BCEHS BC Emergency Health Services

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Fundamentals (From: TG's Overview)

As you view the web page you are encouraged to review the Medical Vision for paramedic care. This document describes how and why BCEHS is moving to an evidence based best practice model subject to constant review and improvement. The expert approach is provided for your review to either enhance or reaffirm your best practice characteristics of paramedic pre-hospital care.

The Adult and Pediatric sections contain clinical practice guidelines for patient management by EMR, PCP and ACP practitioners. For clinical purposes, BCEHS has defined a pediatric patient as ≤ 12 years of age, while an adult is defined as >12 years or showing signs of puberty.

Critical Care Paramedics should refer to the Critical Care Guidelines.

Foreword

Clinical Medical Programs

Date Reviewed

To be written by Joe Acker.

Acknowledgements

Clinical Medical Programs

Date Reviewed

Alberta

Ambulance Victoria

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Acknowledgements

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- List of medical directors here.
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Clinical Governance

Clinical Medical Programs

Date Reviewed

From Old TG's:

Medical Oversight & Clinical Consultation

The <u>Emergency Health Services Act</u> requires emergency medical assistants working in British Columbia to be licensed by the Emergency Medical Assistants Licensing Board (EMALB). The Emergency Medical Assistants Licensing Board ensures all practitioners involved with emergency care in British Columbia comply with the Emergency Health Services Act and the Emergency Medical Assistants Regulation. This provides assurance to the public that competent, consistent, and appropriate care will be available during medical emergencies.

The EMALB regulate the practice of all paramedics in British Columbia, including first responders. Paramedics shall practice within the scope of their license and neither BCEHS nor a Medical Director can direct or permit an EMA at any license level to exceed the license services as defined by the Regulation. However, BCEHS may restrict EMA license services to a subset of those services listed in the Regulation for any given license level.

Paramedics in BC do not work under the license of a physician as they do in some jurisdictions, instead, they hold their own licenses under the authority of the EMALB. However, licensed paramedics employed fall under the clinical governance of the BCEHS Medical Oversight & Clinical Consultation system which is under the leadership of the Clinical and Medical Programs Department. The Medical Oversight & Clinical Consultation system is required to ensure that BCEHS provides safe, high quality, effective and efficient patient care.

Medical Oversight

Medical oversight is defined as the physician supervision of a service, group, or system providing emergency medical services (EMS). Medical oversight has historically been used interchangeably with the term medical direction to describe a role that is complex and multifaceted and includes elements that affect patient care both directly (direct medical oversight) and indirectly (indirect medical oversight).

<u>Indirect medical oversight</u> is delivered through the creation, revision and updates of the BCEHS Treatment Guidelines based on medical evidence and best practices, and is administered through:

- Training, testing and certification of paramedic providers
- Development of operational policy and procedures and related legislative activities
- Clinical audit; quality improvement and education

Direct medical oversight is administered through:

- Real-time medical direction provided directly to paramedics by Medical Directors or Emergency Physician On-Line Support (EPOS)
- Person-to-person communication of patient status and clinical orders to be carried out
- Ultimate authority and responsibility for concurrent medical direction rests with the Medical Director

Treatment Guidelines (TGs) are the medical resource documents that guide paramedic practice in the province of BC. TGs are a combination of best practice and evidenced based medicine designed to better equip paramedics to make informed decisions in the field. They are however much more than traditional pre-hospital care protocols. They provide valuable information regarding what you should do for your patients under certain circumstances but the decision of when, and if, that care is appropriate is dependent on your ability to decide the best course of action for the patient.

Click here to access the current list of EPOS Physicians (Intranet)

Clinical Consultation (Clinicall)

As part of the Medical Oversight model, BCEHS is introducing Clinical Consultation where specialist trained paramedics are enabled and empowered by the organization and by the medical directors to provide clinical, safety, and operational advice to paramedics – this is one new way for paramedics to advance paramedic practice in BC.

The pre-hospital environment poses many clinical challenges to practicing paramedics. When faced with these challenges it may be appropriate to seek clarity with an appropriate senior clinician. Paramedics at all license levels can call CliniCall (cell and landline: 1-833-829-4099 or 604-829-4099 or SAT: 001-604-829-4099) to speak with a Paramedic Specialist who will be either an ACP or a CCP. Reasons for calling CliniCall for a Clinical Consultation include, but are not limited to:

- To gain clarity of a medical condition, or planned treatment pathway;
- Prior to administrating drugs or performing procedures requiring clinical consultation and approval as directed in the BCEHS Treatment Guidelines;
- To discuss treatment and transport options when complex situations or logistics require support of an experienced clinician;
- To receive technical advice regarding high-risk-hazards, hazardous materials, chemical biological radiological nuclear explosive (CBRNE) events, or police situations.

Paramedic Specialists have the ability to escalate the Clinical Consultation to an EPOS physician when there is a requirement in the Treatment Guidelines or Policy for direct physician advice or at any time they feel an escalation is warranted.

Clinical Consultation exists to support paramedic practice by sharing the judgement and decision-making responsibilities with a senior clinician. The paramedic specialists providing Clinical Consultation in CliniCall are authorized by BCEHS and the Medical Directors to provide clinical support. Like the EPOS calls, Clinical Consultations are audited on a regular basis to ensure the advice provided aligns with the Treatment Guidelines, contemporary best practices, and BCEHS policies.

The CliniCall number is 1-833-829-4099 or 604-829-4099

References:

Emergency Medical Assistants Licensing Board (2018). Summer 2018 Newsletter.

Bass, R. R., Lawner, B., Lee, D. and Nable, J. V. (2015). Medical oversight of EMS systems. In Emergency Medical Services (eds D. C. Cone, J. H. Brice, T. R. Delbridge and J. B. Myers). doi:<u>10.1002/9781118990810.ch82</u>

Ethics in Paramedicine

Clinical Medical Programs

Date Reviewed

Guideline Development and Methodology

Clinical Medical Programs

Date Reviewed

Title

Content

Clinical Practice Guidelines: Table of Contents

A: General

- 1. Clinical Approach
- 2. Patient Assessment
- 3. Clinical Handover
- 4. General Duty of care
- 5. Mass Casualty Events
- 6. Documentation Standards
- 7. Oxygen and medication administration
- 8. Interfacility Transfers
- 9. Refusal of Care
- 10. Sexual Assault
- 11. Care in High Threat Environments
- 12. Safeguarding Vulnerable Adults

B: Airway

- 1. Airway management
- 2. Airway obstructions
- 3. Asthma and bronchospasm
- 4. Croup and epiglottitis
- 5. Chronic obstructive pulmonary disease
- 6. Pulmonary embolism

C: Cardiac

Acute coronary syndromes Bradycardia Narrow complex tachycardias Wide complex tachycardias Aortic dissection Pulmonary edema

Shock

Bleeding Vascular access and fluid administration Hypoglycemia and hyperglycemia Adrenal crisis Hyperkalemia Dialysis emergencies Abdominal pain Back pain Nausea and vomiting Pain management Anaphylaxis Minor allergy Syncope and altered level of consciousness Seizures Acute stroke Headache Agitation and combiative patients General mental health Principles of Major trauma Crush syndrome Head and traumatic brain injuries Eye injuries Spinal cord and neck trauma Chest trauma

Abdominal trauma Pelvic trauma Extremity trauma Burns Electrical injuries Drowning Soft tissue injuries Hypothermia Hyperthermia Diving injuries Approach to toxic exposures Carbon monoxide Cyanide Hydrogen sulfide Organophosphates and carbamates Radionuclear incidents Beta blocker toxicity Tricyclic antidepressant toxicity Calcium channel blocker toxicity Acetaminophen Marijuana and cannibis Opioids Infectious diseases Sepsis Viral hemorrhagic fever Maternity: general Maternity: normal labour Seizures in pregnancy / eclampsia Hypertension in pregnancy Vaginal bleeding < 20 weeks Vaginal bleeding > 20 weeks Preterm labour / PROM Complications of delivery Postpartum hemorrhage Trauma in pregnancy Pediatrics: cardiac problems Pediatrics: circulatory problems Pediatrics: respiratory emergencies Pediatrics: neurological emergencies Pediatrics: trauma Pediatrics: cardiac arrest Neonatology: seizures Neonatology: thermoregulation Neonatal resuscitation Neonatal: respiratory management Neonatology: cardiovascular Neonatology: neurological problems Neonatal fluid management Peri-arrest care Non-traumatic cardiac arrest Post-arrest care Traumatic cardiac arrest Palliative care: general Pallative care: delirium Palliative care: pain Pallative care: dyspnea Palliative care: nausea Palliative care: secretions Palliative care: end-of-life Starting / withholding resuscitation

Stopping resuscitation Recognition of life extinct After death Other resuscitation decision-making Special circumstances of trauma Pediatric medical problems Neonatal hypoxic encephalopathy Neonatal surgical emergencies Supporting trans individuals Tracheostomy and laryngectomy management Ottawa ankle rule Canadian C-spine rule Exposure control plan Pinel restraints Ambulating Patients Pelvic binders Tourniquets Wound packing Patient decontamination High performance CPR Nasopharyngeal airways Supraglottic airways Continuous positive airway pressure Positive end expiratory pressure Intranasal drug administration Intraosseous cannulation External jugular vein cannulation Orogastric tube placement Tracheal tube introducer 12-lead ECG acquisition Procedural sedation Anesthesia induction for intubation Transcutaneous pacing Synchronized cardioversion Needle thoracentesis Surgical airways Awake intubation Subcutaneous butterfly insertion Modified Valsalva Venipuncture - Ethical decision making **Virtual Assessments** Virtual cardiovascular assessment Virtual palliative assessment

Virtual respiratory assessment Virtual diabetic assessment Virtual influenza-like illness assessment Home visits Initial assessment screen Patient home safety assessment Falls risk assessment Blood pressure monitoring Home medication self-management Diabetic follow-up Heart failure Chronic obstructive pulmonary disease CPAP BiPAP oxygen therapy and oximetry Palliative care Home health monitoring Community paramedicine telehealth IV initiation by community paramedics

Attending community events

Nitroglycerin Morphine Naloxone Methoxyflurane Magnesium Sulfate Atropine