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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

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Clinical Medical Programs

Date Reviewed

From Old TG's:

Medical Oversight & Clinical Consultation

The [Emergency Health Services Act](#) 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).

[Indirect medical oversight](#) 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 (ClinicalI)

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 administering 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:[10.1002/9781118990810.ch82](https://doi.org/10.1002/9781118990810.ch82)

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 combative 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 cannabis
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
Palliative care: delirium
Palliative care: pain
Palliative 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

