</b>	<b><i>Advanced</i></b> (applied theory)	<p>Can perform the actions associated with this ability and skill without assistance. Is able to apply the competency to difficult and unusual circumstances.</p> <ul style="list-style-type: none"> <li>• Focus is on broad organizational/professional issues;</li> <li>• Consistently provides practical/relevant ideas and perspectives on process or practice improvements which may easily be implemented;</li> <li>• Capable of coaching others in the application of this competency by translating complex nuances relating to this competency into easy to understand terms;</li> <li>• Participates in senior level discussions regarding this competency;</li> <li>• Assist in the development of reference and resource materials related to this competency.</li> </ul>
	<b><i>Expert</i></b> (recognized authority)	<p>Can provide guidance, troubleshoot and answer questions related to this area of expertise and the field where the skill is used.</p> <ul style="list-style-type: none"> <li>• With a strategic focus, demonstrates consistent excellence in applying this competency across multiple projects and/or organizations;</li> <li>• Considered the “Expert” as it pertains to the competency area within and/or outside an organizations;</li> <li>• Create new applications for and/or lead the development of reference and resource materials for competencies;</li> <li>• Is able to diagram or explain the relevant process elements and issues in relation to organizational issues and trends in sufficient detail during discussions and presentations, to foster a greater understanding among internal and external colleagues and constituents.</li> </ul>

## II. Evaluating and Measuring Behavioral Competencies and Personal Characteristics

It is more difficult to use proficiency levels to measure Behavioral Competencies and Personal Characteristics while using a proficiency continuum. These competencies and characteristics are usually better evaluated through adherence to a set of standards at the pre-entry, at entry to practice and at post-entry to practice levels. This type of measurable and evaluative methodology often use associated key indicators anchored along a performance rating scale to identify unsatisfactory performance, successful performance and exceptional performance.

*Example: Teamwork and Cooperation: Cooperates with others to accomplish a common goal*

Unsatisfactory Performance	Successful Performance	Exceptional performance
<ul style="list-style-type: none"> <li>• Tends to isolate themselves while working as a team toward a team goal or objective</li> <li>• Sometimes treats other team members with hostility and indifference</li> <li>• Talks about commitment to team work but does not demonstrate it in their actions</li> <li>• Waits for others to solve interpersonal team conflicts</li> <li>• Participates inconsistently in activities</li> <li>• Provides inconsistent feedback to the team</li> </ul>	<ul style="list-style-type: none"> <li>• Consistently works with others to accomplish goals and tasks</li> <li>• Treats others with respect, is courteous and professional, and supports the team despite differing opinion</li> <li>• Considers the views of others while developing a solution</li> <li>• Regularly initiates communication to resolve conflicts</li> <li>• Consistently attends and participates in activities</li> <li>• Provides consistent and balanced feedback to improve team collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Frequently uses opportunities to work with others as a teaching tool and to impart knowledge to help other succeed</li> <li>• Actively seeks to eliminate team barriers</li> <li>• Assists in building team loyalty</li> <li>• Provides guidance to others as they work through conflicts</li> <li>• Volunteer to lead team activity projects</li> <li>• Proactively works with team members to improve collaboration and team functioning.</li> </ul>

## 10. Proficiency as per the Association of Canada

PAC's definition of proficiency in a specific competency involves the demonstration of skills, knowledge and abilities. A practitioner's level of performance of a competency evolves over time, based upon their training, experiences and on-going use of competencies. Proficiency is defined according to the following principles:

- **Consistency** (repeatedly and successfully performing the competency to achieve the necessary outcome in the relevant practice setting. There is sufficient evidence demonstrating a high likelihood of continued successful performance)
- **Independence** (practicing without assistance from others)
- **Timeliness** (practicing in a timeframe consistent with patient needs, risk mitigation and safety)
- **Accuracy** (practicing correct techniques to achieve the intended outcomes)
- **Appropriateness** (falls within a range of acceptability and is consistent with good decision-making, critical analysis, adherence to clinical standards, guidelines and protocols)

## 11. PAC's Approach to Competencies

Competencies in the NOCP are described using a hierarchy of terms:

- General Competency Area
- Specific Competency
- Sub-Competency
- Performance Criteria

## 12. Competency Areas and General Competencies

To create a framework for the profile, paramedic practice is considered to consist of eight Competency Areas, within each of which several General Competencies establish broad expectations and serve as section headings under which Specific Competencies are listed. The Competency Area and General framework includes:

1. Professional Responsibilities
  - #1. Function as a professional.
  - #2. Participate in continuing education and professional development.
  - #3. Possess an understanding of the medicolegal aspects of the profession.
  - #4. Recognize and comply with relevant provincial and federal legislation.
  - #5. Function effectively in a team environment.

- #6. Make decisions effectively.
- #7. Manage scenes with actual or potential forensic implications.

## 2. Communication

- #8. Practice effective oral communication skills.
- #9. Practice effective written communication skills.
- #10. Practice effective non-verbal communication skills.
- #11. Practice effective interpersonal relations.

## 3. Health and Safety

- #12. Maintain good physical and mental health.
- #13. Practice safe lifting and moving techniques.
- #14. Create and maintain a safe work environment.

## 4. Assessment and Diagnostics

- #15. Conduct triage in a multiple-patient incident.
- #16. Obtain patient history.
- #17. Conduct complete physical assessment demonstrating appropriate use of inspection, palpation, percussion and auscultation.
- #18. Assess vital signs.
- #19. Utilize diagnostic tests.

## 5. Therapeutics

- #20. Maintain patency of upper airway and trachea.
- #21. Prepare oxygen delivery devices.
- #22. Deliver oxygen and administer manual ventilation.
- #23. Utilize ventilation equipment.
- #24. Implement measures to maintain hemodynamic stability.
- #25. Provide basic care for soft tissue injuries.
- #26. Immobilize actual and suspected fractures.
- #27. Administer medications.

## 6. Integration

- #28. Utilize differential diagnosis skills, decision-making skills and psychomotor skills in providing care to patients.
- #29. Provide care to meet the needs of unique patient groups.
- #30. Conduct ongoing assessments and provide care.

## 7. Transportation

- #31. Prepare ambulance for service.
- #32. Drive ambulance or emergency response vehicle.
- #33. Transfer patient to air ambulance.
- #34. Prepare patient for air transport.

## 8. Health Promotion and Public Safety

- #35. Integrate professional practice into community care.
- #36. Contribute to public safety through collaboration with other emergency response agencies.
- #37. Participate in the management of a chemical, biological, radiological / nuclear, explosive (CBRNE) incident.

# 13. Educating to the Competency Profile

This profile is not intended to be used solely as an educational source. While it does inform as to the skills, knowledge and ability requirements for EMR level practitioners, educators are reminded that the teaching of professional competencies requires technical expertise, and should be guided by adult learning theory and principles. Educators are encouraged to contact their respective provincial regulator for further information on educational program approval and accreditation requirements.

The Paramedic Association of Canada (PAC) believes that the most important characteristic of competency-based education is that it measures and assesses the learning rather than time spent learning. Thus, students can only progress by demonstrating their competence and by proving (with evidentiary support) that they have achieved the expected level of knowledge, skill and abilities. They must do this regardless of how long it takes.

The Paramedic Association of Canada's (PAC) is currently developing a companion EMR educational document which will assist educator understand further educational requirements. This document's focus will speak to the:

- Standardization and accreditation/approval of EMR education.
- National implementation of Competency Based Learning/Teaching.
- Measuring and assessing student learning and competency through the use of valid and reliable assessment methods rather than measuring and assessing time.
- Harnessing the power of technology for teaching and learning.
- Teaching in a manner that faculty work with, guide and help students synthesize and apply knowledge.
- Clarifying and further defining competencies and educational expectations.

## 14. Emergency Competency Profile

### AREA #1 - Professional Responsibilities

#### Competency # 1: Function as a Professional

## Sub Competencies

- a. Maintain patient dignity.
- b. Reflect professionalism through use of appropriate language.
- c. Dress appropriately and maintain personal hygiene.
- d. Maintain appropriate personal interaction with patients.
- e. Maintain patient confidentiality.
- f. Participate in quality assurance and enhancement programs.
- g. Promote awareness of emergency medical system and profession.
- h. Participate in professional association.
- i. Behave ethically.
- j. Function as patient advocate.

## Performance Criteria

- Define "dignity".
- Identify cultural characteristics that impact patient dignity.
- Acknowledge cultural differences and personal privacy.
- Demonstrate empathy by providing appropriate care in various situations and adjust based on the care needs of the patient/client.
- Identify language appropriate for patients, peers and other professions.
- Choose language appropriate to situation.
- Communicate verbally using appropriate language.
- Identify appropriate dress for situation and environment.
- Identify characteristics of personal hygiene.
- Acknowledge appearance and personal hygiene.
- Integrate knowledge of situation and environment to dress appropriately.
- Demonstrate personal hygiene.
- Describe appropriate and inappropriate personal interaction.
- Demonstrate appropriate personal interaction with patients/clients.
- Value the importance of appropriate professional relationships with patients/clients.
- Describe legislative and regulatory requirements related to patient confidentiality.
- Acknowledge conduct necessary to maintain patient confidentiality.
- Integrate confidentiality into effective patient care.
- Describe common quality assurance and enhancement processes.
- Discuss the relevance of quality assurance systems as it relates to paramedic practice.
- Describe the characteristics of local, provincial and federal emergency medical services.
- Discuss emergency medical services in Canada.



- Identify professional associations for paramedics in Canada.
- Describe the role of and discuss the benefits of participation in professional association(s).
- Define “ethics” and describe “ethical behavior”.
- Value the importance of having and abiding by a professional standard of practice, code of ethics and belief system.
- Integrate ethical behavior with patients/clients, peers, co-workers, medical staff and allied agency personnel.
- Define “patient/client advocacy” and discuss situations where patient/client advocacy is required.
- Describe & Explain ways in which a practitioner can advocate for patients/clients.
- Value and demonstrate the integration of patient/client advocacy.

## Competency # 2: Participate in continuing education and professional development.

### Sub Competencies

- a. Develop personal plan for continuing professional development.
- b. Self-evaluate and set goals for improvement, as related to professional practice.
- c. Interpret evidence in medical literature and assess relevance to practice.
- d. Make presentations.

### Performance Criteria

- List professional development activities.
- Value professional development.
- Identify & discuss strategies for professional improvement.
- Value goal setting and self-evaluation.
- Explain the importance of research in emergency medical services.
- Define academic research.
- Distinguish qualitative and quantitative research methodology.
- Identify ethical considerations in research, research question, sources of research evidence and levels of evidence.
- Define evidence-based practice.
- Review literature.
- Analyze research evidence.
- Discuss applicability of research findings to practice.
- Present information to a group in a clear and organized fashion.
- Facilitate group discussion.

### Competency # 3: Possess an understanding of the medicolegal aspects of the profession.

#### Sub Competencies

- a. Comply with scope of practice.
- b. Recognize the rights of the patient and the implications on the role of the provider.
- c. Include all pertinent and required information on reports and medical records.

#### Performance Criteria

- Define "scope of practice".
- Describe & discuss role of Medical Oversight.
- Discuss protocols, standing orders, directives, guidelines and standards.
- Describe the process to be followed for situations not covered by protocols, standing orders, directives, guidelines and standards.
- Acknowledge importance of compliance with protocols, standing orders, guidelines and standards.
- Communicate scope of practice.
- Identify legislative requirements.
- Identify & discuss legal issues pertaining to patient rights.
- Value patient rights.
- Organize information for documentation.
- Apply principles of correct documentation.
- Acknowledge the importance of appropriate documentation.
- Demonstrate proper documentation.

### Competency # 4: Recognize and comply with relevant provincial and federal legislation.

#### Sub Competencies

- a. Function within relevant legislation, standards, policies and procedures.

#### Performance Criteria

- Discuss legislation, standards, policies and procedures.
- Acknowledge the rationale for standards, policies and procedures.

- Perform in a manner consistent with standards, legislation, policies and procedures.

### Competency # 5: Function effectively in a team environment.

#### Sub Competencies

- a. Work collaboratively with a partner.
- b. Accept and deliver constructive feedback.

#### Performance Criteria

- Discuss characteristics of interpersonal relationships.
- Acknowledge the impact of interpersonal relationships between team members on patient care.
- Describe characteristics of & integrate teamwork into the provision of care
- Demonstrate cooperative and collaborative practice within a team environment.
- Describe & discuss constructive feedback.
- Demonstrates ability to receive constructive feedback.
- Acknowledge constructive feedback.
- Communicate with the intent to provide constructive feedback.
- Demonstrate & integrate the provision of constructive feedback within professional practice.

### Competency # 6: Make decisions effectively.

#### Sub Competencies

- a. Employ reasonable and prudent judgment.
- b. Practice effective problem-solving.
- c. Delegate tasks appropriately.

#### Performance Criteria

- Describe & discuss reasonable and prudent judgment, effective problem solving, appropriate task delegation, and tasks delegated to non-healthcare professionals.
- Value reasonable and prudent judgment, the process of problem solving, and the importance of leadership.

- Demonstrate & integrate reasonable and prudent judgment and problem solving.
- Apply effective problem solving.
- Demonstrate & perform task delegation.

#### Competency # 7: Manage scenes with actual or potential forensic implications.

##### Sub Competencies

- a. Collaborate with law enforcement agencies in the management of crime scenes.
- b. Comply with ethical and legal reporting requirements for situations of abuse.

##### Performance Criteria

- Describe criminal law as it applies to EMR practice, common characteristics of real or potential crime scenes, the role of the EMR in the management of real or potential crime scenes, the benefits of accurate note taking in real or potential crime scenes, the requirements of legal testimony, and the ethical and legal requirements for reporting real or suspected situations of abuse, from an ethical and legal perspectives.
- Manage patients in real or potential crime scenes.
- Adapt scene management to the specific needs of a crime scene.
- Identify the potential roles of an EMR in a specialized law enforcement team, and the requirements for reporting real or suspected situations of abuse
- Maintain notes appropriate to real or potential crime scenes.
- Comply with reporting requirements.
- Adapt care and scene management to fulfill reporting requirements.

## AREA #2 - Communication

#### Competency # 8: Practice effective oral communication skills.

##### Sub Competencies

- a. Deliver an organized, accurate and relevant report utilizing telecommunication devices.
- b. Deliver an organized, accurate and relevant verbal report.
- c. Deliver an organized, accurate and relevant patient history.

- d. Provide information to patient about their situation and how they will be cared for.
- e. Interact effectively with the patient, relatives and bystanders who are in stressful situations.
- f. Speak in language appropriate to the listener.
- g. Use appropriate terminology.

### Performance Criteria

- Identify relevant legislation and regulations, and various telecommunication devices.
- List the components of effective telecommunication.
- Describe the components of a telecommunication report, and the operational features of various telecommunication devices.
- Organize information for a telecommunication report.
- Demonstrate & operate use of various telecommunication devices.
- Demonstrate & perform an organized, accurate and relevant telecommunication report.
- List the components of effective verbal communication.
- Describe the components of a verbal report.
- Organize information for a verbal report.
- Demonstrate & perform an organized, accurate and relevant verbal report.
- List the components of a patient history.
- Organize a patient history for the purposes of oral communication.
- Communicate an organized, accurate and relevant patient history.
- Identify information that should be communicated to the patient.
- Evaluate patient comprehension.
- Communicate to patient their situation and how they will be cared for.
- Adapt communication based on patient's apparent comprehension.
- List factors that contribute to stress in patients, relatives and bystanders.
- Identify verbal and non-verbal indicators of stress.
- Describe & discuss techniques to maximize the effectiveness of communication.
- Choose techniques to maximize the effectiveness of communication.
- Demonstrate & adapt communication techniques during stressful situations.
- Identify basic communication needs.
- Describe common communication barriers.
- Describe & discuss methods of meeting basic communication needs.
- Adapt communication techniques effectively.
- Define common medical terminology.
- Integrate medical and non-medical terminology.

### Competency # 9: Practice effective written communication skills.

#### Sub Competencies

- a. Record organized, accurate and relevant patient information.
- b. Prepare professional correspondence.

#### Performance Criteria

- Organize patient information for the purposes of a written report.
- Communicate accurate, organized and relevant documentation.
- List common items of professional correspondence.
- Describe essential elements of professional correspondence.

### Competency # 10: Practice effective non-verbal communication skills.

#### Sub Competencies

- a. Employ effective non-verbal behaviour.
- b. Practice active listening techniques.
- c. Establish trust and rapport with patients and colleagues.
- d. Recognize and react appropriately to non-verbal behaviours.

#### Performance Criteria

- Describe non-verbal behaviours.
- List examples of non-verbal behaviours that may impact others positively, and examples of non-verbal behaviours that may impact others negatively.
- Identify cultural factors that may affect non-verbal communication, growth and development factors that may affect non-verbal communication, and personal factors that may affect non-verbal communication.
- Acknowledge the relationship between positive non-verbal behaviour and personal feelings.
- Demonstrate non-verbal behaviour that positively impacts communication.
- Define "active listening".
- Acknowledge the relationship between sincerity, genuine interest and active listening.
- Demonstrate & perform active listening in interactions with colleagues, patients and others.
- Communicate openly despite the impeding non-verbal behaviour of others.
- List behaviours that help establish trust, and behaviours that help establish rapport.

- Describe feedback that indicates that trust and rapport have been established.
- Receive feedback that indicates that trust and rapport have been established.
- Demonstrate behaviour that promotes trust and rapport.
- Distinguish threatening and non-threatening behaviours.
- Identify behaviours that diffuse hostility.
- Discuss behaviours that may provoke hostile behaviour in others.
- Evaluate reactions to positive and negative patient behaviours.
- Choose appropriate patient care options.
- Demonstrate ability to manage hostile situations.

### Competency # 11: Practice effective interpersonal relations.

#### Sub Competencies

- a. Treat others with respect.
- b. Employ empathy and compassion while providing care.
- c. Recognize and react appropriately to persons exhibiting emotional reactions.
- d. Act in a confident manner.
- e. Act assertively as required.
- f. Employ diplomacy, tact and discretion.
- g. Employ conflict resolution skills.

#### Performance Criteria

- Define "respect", "empathy", "compassion", and "sympathy".
- List examples of ways to demonstrate respect.
- Identify cultural differences that affect the demonstration of respect.
- Value respect in patient care.
- Demonstrate behaviour that is respectful to patients.
- Adjust actions as appropriate, consistent with others' expectations of respectful behaviour.
- Distinguish between empathy, sympathy and compassion.
- Describe behaviours that convey empathy and compassion.
- Value empathy and compassion.
- Demonstrate empathy and compassion.
- List common emotional reactions exhibited by patients, relatives, bystanders and paramedics.
- List common coping mechanisms.

- Describe positive and negative aspects of coping mechanisms.
- Identify verbal means of supporting others displaying emotional reactions and coping mechanisms, and non-verbal means of supporting others displaying emotional reactions and coping mechanisms.
- Value the provision of emotional support.
- Demonstrate behaviours that provide emotional support.
- Identify community resources that may assist those in need.
- Define "confidence".
- Identify the impact of confidence on patient care, and risks associated with over confidence.
- Choose behaviours that display confidence.
- Adjust behaviour to exhibit an appropriate level of confidence.
- Discuss assertive behaviour, and aggressive behaviour.
- Distinguish assertive and aggressive behaviour.
- Describe techniques of assertive behaviour.
- Evaluate assertive behaviour.
- Choose assertive behaviour when appropriate.
- Demonstrate & perform appropriate assertive behaviour in interactions.
- Adapt assertive behaviour as appropriate.
- Define "diplomacy", "tact", and "discretion".
- Evaluate the impact of diplomacy, tact and discretion.
- Value diplomacy, tact, and discretion.
- Demonstrate & adapt behaviour showing diplomacy, tact, and discretion.
- Define "conflict".
- Identify situations of potential conflict.
- Describe & discuss basic conflict resolution strategies.
- Justify the use of basic conflict resolution skills.
- Demonstrate basic conflict resolution skills.

### AREA #3 - Health and Safety

#### Competency # 12: Maintain good physical and mental health.

##### Sub Competencies

- a. Maintain balance in personal lifestyle.
- b. Develop and maintain an appropriate support system.



- c. Manage stress.
- d. Practice effective strategies to maintain and/or improve physical and mental health.
- e. Exhibit physical strength and fitness consistent with the requirements of professional practice.

### Performance Criteria

- List the components of a balanced, healthy lifestyle.
- Describe personal activities / habits which promote a balanced, healthy lifestyle.
- Choose personal activities/habits which promote a balanced and healthy lifestyle.
- List personal support systems that promote the maintenance of physical and mental health.
- Describe the benefits of a personal support system.
- Value the benefits of a personal support system.
- Define “stress”, and "stress disorders".
- List & describe factors that typically contribute to personal stress.
- List & discuss techniques to manage stress.
- Choose and implements personal techniques for managing personal stress.
- Identify and list signs and symptoms of post-traumatic stress.
- Discuss how signs and symptoms of post-traumatic stress may impact one’s ability to safely and independently practice the profession.
- Identify strategies to address signs and symptoms of post-traumatic stress.
- Describes, discuss and identify appropriate actions required when signs and symptoms of post-traumatic stress are identified in peers.
- Describe & explain the concepts of critical incident stress management.
- List the effects of shift work on physical and mental health.
- List & describe strategies to promote on-going physical and mental health.
- Choose strategies to promote on-going physical and mental health.
- Describe the physical capabilities required of an EMR, and strategies to develop and maintain physical strength and fitness.
- Choose strategies to develop and maintain physical strength and fitness.
- Demonstrate adequate physical strength and fitness.

### Competency # 13: Practice safe lifting and moving techniques.

#### Sub Competencies

- a. Practice safe biomechanics.
- b. Transfer patient from various positions using applicable equipment and / or techniques.

- c. Transfer patient using emergency evacuation techniques.
- d. Secure patient to applicable equipment.

#### **Performance Criteria**

- Define “safe biomechanics”.
- Describe injuries common to EMR practitioners, and strategies to reduce injury risk.
- Choose strategies to reduce injury risk.
- Adapt proper lifting techniques.
- List equipment for patient transfer.
- Describe indications for equipment use.
- Identify specifications of the equipment to be used, including equipment for special patient populations.
- Explain techniques of transfer using specified equipment.
- Demonstrate patient transfers.
- Describe situations where emergency evacuation may be required, and emergency lifting and moving techniques.
- Describe & distinguish alternative techniques and conditions for use.
- Demonstrate emergency lifting and moving techniques.
- Identify safe and secure methods.
- Demonstrate & integrate safe and secure procedures for patient movement and transport.

### **Competency # 14: Create and maintain a safe work environment.**

#### **Sub Competencies**

- a. Assess scene for safety.
- b. Address potential occupational hazards.
- c. Conduct basic extrication.
- d. Exhibit defusing and self-protection behaviours appropriate for use with patients and bystanders.
- e. Conduct procedures and operations consistent with Workplace Hazardous Materials Information System (WHMIS) and hazardous materials management requirements.
- f. Practice infection control techniques.
- g. Clean and disinfect equipment.
- h. Clean and disinfect work environment.

#### **Performance Criteria**

- Define “scene safety”.
- Describe factors contributing to scene safety.
- Apply techniques for assessing scene safety.
- Demonstrate & integrate techniques for the assessment of scene safety.
- List potential occupational hazards.
- Describe ways to manage occupational hazards.
- Demonstrate & adapt techniques to manage occupational hazards.
- Describe basic, non-mechanical patient extrication principles.
- Apply basic, non-mechanical patient extrication principles.
- Demonstrate & integrate basic, non-mechanical extrication principles.
- Describe methods of defusing.
- Apply methods of defusing.
- Choose methods of defusing and self-protection.
- Demonstrate & adapt methods of defusing and self-protection.
- Identify & describe applicable legislation and regulations.
- Apply regulations.
- Identify & describe common routes for transmission of disease and infection.
- Define “infection control precautions”.
- Apply infection control precautions.
- Describe personal protective equipment utilized in practice.
- Demonstrate proper use of personal protective equipment.
- List equipment and supplies required to clean and disinfect equipment, and work environment.
- List & Describe techniques to clean and disinfect equipment, and work environment.
- Demonstrate correct equipment and work environment cleaning and disinfecting techniques.

#### **AREA #4 - Assessment and Diagnostics**

##### **Competency # 15: Conduct triage in a multiple-patient incident.**

###### **Sub Competencies**

- a. Rapidly assess an incident based on the principles of a triage system.
- b. Assume different roles in a multiple patient incident.
- c. Manage a multiple patient incident.

### Performance Criteria

- Discuss triage.
- Identify circumstances under which triage is required.
- Evaluate a triage system.
- Apply the equipment and materials used to sort patients.
- Perform targeted patient assessment based on a triage system.
- Communicate with other responders.
- Adapt triage decision making processes.
- Identify & distinguish the EMR practitioner roles involved when managing a multiple patient incident.
- Describe the principal responsibilities of each role.
- Apply management principles to a multiple patient incident.
- Modify procedures to meet the needs of a specific incident.

### Competency # 16: Obtain patient history.

#### Sub Competencies

- a. Obtain list of patient's allergies.
- b. Obtain patient's medication profile.
- c. Obtain chief complaint and / or incident history from patient, family members and / or bystanders.
- d. Obtain information regarding patient's past medical history.
- e. Obtain information about patient's last oral intake.
- f. Obtain information regarding incident through accurate and complete scene assessment.

### Performance Criteria

- List common examples of allergens.
- Describe how an allergen can affect individuals.
- Evaluate how information about an allergy will affect patient care.
- Demonstrate & integrate the skill of obtaining information about allergies into history gathering procedures.
- Apply various methods of discovering patient's medication profile.
- Describe relationship of medication, dosage and frequency to patient history.

- Demonstrate & integrate the skill of obtaining medication profile into history gathering procedures.
- Assess patient compliance.
- List & describe methods of discovering an incident history.
- Describe common components of an incident history.
- Demonstrate & integrate the skill of obtaining incident history into the overall patient assessment.
- Adapt interview techniques to the incident history findings.
- Integrate incident history information into patient care procedures.
- List methods of discovering a patient's medical history.
- Describe common components of a complete medical history.
- Demonstrate & integrate the skill of obtaining medical history into the overall patient assessment.
- Demonstrate & adapt interview techniques appropriate to the medical history findings.
- Integrate medical history information into patient care procedures.
- Assess current health status with respect to past medical history
- List situations when information about a patient's last oral intake may be required, and methods of discovering information regarding last oral intake.
- Demonstrate & integrate the skill of obtaining information regarding last oral intake into the overall patient assessment.
- List & describe methods of discovering incident information.
- Demonstrate & integrate the skill of obtaining incident information into the overall scene assessment.
- Adapt scene management from information gained during continuous scene assessment.
- Integrate incident information into patient care procedures.

### Competency # 17: Conduct complete physical assessment demonstrating appropriate use of inspection, palpation, percussion and auscultation.

#### Sub Competencies

- a. Conduct Primary patient assessment and interpret findings.
- b. Conduct secondary patient assessment and interpret findings.
- c. Conduct cardiovascular system assessment and interpret findings.
- d. Conduct neurological system assessment and interpret findings.
- e. Conduct respiratory system assessment and interpret findings.
- f. Conduct obstetrical assessment and interpret findings.

- g. Conduct gastrointestinal system assessment and interpret findings.
- h. Conduct genitourinary / reproductive system assessment and interpret findings.
- i. Conduct integumentary system assessment and interpret findings.
- j. Conduct musculoskeletal assessment and interpret findings.
- k. Conduct assessment of the ears, eyes, nose and throat and interpret findings.
- l. Conduct neonatal assessment and interpret findings.
- m. Conduct psychiatric assessment and interpret findings.
- n. Conduct pediatric assessment and interpret findings.
- o. Conduct geriatric assessment and interpret findings.
- p. Conduct bariatric assessment and interpret findings.

### Performance Criteria

- Explain primary assessment.
- Distinguish between trauma assessment and primary medical assessment.
- Evaluate life threatening findings from primary assessment.
- Apply appropriate sequential techniques for primary assessment, and primary assessment to different age groups.
- Demonstrate techniques & perform a primary assessment.
- Adapt assessment techniques to primary assessment findings.
- Analyze initial assessments to determine patient's level of distress and severity of illness or injury.
- Perform procedures to address problems found in the primary assessment & infer a provisional diagnosis
- Explain secondary assessment.
- Distinguish between trauma assessment and secondary medical assessment.
- Evaluate life threatening findings from secondary assessment.
- Apply appropriate sequential techniques for secondary assessment, and secondary assessment to different age groups.
- Demonstrate techniques & perform secondary assessment.
- Adapt assessment techniques to secondary assessment findings.
- Perform procedures to address problems found in the secondary assessment & infer a provisional diagnosis.
- Describe & explain the pathophysiology of all specific illnesses and injuries listed in **Appendix 1**.
- Apply assessment techniques specific to the different illness and injuries in **Appendix 1**.
- Evaluate findings related to the etiology, pathophysiology and manifestations of all illnesses and injuries listed in **Appendix 1**.

- Demonstrate & perform specific assessment techniques for all illnesses and injuries listed in **Appendix 1**.
- Adapt assessment techniques to history findings.
- Define "neonatal patient".
- Apply assessment techniques specific to the neonatal patient.
- Distinguish between the "mentally well" and the "mentally unwell" person.
- Communicate appropriately with other health care providers when dealing with a patients suffering from psychiatric disorders.
- Define "pediatric patient".
- List & explain developmental parameters.
- List & describe the anatomical and physiological differences between the pediatric and adult patient.
- Explain variations in assessment findings all patient population group.
- Modify assessment approach based on pateint population group.
- Define "geriatric patient".
- Describe & Discuss the effects of the aging process.
- Define "bariatric patient".
- Describe & Discuss the effects of obesity.

### Competency # 18: Assess vital signs.

#### Sub Competencies

- Assess pulse.
- Assess respiration.
- Conduct non-invasive temperature monitoring.
- Measure blood pressure by auscultation.
- Measure blood pressure by palpation.
- Measure blood pressure with non-invasive blood pressure monitor.
- Assess skin condition.
- Assess pupils.
- Assess level of consciousness.

#### Performance Criteria

- Define "pulse".

- Identify sites where a pulse may be found, and factors that influence the pulse rate.
- Modify pulse check to age of patient.
- Evaluate arterial pulse rate, rhythm, and quality.
- Distinguish between normal and abnormal findings.
- Demonstrate & perform pulse assessment.
- Adapt techniques of obtaining pulse to patient situation.
- Describe the physiology of respiration.
- Modify respiratory assessment to patient age.
- Evaluate respiratory rate, effort, excursion and symmetry.
- Distinguish between adequate and inadequate respiratory effort.
- List & explain factors that influence the respiratory rate.
- Demonstrate & perform respiratory assessment.
- Adapt techniques of obtaining respirations to patient situation.
- Identify sites where temperature may be assessed by non-invasive methods.
- Modify temperature check to age of patient.
- Distinguish between normal and abnormal findings.
- Discuss factors that influence body temperature.
- Perform temperature assessment.
- Adapt techniques of obtaining temperature to patient situation.
- Describe the physiology of blood pressure.
- Analyze the strengths and limitations of an auscultated blood pressure.
- Distinguish between a blood pressure taken by auscultation or palpation.
- Identify & explain average blood pressure expectations for age, and factors that may influence patient's blood pressure.
- Demonstrate & perform auscultated determination of blood pressure.
- Adapt technique of auscultating blood pressure to patient situation.
- Describe the physiology of pulse points.
- Analyze the strengths and weaknesses of a palpated blood pressure.
- Identify & explain factors that may influence a palpated blood pressure.
- Demonstrate palpated determination of blood pressure.
- Adapt technique of palpating blood pressure to patient situation.
- Explain rationale for measuring blood pressure with non-invasive monitor.
- Describe techniques to obtain blood pressure with non-invasive monitor.
- Distinguish normal and abnormal findings of blood pressure determined with non-invasive monitor.
- Perform blood pressure measurement using non-invasive monitor, and troubleshooting when using a non-invasive blood pressure monitor.



- List three (Four) parameters used to assess skin condition.
- Identify the factors that affect skin temperature, colour and moisture, and how to assess skin colour changes in different races.
- Distinguish between normal and abnormal findings when assessing skin colour, skin temperature, skin condition, and skin turgor.
- Demonstrate & perform assessment of skin condition utilizing three parameters.
- Adapt technique of skin assessment to patient age and race.
- List the three parameters used to assess pupils.
- Identify the cranial nerves that regulate eye movement and contraction.
- Identify & discuss conditions that affect pupil size, symmetry and reactivity.
- Distinguish between normal and abnormal findings when assessing pupils for size, symmetry and reactivity.
- Demonstrate & perform pupil assessment utilizing the three parameters.
- Adapt technique of assessing pupils to patient situation.
- List & identify factors that affect patient's mental status.
- Apply methods of assessing level of consciousness.
- Apply the "Alert Verbal Pain Unresponsive" (APVU) scale, and the "Glasgow Coma Scale" (GCS) to mental status assessment.
- Demonstrate & perform assessment of level of consciousness.
- Adapt technique of assessing level of consciousness to patient age.

### Competency # 19: Utilize diagnostic tests.

#### Sub Competencies

- a. Conduct oximetry testing and interpret findings.
- b. Conduct glucometric testing and interpret findings.

#### Performance Criteria

- Identify the factors that affect accuracy of pulse oximeters.
- Describe the physiologic properties of oxygen, and the function of a pulse oximeter.
- Identify normal and abnormal findings when performing oximetry testing, and indications for oxygen administration relative to saturated oxygen values.
- Perform oximetry testing.
- Adapt technique of oximetry testing to patient age.

- Identify indications for glucometric testing, the factors that affect accuracy of glucometric testing, and normal and abnormal findings when performing glucometric testing.
- Describe the physiologic mechanism of glucose, and the function of a glucometer.
- Perform glucometric testing.
- Adapt the techniques of glucometric testing to patient age.

## AREA #5 - Therapeutics

### Competency # 20: Maintain patency of upper airway and trachea.

#### Sub Competencies

- a. Use manual maneuvers and positioning to maintain airway patency.
- b. Suction oropharynx.
- c. Suction beyond oropharynx.
- d. Utilize oropharyngeal airway.
- e. Utilize nasopharyngeal airway.

#### Performance Criteria

- Define & describe methods of relieving the symptoms of airway obstruction.
- Describe the types of airway opening maneuvers for various patients.
- Describe & discuss the indications, contraindications and precautions of performing airway maneuvers.
- Apply problem-solving techniques required with various types of patients.
- Demonstrate & adapt maneuvers and positioning for head, neck & jaw positioning which improve airway patency.
- Demonstrate & perform manual airway maneuvers under a variety of patient and environmental presentations.
- Adjust to changes in patient's airway patency.
- Demonstrate management of potential complications of airway maneuvers.
- Identify & explain the purposes of and indications for oropharyngeal suctioning.
- Describe suctioning equipment.
- Explain established standards of maintenance for suctioning equipment.
- Identify pressure limitations for suctioning various age groups.
- Operate appropriate suctioning devices.

- Demonstrate & perform suctioning using safe technique, and how to clean and disinfect suctioning equipment.
- Adjust & adapt suctioning techniques to changes in patient's condition.
- List & explain potential complications of suctioning.
- Identify indications for suctioning beyond the oropharynx, and equipment for suctioning beyond the oropharynx.
- Identify & explain the purpose and indications for inserting an oropharyngeal airway.
- Discuss oropharyngeal airway types and sizes.
- Perform oropharyngeal airway sizing procedures, and insertion of an oropharyngeal airway.
- Adjust to changes in patient presentation.
- Explain the purposes of and indications for inserting a nasopharyngeal airway.
- Perform nasopharyngeal airway sizing procedures, and nasopharyngeal airway insertion.
- Adjust to changes in patient presentation.

## Competency # 21: Prepare oxygen delivery devices.

### Sub Competencies

- a. Prepare oxygen delivery devices.
- b. Utilize portable oxygen delivery systems.

### Performance Criteria

- Identify & describe indications for oxygen administration.
- Identify & discuss the purpose of oxygen administration, and oxygen administration complications.
- Describe the safe handling of oxygen delivery systems.
- Discuss oxygen administration precautions.
- Identify different oxygen cylinder types and sizes, and various types of oxygen delivery systems.
- Apply the formulas that determine oxygen cylinder factors, volume (or type) and maximum filling volumes and duration.
- Explain the difference between portable and fixed delivery systems.
- Describe the sequential steps for setting up oxygen delivery systems.
- Operate oxygen delivery systems.
- Demonstrate cleaning and disinfection of oxygen delivery systems.

## Competency # 22: Deliver oxygen and administer manual ventilation.

### Sub Competencies

- a. Administer oxygen using nasal cannula.
- b. Administer oxygen using low concentration mask.
- c. Administer oxygen using controlled concentration mask.
- d. Administer oxygen using high concentration mask.
- e. Administer oxygen using pocket mask.

### Performance Criteria

- Identify the purposes of and indications for the use of a nasal cannula, a low concentration mask, a controlled concentration oxygen mask, a high concentration mask, and a pocket mask.
- List the steps for administration of oxygen by a nasal cannula, a low concentration mask, a high concentration mask, and a pocket mask
- Perform oxygen administration using a nasal cannula, a low concentration mask, a high concentration mask, and a pocket mask
- Adjust to changes in patient presentation.

## Competency # 23: Utilize ventilation equipment.

### Sub Competencies

- a. Provide oxygenation and ventilation using manual positive pressure devices.

### Performance Criteria

- Identify the purposes of and indications for the use of a manual positive pressure device.
- List the steps for administration of oxygen by a manual positive pressure device.
- Discuss rate, rhythm, volume, compliance and positive end expiratory pressure.
- Perform ventilation using a manual positive pressure device.
- Distinguish between one person or two person application of a manual positive pressure device.
- Evaluate the effectiveness of ventilation.
- Adjust to changes in patient presentation.

## Competency # 24: Implement measures to maintain hemodynamic stability.

### Sub Competencies

- a. Conduct cardiopulmonary resuscitation (CPR).
- b. Control external hemorrhage through the use of direct pressure and patient positioning.
- c. Conduct automated external defibrillation.
- d. Conduct manual defibrillation.

### Performance Criteria

- Identify the purposes of and indications for CPR.
- List the steps for CPR administration in a variety of presentations.
- Perform CPR on various age groups, and CPR while moving a patient from site of collapse.
- Discuss potential complications of CPR.
- Adapt to changes in patient presentation.
- Identify the purposes of and indications for hemorrhage control through the use of direct pressure and patient positioning.
- List the steps for hemorrhage control through the use of direct pressure and patient positioning.
- Perform hemorrhage control through the use of direct pressure and patient positioning.
- Discuss potential complications of hemorrhage control through the use of direct pressure and patient positioning.
- Adapt to changes in patient presentation.
- Define & explain “defibrillation”.
- Describe & explain the purposes of automated external defibrillation.
- Discuss the indications for automated external defibrillation.
- Identify & discuss the various types of automated external defibrillator.
- List & explain complications to the use of automated external defibrillation.
- Apply the established standards of automated external defibrillation equipment maintenance.
- Operate an automated external defibrillator.
- Integrate CPR procedures and automated external defibrillation procedures.
- Adapt & integrate procedures to patient presentation.

## Competency # 25: Provide basic care for soft tissue injuries.

### Sub Competencies

- a. Treat soft tissue injuries.
- b. Treat burn.
- c. Treat eye injury.
- d. Treat penetration wound.
- e. Treat local cold injury.
- f. Provide routine wound care.

### Performance Criteria

- Identify the purposes of and indications for soft tissue dressing, bandaging and immobilization.
- Describe the various types of dressings and bandages.
- Demonstrate & perform appropriate dressing, bandaging and immobilization procedures.
- Adjust to changes in patient presentation.
- Identify the purposes of and indications for dressing a burn.
- Describe types of burn dressings.
- Demonstrate application of burn dressing.
- Adjust to changes in patient presentation.
- Identify the purposes of and indications for an eye dressing.
- Describe types of eye dressings.
- Demonstrate application of eye dressing.
- Adjust to changes in patient presentation.
- Identify the purposes of and indications for dressing a penetration wound.
- Describe types of penetration wound dressings.
- Demonstrate application of penetration wound dressing.
- Adjust to changes in patient presentation.
- Describe methods for local cold injury assessment.
- Identify the purposes of and indications for caring for local cold injury.
- Identify the types of tissue damage that may result from local cold injury.
- Demonstrate provision of care for local cold injury.
- Adjust to changes in patient presentation.
- Describe the stages of wound healing, and common dressings and therapies associated with wound care.

- Explain the ongoing care associated with wound management, and the process of suturing/stapling and suture/staple removal.
- Perform wound care.
- Utilize sterile or aseptic technique as appropriate.

#### Competency # 26: Immobilize actual and suspected fractures.

##### Sub Competencies

- a. Immobilize suspected fractures involving appendicular skeleton.
- b. Immobilize suspected fractures involving axial skeleton.
- c. Reduce fractures and dislocations

##### Performance Criteria

- Identify signs and symptoms of a possible fracture not involving the spinal column.
- Distinguish between open and closed fractures.
- Evaluate commercially manufactured splints for use based on patient presentation.
- Modify splints to meet patient needs.
- Explain how the mechanism of injury and illness can affect injuries to the appendicular skeleton.
- Demonstrate & perform appropriate treatment to suspected fractures.
- Identify signs and symptoms of possible Fracture injury to the spinal column or Axial Skeleton.
- Describe the relationship of kinematics to potential spinal injury.
- Evaluate commercially manufactured immobilization devices for use based on patient presentation.
- Modify immobilization devices to meet patient needs.
- Demonstrate & perform treatment of suspected fractures involving the axial skeleton.
- Define "Closed Reduction".
- Discuss the indications for fracture and dislocation reduction.

#### Competency # 27: Administer medications.

##### Sub Competencies

- a. Recognize principles of pharmacology as applied to medications listed in **Appendix 2**.
- b. Follow safe process for responsible medication administration.
- c. Administer medication via subcutaneous route.
- d. Administer medication via intramuscular route.
- e. Administer medication via sublingual route.
- f. Administer medication via buccal route.
- g. Administer medication via oral route.
- h. Provide patient medication assist according to provincial list of medications and policies.

### **Performance Criteria**

- Identify the sources for medications, drug classification, and chemical, generic, trade and official names for all medications.
- Describe mechanisms of entry, absorption, site of action, metabolism and elimination.
- Perform calculation to determine the amount of medication required for expected action.
- Explain factors that affect the absorption, distribution and elimination of a medication, and formulations related to administration.
- Discuss indications, relative and absolute contraindications, side effects, dosage parameters, and safe administration process for each medication, and the information found within an appropriate medication references.
- Define pharmacological terminology and abbreviations.
- List the signs, symptoms and side-effects of iatrogenic overdose.
- Explain the “Seven Rights” of medication administration.
- Distinguish between the different drug administration routes.
- Describe how medication administration protocols are applied to specific patient presentations.
- Apply policies when medication administration errors occur.
- Explain the role of the EMR in medication administration.
- Explain the role of the EMR in medication error reporting.
- Demonstrate how to provide medications using a sequential step method of administration, how to prepare a patient for medication administration, and how to measure the required quantity of medication.
- Set up the supplies required for the specific route of drug administration.
- Receive consent before administration of medications.
- Identify medical conditions and indications for subcutaneous administration of epinephrine and naloxone..
- Evaluate appropriate site for the injection.



- Discuss the benefit of medication administration via subcutaneous route in comparison to other routes.
- Demonstrate how to provide subcutaneous medications using a sequential step method of administration, how to prepare a patient for subcutaneous medication administration, and how to prepare an auto injector device.
- Identify medical conditions, and indications for intramuscular administration of epinephrine and naloxone.
- Distinguish those approved drugs that are given via intramuscular routes.
- Evaluate appropriate site for the injection.
- Discuss the benefit of medication administration via intramuscular route in comparison to other routes.
- Demonstrate how to provide intramuscular medications using a sequential step method of administration, how to prepare a patient for intramuscular medication administration, and how to prepare an auto injector.
- Identify medical conditions, and indications for sublingual administration of nitroglycerin.
- Distinguish those approved drugs that are given via sublingual routes.
- Discuss the benefit of medication administration via sublingual route in comparison to other routes.
- Demonstrate how to provide sublingual medications using a sequential step method of administration, how to prepare a patient for sublingual medication administration, and how to prepare a sublingual administration device.
- Evaluate medical conditions and indications for buccal administration of a medication.
- Apply proper calculations for correct medication requirement for patient presentation.
- Distinguish those approved drugs that are given via buccal routes.
- Discuss the benefit of medication administration via buccal route in comparison to other routes.
- Demonstrate how to provide buccal medications using a sequential step method of administration, how to prepare a patient for buccal medication administration, and how to measure the required quantity of buccal medication.
- Evaluate medical conditions and indications for oral administration of a medication.
- Apply proper calculations for correct medication requirement for the patient presentation.
- Distinguish those approved drugs that are given via oral routes.
- Discuss the benefit of medication administration via oral route in comparison to other routes.
- Demonstrate how to provide oral medications using a sequential step method, how to prepare a patient for oral administration of a medication.

- Identify provincial policies and directives for assisting patients with their own prescribed medication.
- Discuss the benefits, advantages and disadvantages of assisting a patient with their own medications.
- Discuss the limitations associated with assisting patient with their own medication.
- Identify indications, relative and absolute contraindications, side effects, dosage parameters, and safe administration process for each medication.

## AREA #6 - Integration

**Competency # 28: Utilize differential diagnosis skills, decision-making skills and psychomotor skills in providing care to patients.**

### Sub Competencies

- a. Provide care to patient experiencing signs and symptoms involving cardiovascular system.
- b. Provide care to patient experiencing signs and symptoms involving neurological system.
- c. Provide care to patient experiencing signs and symptoms involving respiratory system.
- d. Provide care to patient experiencing signs and symptoms involving genitourinary / reproductive systems.
- e. Provide care to patient experiencing signs and symptoms involving gastrointestinal system.
- f. Provide care to patient experiencing signs and symptoms involving integumentary system.
- g. Provide care to patient experiencing signs and symptoms involving musculoskeletal system.
- h. Provide care to patient experiencing signs and symptoms involving immunologic system.
- i. Provide care to patient experiencing signs and symptoms involving endocrine system.
- j. Provide care to patient experiencing signs and symptoms involving the eyes, ears, nose or throat.
- k. Provide care to patient experiencing toxicologic syndromes.
- l. Provide care to patient experiencing non-urgent problem.
- m. Provide care to a palliative patient.
- n. Provide care to patient experiencing signs and symptoms due to exposure to adverse environments.
- o. Provide care to trauma patient.

### Performance Criteria

- Describe & explain the pathophysiology for all specific conditions listed in **Appendix 1**, the approach to a patient presenting with the various conditions, and how patient history relates to patient presentation.
- Explain how age, gender and health status relate to patient presentation and care.
- Infer a differential diagnosis.
- Discuss and identify potential complications of the various conditions.
- Adapt care based on patient presentation.
- Demonstrate & integrate the ability to approach, assess, treat and transport a patient.
- Justify approach, assessment, care and transport decisions.

### Competency # 29: Provide care to meet the needs of unique patient groups.

#### Sub Competencies

- Provide care for neonatal patient.
- Provide care for pediatric patient.
- Provide care for geriatric patient.
- Provide care for physically-impaired patient.
- Provide care for mentally-impaired patient.
- Provide care to bariatric patient.
- Provide care to obstetrical/labor delivery patient

#### Performance Criteria

- Adapt care based on patient presentation.
- List & describe potential complications with pediatric and neonatal patients.
- Demonstrate & Integrate the ability to approach, assess and treat.
- Justify approach, assessment, care and transport decisions.
- Identify possible abuse or neglect.
- Describe & Integrate variations to approach and treatment.
- Justify variations in approach and treatment decisions.
- Define "physically impaired patient".
- Modify assessment approach.
- List & identify common medical emergencies associated with physically-impaired patients, and common trauma emergencies associated with physically-impaired patients.
- Identify possible abuse or neglect of the physically-impaired patient.

- List & demonstrate appropriate assessment techniques for physically-impaired patient.
- List & integrate the approach, treatment and transport methods appropriate to physically-impaired patient.
- Justify approach, assessment, care and transport decisions.
- Define "mentally-impaired patient".
- Modify assessment approach.
- List common medical emergencies associated with mentally-impaired patients.
- List & identify common trauma emergencies associated with mentally-impaired patients.
- Identify possible abuse or neglect of mentally-impaired patient.
- List & demonstrate appropriate assessment techniques for mentally-impaired patient.
- List & integrate the approach, treatment and transport methods appropriate to mentally-impaired patient.
- Justify approach, assessment, care and transport decisions.
- Define "bariatric patient".
- Modify assessment approach.
- List common medical emergencies associated with bariatric patients.
- List & identify common medical and trauma emergencies associated with bariatric patients.
- Identify possible abuse or neglect of bariatric patient.
- List & demonstrate appropriate assessment techniques for bariatric patient.
- List & integrate the approach, treatment and transport methods appropriate to bariatric patient.
- Justify approach, assessment, care and transport decisions.

### Competency #30: Conduct ongoing assessments and provide care.

#### Sub Competencies

- a. Conduct ongoing assessments based on patient presentation and interpret findings.
- b. Re-direct priorities based on assessment findings.

#### Performance Criteria

- Demonstrate & adapt ongoing assessments based on patient presentation.
- Evaluate results of ongoing assessments.
- Integrate assessment and patient care procedures.
- Justify ongoing assessment decisions.
- Demonstrate & adapt management priorities.

- Communicate changes to patient, family, or primary caregiver(s).
- Justify approach, assessment, care and transport decisions.

## **AREA #7 - Transportation**

### **Competency #31: Prepare ambulance for service.**

#### **Sub Competencies**

- a. Conduct vehicle maintenance and safety check.
- b. Recognize conditions requiring removal of vehicle from service.
- c. Utilize all vehicle equipment & medical treatment devices.

#### **Performance Criteria**

- Identify components of a maintenance check, and components of a safety check.
- Demonstrate & perform a maintenance check, and a safety check.
- List the conditions that require removal of a vehicle from service.
- Describe & Explain the purpose of all vehicle equipment, and the purpose of all vehicle devices.
- Operate vehicle equipment and all vehicle devices correctly.

### **Competency #32: Drive ambulance or emergency response vehicle.**

#### **Sub Competencies**

- a. Utilize defensive driving techniques.
- b. Utilize safe emergency driving techniques.
- c. Drive in a manner that ensures patient comfort and a safe environment for all passengers.

#### **Performance Criteria**

- Describe principles of professional and defensive driving.
- Apply techniques of professional and defensive driving.
- Describe driving techniques for maximizing the safety of the working environment.

### Competency #33: Transfer patient to air ambulance.

#### Sub Competencies

- a. Create safe landing zone for rotary-wing aircraft.
- b. Safely approach stationary rotary-wing aircraft.
- c. Safely approach stationary fixed-wing aircraft.

#### Performance Criteria

- List the required elements of a safe landing zone.
- Describe procedure to create a safe landing zone.
- Describe the technique for safely approaching a rotary wing aircraft, and a fixed-wing aircraft.

### Competency #34: Patient preparation for air transport.

#### Sub Competencies

- a. Prepare patient for air medical transport.
- b. Recognize the stressors of flight on patient, crew and equipment, and the implications for patient care.

#### Performance Criteria

- Identify the unique patient care principles for air medical transport.
- Describe the preparation of patient for air medical transport.
- List the environmental factors and stresses experienced in flight.
- Describe how environmental factors and stresses may affect air medical patients.

## AREA #8 - Health Promotion and Public Safety

### Competency #35: Integrate professional practice into community care.

#### Sub Competencies

- a. Participate in health promotion activities and initiatives.
- b. Participate in injury prevention and public safety activities and initiatives.
- c. Work collaboratively with other members of the health care community.
- d. Utilize community support agencies as appropriate.

#### **Performance Criteria**

- Differentiate between primary, secondary and tertiary care strategies.
- Explain the purpose of health promotion and prevention strategies.
- Describe common health promotion and prevention strategies, health promotion and prevention strategies for individuals and communities, and tissue / organ donation programs.
- Explain the purpose of injury prevention and public safety initiatives.
- Describe common injury prevention and public safety initiatives, and injury prevention strategies for individuals, households, workplaces and communities.
- List other members of the health care community.
- Describe the roles of and relationship to other health care professionals.
- Value working collaboratively with other health care professionals.
- Demonstrate collaborative work with other health care professionals.
- Identify common community support programs.
- Describe & discuss situations that may require expertise of community support agencies, and related legislative requirements.
- Acknowledge the need for additional intervention.
- Communicate options to patient.

### **Competency #36: Contribute to public safety through collaboration with other emergency response agencies.**

#### **Sub Competencies**

- a. Work collaboratively with other emergency response agencies.
- b. Work within an incident management system (IMS).

#### **Performance Criteria**

- List community emergency response agencies.
- Describe the roles of and relationship to other emergency response agencies.
- Describe & discuss mutual assistance and tiered-response.
- Value collaborative work with other emergency response agencies.

- Perform collaborative work with other emergency response agencies.
- Identify a variety of Incident Management Systems.
- Describe the principles of an IMS.
- Identify & explain the various participant roles in an IMS.
- Apply an IMS structure to an incident.

### Competency #37: Participate in the management of a chemical, biological, radiological / nuclear, explosive (CBRNE) incident.

#### Sub Competencies

- a. Recognize indicators of agent exposure.
- b. Possess knowledge of personal protective equipment (PPE).
- c. Perform CBRNE scene size-up.
- d. Conduct triage at CBRNE incident.
- e. Conduct decontamination procedures.
- f. Provide care to patients involved in CBRNE incident.

#### Performance Criteria

- List common CBRNE agents.
- List & discuss signs and symptoms due to agent exposure.
- Identify potential dissemination devices.
- Discuss importance of PPE, and limitations of PPE.
- List levels of PPE.
- Describe how to safely perform CBRNE scene size-up, agent / hazard avoidance techniques, and how to define and establish inner and outer perimeters.
- Describe the principles of triage specific to a CBRNE incident.
- Control contaminated casualties.
- Conduct emergency decontamination procedures.
- Assist with the decontamination process.
- List chemical counter-measures.
- Identify precautions to be taken when transporting patients, possible support requirements by hospitals.

## Appendix -1 Pathophysiology

This listing is a guideline of illnesses, conditions and injuries where knowledge is recommended



Cardiovascular	
Vascular Disease	Aneurysm
	Arteriosclerosis
	Hypertension
Acute Coronary Syndrome	Infarction
	Ischemia/Angina
Traumatic Injury	Myocardial Contusion
	Aortic disruption

Neurologic	
Convulsive Disorders	Febrile Seizure
	Generalized Seizures
	Partial Seizures
Headache & Facial Pain	Infection
Cerebral Disorder	Stroke
	Transient Ischemic Attack
Altered Mental State	Metabolic
	Structural
Infectious Disorder	Meningitis
Traumatic Injury	Head Injury
	Spinal Cord Injury

Respiratory	
Medical Illness	Chronic Obstructive Pulmonary Disorder
	Pulmonary Edema
	Acute Respiratory Failure
	Reactive Airway Disease / Asthma
Traumatic Injury	Airway Obstruction
	Penetrating Injury
	Flail Chest
	Fractured Ribs
Pediatric Illness	Respiratory Failure
	Croup / Epiglottitis

Genitourinary / Reproductive System	
Reproductive Disorder	Acute bleeding / discharge
Renal /Bladder	Renal Obstruction
	Traumatic Injury

Gastrointestinal	
Esophagus / Stomach / Bowel / Liver	Esophageal Varices
	Obstruction
	Upper gastrointestinal Bleed
	Lower gastrointestinal Bleed
	Appendicitis
	Cirrhosis / Hepatitis
Traumatic Injury	Penetrating / Blunt Injury
	Evisceration

Integumentary	
Traumatic Injury	Burns
	Laceration / Avulsion / Abrasions
	Integumentary cold injury
	Crush injuries
Police devices	Taser darts
Inflammatory Illness	Allergy / urticaria
	Stings and bites
Immunologic Disorder	Anaphylaxis

Musculoskeletal	
Soft Tissue Disorder	Amputation
	Contusion
Involving Joints	Dislocation
	Sprain
	Strains
Traumatic injuries	Appendicular / Axial / Open / Closed Fractures
	Falls / Blast / Crush injuries

Endocrine	
Pancreatic Illness	Diabetes Mellitus
	Hypoglycemic and Hyperglycemic event

Eyes, Ears, Nose Throat	
Traumatic Injury	Eye Trauma
	Eye Avulsion

	Penetrating Injury
	Chemical Burns
	Trismus
	Epistaxis
	Fractured Nose
	Blunt Tracheal Injury

Toxicologic Emergencies	
Poisonous Chemicals	Absorption, Ingestion, Inhalation
Prescription Medication	Accidental / Intentional Over medication
Non-Prescription Medication	Alcohol
	Recreational Drugs
	CNS depressants
	Sympathomimetics
Food related	Food poisoning
Police Agents	Gases and Spray Agents

Adverse Environment	
Hypo/Hyperthermic Illness	Hypothermia
	Hyperthermia
	Heat Cramp
	Heat Stroke
	Heat Exhaustion

Psychological Disorders / Illness	
Anxiety Disorder	Acute Stress
	Generalized Anxiety
	Post-Traumatic Stress
	Situational Disturbance
Affective Disorder	Suicidal Ideation
	Depression
	Psychosis

Obstetrics / Neonatal	
Pregnancy Complications	First Trimester Bleeding

	Third Trimester Bleeding
Child Birth Complications	Abnormal Presentation
	Post Partum Hemorrhage
	Neonate Respiratory Insufficiency
	Neonate Cardiovascular Insufficiency

Multisystem Diseases / Illness	
Shock Syndromes	Anaphylaxis
	Hypovolemic
	Neurogenic
	Septic

## Appendix -2 Pharmacologic Agents

This listing of pharmacological agents serves as a representative guide of agents administered by Emergency Medical Responders across Canada and must be considered with **Specific Competency # 27 - Medication Administration**.

The right of administration of pharmacological agents is guided by the responsible paramedicine regulators in each Canadian jurisdictions.

Pharmacological Agents	
Affecting the Central Nervous System	Opioid Antagonist - Naloxone
Affecting the Autonomic Nervous System	Adrenergic Agent - Epinephrine auto-injectors & Prefilled syringes Patient assistance with their prescribed Epinephrine auto injector and Prefilled syringe.
Affecting the Respiratory System	Patient assistance with their prescribed bronchodilator.
Affecting the Cardiovascular System	Antianginal agent - Nitroglycerine tabs and sprays Patient assistance with their prescribed Nitroglycerin tabs and spray
Affecting Blood Clotting Mechanisms	Platelet Inhibitor - ASA Patient assistance with their prescribed ASA tabs
Affecting Body Glycemia	Hypoglycemic combating agent - Oral Glucose

## Acknowledgements

PAC gratefully acknowledges the working committee's contributions:

- **Carl Damour**, Manager, Registration Services, Alberta College of Paramedics (**Chair**)
- **Dwayne Forsman**, Chief Administrative Officer, Paramedic Association of Canada
- **Joshua T. Fisher**, Paramedic, Newfoundland
- **Bill Leverett**, District Supervisor, British Columbia Ambulance Service
- **Jodie Marshall**, Program Manager, Medical Responder Programs, Justice Institute of British Columbia
- **Jacqueline Messer LePage**, Registrar, Saskatchewan College of Paramedics
- **John Paddon**, Paramedic, Alberta Health Services
- **Tim Stairs**, Treasurer, Board of Directors, Paramedic Association of New Brunswick
- **Jennifer Williams**, Advanced Care Paramedic, Director of Professional Practice and Research, Saskatchewan College of Paramedics
- **Jon Pascoe**, Pascoe Management Consulting Inc., Alberta College of Paramedics/Paramedic Association of Canada (project management/secretariat).