



National Occupational Competency Profile Variances for Manitoba Primary Care Paramedics

September 1, 2021



An Introduction:

With the College of Paramedic of Manitoba becoming operational December 1, 2020, the Regulated Health Professions Act (RHPA) and the College of Paramedics of Manitoba General Regulation became the defining documents for Paramedic Scope of Practice. While approved education programs have used the National Occupational Competency profile (NOCP 2011) as the foundation for required knowledge and demonstration of competency, the Reserved Acts of the General Regulations exceeds the NOCP’s in several areas, and the Provincial Medical Director has exceeded NOCP pharmacological responsibilities for Paramedics.

To ensure appropriate education for paramedic practitioners, variances have been identified and, in some NOCP’s, the performance environment has been changed to better ensure competent paramedic practice in Manitoba. As per the EQual Health Education Council Client Agreement:

The Council client and EQual™ acknowledge that the Council client’s provincial variances and educational guidance’s may be amended from time to time and upon agreement between the parties. (page 2, section 4)

Performance Environments

The Performance Environment specifies the setting in which the paramedic must demonstrate proficiency. The following notations and definitions apply:

Performance Environment	DEFINITION
N	The competency is <i>not applicable</i> to the paramedic.
X	The paramedic should have a <i>basic awareness</i> of the subject matter of the competency. The paramedic must have been provided with or exposed to basic information on the subject, but evaluation is not required.
A	The paramedic must have demonstrated an <i>academic understanding</i> of the competency. Individual evaluation is required.
S	The paramedic must have demonstrated proficiency in a <i>simulated setting</i> . Individual evaluation of physical application skills is required, utilizing any of the following: <ul style="list-style-type: none"> • practical scenario • skill station • mannequin • cadaver • live subject (human or non-human) In Competency Areas 4 and 5, skills must be demonstrated on a human subject where legally and ethically acceptable.



Performance Environment	DEFINITION
C	<p>The paramedic must have demonstrated proficiency in a <i>clinical setting</i> with a patient. Individual evaluation of physical application skills is required. An acceptable clinical setting is any of the following:</p> <ul style="list-style-type: none"> • hospital • health clinic • medical office • nursing home. • high fidelity simulation⁴ <p>Alternate clinical settings must be appropriate to the Specific Competency being evaluated.</p>
P	<p>The paramedic must have demonstrated proficiency in a <i>field preceptorship</i> with a patient. Individual evaluation of physical application skills is required. An acceptable field preceptorship setting is a land or air paramedic service. Alternate field preceptorship settings must be appropriate to the Specific Competency being evaluated and may include high fidelity simulation.</p>

NOCP variances for Manitoba Primary Care Paramedic

Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
<p>3(d): Performing a procedure on tissue below the surface of a tooth.</p> <p>Emergency Tooth Reimplantation</p>	No NOCP	N/A	<p>A</p> <p>Explain indicators and rationale for emergency tooth reimplantation.</p> <p>Explain possible complications of tooth reimplantation.</p>
<p>4(c): removing a device beyond the pharynx.</p> <p>Orogastric tube (gravity drain) maintenance,</p> <p>Nasogastric tube maintenance (gravity drain)</p>	No NOCP	N/A	<p>S</p> <p>Define Orogastric (OG) and Nasogastric (NG) tube monitoring.</p> <p>Explain indications and rationale for use of OG and NG tubes</p> <p>Explain the assessment and management of OG and NG tubes</p> <p>Explain complications of OG and NG tubes</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
			Perform routine management of patients with OG and NG tubes (including removal)
<p>4(f): Inserting or removing an instrument or device beyond the anal verge.</p> <p>Continuous Core Temperature Monitoring</p>	4.5.g Conduct invasive core temperature monitoring and interpret findings	X	<p>A</p> <p>4.5.g Conduct invasive core temperature monitoring and interpret findings.</p> <p>Differentiate between core and peripheral temperature monitoring.</p> <p>Explain indications and rationale for measuring core body temperature.</p> <p>Explain various means of measuring core body temperature.</p>
<p>4(g): Inserting or removing an instrument or device into an artificial opening in the body.</p> <p>Positive Pressure Ventilation with a Tracheostomy,</p> <p>Suctioning a Tracheostomy</p> <p>Managing Obstructed Tracheostomy</p>	5.1.c Suction beyond oropharynx.	A	<p>C</p> <p>5.1.c Suction beyond oropharynx.</p> <p>Discuss indications for suctioning beyond the oropharynx.</p> <p>Describe equipment for suctioning beyond the oropharynx.</p> <p>Perform suctioning beyond oropharynx</p>
<p>5(e): Administering a substance by enteral instillation or parenteral instillation.</p> <p>Tube Maintenance of an NG tube</p> <p>Tube Maintenance of a PEG tube</p>	No NOCP	N/A	<p>S</p> <p>Define Percutaneous endoscopic gastric tube (PEG) and nasogastric (NG) tube.</p> <p>Explain indications and rationale for use of PEG and NG tubes</p> <p>Explain the assessment and management of PEG and NG tubes</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
			<p>Explain complications of PEG and NG tubes</p> <p>Perform routine management of patients with PEG and NG tubes</p>
<p>9. If there is a standing order, and with additional training, administering a drug, except vaccines, by:</p> <ul style="list-style-type: none"> - auto-injector, - inhalation, metered dose inhaler or nebulizer, - buccal, oral or sublingual routes, - intranasal route 	<p>5.8.b – Follow safe process for responsible medication administration.</p>	<p>C</p>	<p>P</p> <p>5.8.b – Follow safe process for responsible medication administration.</p> <p>Explain the “Five Rights” of medication administration.</p> <p>Distinguish between the different drug administration routes.</p> <p>Discuss how medication administration protocols are applied to specific patient presentations.</p> <p>Apply policies when medication administration errors occur.</p> <p>Explain the role of the paramedic in medication administration.</p>
<p>9. If there is a standing order, and with additional training, administering a drug, except vaccines, by:</p> <ul style="list-style-type: none"> - auto-injector, - inhalation, metered dose inhaler or nebulizer, - buccal, oral or sublingual routes, - intranasal route - Topical 	<p>5.8.k Administer medication via oral route.</p>	<p>S</p>	<p>C</p> <p>5.8.k Administer medication via oral route.</p> <p>Evaluate medical conditions, and indications for Oral administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
			<p>Distinguish those approved drugs that are given via Oral routes.</p> <p>Evaluate the benefit of medication administration via Oral route in comparison to other routes.</p> <p>Demonstrate how to provide Oral medications using a sequential step method of administration.</p> <p>Demonstrate how to prepare a patient for Oral medication administration.</p> <p>Demonstrate how to measure the required quantity of medication.</p>
<p>9. If there is a standing order, and with additional training, administering a drug, except vaccines, by:</p> <ul style="list-style-type: none"> - auto-injector, - inhalation, metered dose inhaler or nebulizer, - buccal, oral or sublingual routes, - intranasal route - Topical 	<p>5.8.h Administer medication via sublingual route.</p>	<p>S</p>	<p>C</p> <p>5.8.h Administer medication via sublingual route.</p> <p>Evaluate medical conditions, and indications for Sublingual administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p> <p>Distinguish those approved drugs that are given via Sublingual routes.</p> <p>Evaluate the benefit of medication administration via Sublingual route in comparison to other routes.</p> <p>Demonstrate how to provide Sublingual medications using a sequential step method of administration.</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
			<p>Demonstrate how to prepare a patient for Sublingual medication administration.</p> <p>Demonstrate how to measure the required quantity of medication.</p>
<p>9. If there is a standing order, and with additional training, administering a drug, except vaccines, by:</p> <ul style="list-style-type: none"> - auto-injector, - inhalation, metered dose inhaler or nebulizer, - buccal, oral or sublingual routes, - intranasal route - topical 	<p>5.8.j Administer medication via topical route.</p>	<p>A</p>	<p>S</p> <p>5.8.j Administer medication via topical route.</p> <p>Evaluate medical conditions, and indications for Topical administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p> <p>Distinguish those approved drugs that are given via Topical routes.</p> <p>Evaluate the rate of absorption of medication administered via Topical route in comparison to other routes.</p> <p>Evaluate the benefit of medication administration via Topical route in comparison to other routes.</p> <p>Demonstrate how to provide Topical medications using a sequential step method of administration.</p> <p>Demonstrate how to prepare a patient for Topical medication administration.</p> <p>Demonstrate how to measure the required quantity of medication.</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
<p>9: If there is a standing order, and with additional training, administering a drug by any method, except vaccines, incidental to the practice of paramedicine</p> <p>Routes of administration include: Subcutaneous (SC); Intramuscular (IM); Intravenous (IV) Intraosseous (IO)</p> <p>Administering Medication through an established infusion device.</p>	<p>5.8.d Administer medication via intramuscular route.</p>	<p>S</p>	<p>C</p> <p>5.8.d Administer medication via intramuscular route.</p> <p>Evaluate medical conditions, and indications for intramuscular administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p> <p>Distinguish those approved drugs that are given via intramuscular routes.</p> <p>Evaluate appropriate site for the injection.</p> <p>Evaluate the benefit of medication administration via intramuscular route in comparison to other routes.</p> <p>Demonstrate how to provide intramuscular medications using a sequential step method of administration.</p> <p>Demonstrate how to prepare a patient for intramuscular medication administration.</p> <p>Demonstrate how to measure the required quantity of medication.</p>



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<p>9: If there is a standing order, and with additional training, administering a drug by any method, except vaccines, incidental to the practice of paramedicine</p> <p>Routes of administration including: Subcutaneous (SC); Intramuscular (IM); Intravenous (IV) Intraosseous (IO)</p> <p>Administering Medication through an established infusion device.</p>	<p>5.8.e Administer medication via intravenous route.</p>	<p>A</p>	<p>C</p> <p>5.8.e Administer medication via intravenous route.</p> <p>Evaluate medical conditions and patient indications for intravenous administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p> <p>Distinguish those approved drugs that are given via intravenous routes.</p> <p>Evaluate the benefit of medication administration via intravenous route in comparison to other routes.</p> <p>Demonstrate how to provide intravenous medications using a sequential step method.</p> <p>Demonstrate how to prepare a patient for intravenous administration of a medication.</p> <p>Demonstrate how to measure the required quantity of intravenous medication.</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
<p>9: If there is a standing order, and with additional training, administering a drug by any method, except vaccines, incidental to the practice of paramedicine</p> <p>Routes of administration include: Subcutaneous (SC); Intramuscular (IM); Intravenous (IV) Intraosseous (IO)</p> <p>Administering Medication through an established infusion device.</p>	<p>5.8.f Administer medication via intraosseous route.</p>	<p>A</p>	<p>S 5.8.f Administer medication via intraosseous route.</p> <p>List medical conditions and patient indications for intraosseous administration of a medication.</p> <p>Apply proper calculations for correct medication requirement for the patient presentation.</p> <p>Distinguish those approved drugs that are given via intraosseous routes.</p> <p>Evaluate appropriate site for the injection.</p> <p>Evaluate the benefit of medication administration via intraosseous route in comparison to other routes.</p> <p>Demonstrate how to provide intraosseous medications using a sequential step method.</p> <p>Demonstrate how to prepare a patient for intraosseous administration of a medication.</p> <p>Demonstrate how to measure the required quantity of intraosseous medication.</p>



Reserved Act	NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
<p>9: Administering a vaccine by any method in accordance with provincial requirements if the vaccine is required as part of a communicable disease response or in a public health emergency.</p> <p>Vaccine Administration</p>	<p>No NOCP</p>	<p>N/A</p>	<p>A</p> <p>Immune System and how Vaccines Work Discuss human immune system and how vaccines work</p> <p>Vaccine Preventable Diseases Discuss the rationale and benefit of immunization as relevant to the practice setting</p> <p>Vaccine Development and Evaluation Demonstrates knowledge about the main steps in vaccine deployment and evaluation</p> <p>Types of Immunizing Agents and their Composition Demonstrates knowledge of the components and properties of immunizing agents as needed for safe and effective practice.</p> <p>Population Health Discusses relevant principles of population health for improving immunization coverage rates.</p> <p>Communication Demonstrates effective communication about immunization as relevant to the practice setting (s)</p> <p>Storage and Handling Discusses Canadian guidelines regarding storage, handling, or transporting vaccines</p> <p>Administration Describes the process of preparation and administration of immunization agents</p>



			<p>Adverse Events Describes anticipation, identification and management of adverse events following immunization</p> <p>Documentation Describes relevant information to each immunization encounter in accordance with national guidelines for immunization practices and jurisdictional health information processes</p> <p>Special Considerations Identifies and describes response to the unique needs of certain population groups</p> <p>The Canadian System Demonstrates an understanding of the immunization system in Canada and its impact on Paramedic practice</p> <p>Legal and Ethical Aspects Describes the legal and ethics standards in all aspects of immunization practice</p>
<p>12: Setting a fracture of a bone for the purpose of</p> <ul style="list-style-type: none"> • restoring perfusion, • extrication • immobilization 	<p>5.7.c Reduce fractures and dislocations.</p>	<p>X</p>	<p>A</p> <p>5.7.c Reduce fractures and dislocations.</p> <p>Define "Closed Reduction".</p> <p>Discuss the indications for fracture and dislocation reduction.</p> <p>Discuss possible complications and their signs and symptoms of fracture and dislocation reduction.</p> <p>Describe the process of fracture and dislocation reduction.</p>



Additional NOCP variances for Primary Care Paramedic

NOCP Comp	Current Performance Environment	New Performance Environment and Expected Competencies and Sub-competencies
<p>4.5.n Obtain 12 lead ECG and interpret findings.</p>	<p>S</p>	<p>P Explain the difference between a 3-lead and a 12- lead ECG. Identify indications for use of a 12-lead ECG. Perform the technique of obtaining a 12-lead ECG.</p>
		<p>Adapt technique of obtaining a 12-lead ECG to patient age and gender. Describe the steps involved in interpreting 12-lead ECGs, and ECGs obtained with additional leads. Identify indications for the use of additional leads. Describe the technique of obtaining ECGs with additional leads.</p>
<p>6.1.q Provide care to obstetrical patient.</p>	<p>S</p>	<p>C Explain the approach to an obstetrical patient. Discuss disease processes that interfere with the labour and delivery. Discuss complications of labour and delivery. Analyze how patient history relates to patient presentation. Analyze how age and health status relate to patient presentation. Discuss indications that suggest the need to prepare for imminent delivery. Adjust care based on fetal and maternal presentation. Adapt care to manage an imminent delivery. Integrate the approach, assessment, treatment and transport of a patient. Justify approach, assessment, care and transport decisions.</p>



Pharmacology Requirements - Manitoba PCP's must receive advanced academic pharmacology education to ensure safe and competent administration of pharmacological agents listed below. The pharmacology education must be provided by:

- A qualified Canadian registered PCP/ACP possessing a relevant degree in science and/or education, and who is certified to administer the pharmacological agents
- Other registered Health Professionals with relevant education credentials (Physician, RN, RT, etc).

Pharmacologic agents to be administered by Manitoba PCP's and which are associated with pharmacology education enhancement include: ***(Please note: the list may change from time to time as new pharmacological agents are added/removed and education content should reflect current expectation)***

Fentanyl and Midazolam – IN

Lorazepam, Olanzapine, Ticagrelor – Oral or SL

Dimenhydrinate – Oral or IV

Tranexamic Acid, Ketamine, Enoxaparin, Metoclopramide – IV (Enoxaparin may also be given SC)

Oxytocin – IM, IV

Toradol, Vaccines – IM

Medications maintained through an established infusion device: The following medications are currently listed as part of the PCP Paramedic Scope of Work and are found on the Shared Health website (<https://sharedhealthmb.ca/health-providers/ers/>) specifically in document P07 Maintenance of Established Medication Infusion (<https://sharedhealthmb.ca/health-providers/ers/clinical-procedures/>) ***These documents are subject to change/revision and should be monitored by education programs to ensure accuracy.***

Medications maintained through an established infusion device:

Antibiotics, Corticosteroids, Dextrose (>25%), Glucagon, Heparin, Insulin, Magnesium Sulphate, N-acetylcysteine, Naloxone, Octreotide, Oxytocin, Pantoprazole, and IV solutions including Ringer's lactate solution, 0.9% (normal) saline solution, 0.45% (half normal) saline solution, 5% dextrose solution (D5W), 10% dextrose solution (D10W), Any standard combination of the above fluids (e.g. D5W / 0.45% saline solution)

Maximum rate of infusion = 250 ml / hr.,

Additives to IV solution:

- **KCl** up to 40 mEq/l,
- **MgSO4** up to 1 gm/l,
- **Oxytocin** up to 40 units per liter