



**Emergency Medical Services Council**



Health Services Building – MC L963  
525 Portland Avenue South  
Minneapolis, MN 55415-1569

612-348-6001, Phone  
chd.ems@co.hennepin.mn.us

**Ambulance Medical Directors Subcommittee  
Wednesday, November 08, 2017, 11:30 a.m. - 1:30 p.m.  
Health Services Building, Room 313  
525 Portland Avenue S., Minneapolis 55405**

**Draft Summary**

<b>Present</b>	<b>Absent</b>
1. Jeffrey Ho, M.D., Hennepin EMS 2. Charlie Lick, M.D., Allina Health EMS 3. John Lyng, M.D., North Memorial Ambulance Service 4. Paul Nystrom, M.D., Edina Fire Department 5. Kevin Sipprell, M.D., Ridgeview Ambulance Service (Chair)	
<b>Guests</b>	<b>Staff</b>
	1. Matthew R. Maxwell 2. Kristin Mellstrom

**Welcome and Introductions** – Chair Kevin Sipprell called the meeting to order at 11:35 a.m. with a quorum present. After introductions, the proposed November 8, 2017 agenda and meeting summary from September 26, 2017 were approved.

**Medical Control Exam Revisions** – Sipprell explained that the October EMS Council protocol changes impacted eight questions on the medical control exam, rendering most of those questions unanswerable because the lists (medication list, approved equipment and procedures list, etc.) the questions were derived from were removed from the protocol book. Sipprell referred the Subcommittee to a draft exam which eliminated those questions and inserted a handful of new questions based on the physician medical control training video. The proposed exam was still heavily based on clinical questions derived from the Hennepin County ALS Medical Protocol book.

The Subcommittee briefly discussed the history of the exam, merits of having an exam and certification process, and if the exam in its current form holds any value. The Subcommittee reached shared agreement that there should be some form of physician medical control certification, but the exam accomplishes little to assure that certified physicians are competent to perform the duties of a medical control physician. Other ideas discussed included:

- adding questions about medical and legal issues (for example whether a Hennepin County certified medical control physician is required to stop at the scene of an emergency or not);
- correct use of the 800 MHz EMS radio (which buttons do what, etc.);
- termination of resuscitation;
- against medical advice (AMA) and left patients; and
- ambulance diversion.

The Subcommittee briefly discussed how the EMS System has changed over the past few decades, especially pertaining to medical control. Paramedic protocols today predominantly consist of standing orders, and the current ALS Medical Protocol book has few protocols requiring medical control. In decades past medical control was a big part of paramedic protocols, and the handful of medical control hospitals meant medical control calls were concentrated among a few hospitals and a small cadre of medical control physicians.

Today, with sixteen medical control hospitals and close to three hundred certified medical control physicians – coupled with the protocols trending away from medical control contact – there is dilution of physician medical control experience. This has some hospitals to experience radio failures, but due to such infrequent use they are unaware of the failure. Also, numerous medical control physicians get such little experience with medical control when they receive a call don't remember how to operate the radio, or forget their certification number.

An analysis done in 2010 showed that the busiest hospitals received only a few medical control calls per day, and the smaller community hospitals might only get one or two medical control calls per month. With the continued shift towards standing orders since this study was conducted, more than likely the number of medical control contacts [per hospital] has continued to decline. The Subcommittee discussed how medical control is handled in other EMS systems, and the pros and cons of each. The Subcommittee agreed replicating the 2010 study to ascertain how frequently medical control occurs today would help inform the conversation.

The subcommittee agreed to:

- Determine how many medical control calls occur in a 6 month period. Stratify the data by hospital, and bring to the Subcommittee's next meeting for review.
- Temporarily suspend the requirement that physicians complete the medical control exam for initial certification. This suspension will be in place until the Subcommittee agrees on a replacement process for certification.
- Revise the physician medical control certification form to exclude the testing requirement, but add new check boxes for the emergency department's medical director to assure that the applicant for medical control has watched the training video and knows how to operate the 800 MHz radio.

**Protocols** – The Subcommittee discussed the *Adult Tachycardia with Pulses* protocol and *Pediatric Pain Management* protocol.

**Adult Tachycardia with Pulses** – The Subcommittee accepted the revised protocol the following changes:

- Unstable patient, #2, third bullet, change “wide irregular” to “wide regular.”
- Unstable patient, #2, fourth bullet, add “(Torsades)” after wide irregular.

**Pediatric Pain Management** – The Subcommittee reviewed a draft that added Fentanyl as a drug option, and agreed to the following changes:

This protocol is to be used to provide relief of pain when indicated for pediatric patients. This protocol is NOT to be used in cases where the patient meets any of the following:

- Is hypotensive (i.e. clinical signs of poor perfusion, capillary refill greater than two seconds)
- Complains of abdominal pain
- Has sustained a head injury
- Has pain determined to be cardiac in origin
- Is in active labor

#### **Standing Orders**

- A. Assess the patient’s pain on 0-10 scale if possible or use other scale if necessary. ~~See the Table of Contents for the Wong-Baker Pain Rating Scale~~
- B. Inform the patient and/or guardians that pain is an important diagnostic parameter and the goal of this protocol is to relieve suffering, not totally eliminate pain
- C. Administer one of the following service dependent medications:
  1. ~~Administer~~ Morphine Sulfate x 1 at 0.1 mg/kg IV/IM/SQ (up to maximum dose of 5 mg)
  2. If pain is of a traumatic origin (non-cardiac), consider Ketamine:
    - A. IV/IO route 0.2 mg/kg (maximum dose 50 mg); may repeat every 15 minutes. Reassess the patient’s pain scale and if necessary administer a second dose 0.2 mg/kg IV/IO
    - B. IM route 0.4 mg/kg (maximum dose 50 mg); may repeat every 30 minutes. Reassess the patient’s pain scale and if necessary administer a second dose 0.4 mg/kg IM
  3. Nasal Fentanyl
    - a. 1mcg/kg (up to 100mcg per single dose) IV/IO/IM/IN
      - Intranasal administration should not exceed 0.5ml per nostril
    - b. May repeat 0.5mcg/Kg IV/IO/IM/IN (up to 50 mcg/repeat dose) every 10 min, not to exceed cumulative dose of 200mcg
  4. Inhaled Nitronox may be used as an alternative if available
  5. NOTE: Refer to pediatric reference (e.g., Broselow Tape) if assistance is needed with pediatric vital signs or drug dosage calculations.
- D. Monitor the patient’s vital signs. If respiratory depression or hypotension occurs after administration of Morphine Sulfate, ventilate the patient as necessary and administer naloxone (Narcan) 0.01 mg/kg IV (up to a maximum dose of 0.4 mg)

#### **After Obtaining Verbal Orders**

E. Consider initial or additional pain medication as appropriate.

**Trauma Disposition Guideline** – Sipprell explained that the Medical Standards Committee remanded this back to the Subcommittee with direction to focus only on major trauma, and to consider feedback from the public comment period. The Subcommittee briefly reviewed the current major trauma disposition guideline, as well as the feedback provided by hospitals during the public comment period, and agreed to the following changes:

- A. Ground ambulances must immediately transport patients with compromised airways (unable to maintain an airway and ventilate) to the nearest designated trauma hospital.
  - o If no designated trauma hospital exists within 30 minutes transport time, the patient must be transported to the closest hospital.
- B. In cases where a patient does not have a compromised airway, the ground ambulance must transport major trauma patients to a level I or level II trauma hospital within thirty minutes transport time.
  - o If no level I or level II trauma hospital exists within 30 minutes transport time, the patient must be transported to the closest designated trauma hospital within 30 minutes transport time. If no designated trauma hospital exists within 30 minutes transport time, the patient must be transported to the closest hospital.
- C. ~~Critical trauma patient indicators for major trauma (as a result of a traumatic injury):~~
  - ~~1. Compromised airway~~
  - ~~2. Signs of respiratory distress~~
  - ~~3. Altered Level of Consciousness – less than "A" on the AVPU scale resulting from a traumatic event~~
  - ~~4. Signs of shock or diminished perfusion~~
  - ~~5. Severe burns~~
  - ~~6. Other considerations:~~
    - ~~a. Severe multiple injuries (two or more systems) or severe single system injury~~
    - ~~b. Cardiac or major vessel injuries resulting from blunt or penetrating trauma~~
    - ~~c. Injuries with complications (e.g. shock, sepsis, respiratory failure, cardiac failure)~~
    - ~~d. Severe facial injuries~~
    - ~~e. Severe orthopedic injuries~~
    - ~~f. Co-morbid factors (e.g. Age < 5 or > 55 years, cardiac or respiratory disease, insulin-dependent diabetes, morbid obesity)~~
    - ~~g. Evidence of traumatic brain injury and/or spinal cord injury (e.g. new paralysis)~~
  - ~~7. Paramedic provider impression is consistent with major trauma~~
- D. Major trauma defined as:
  - 1. Amputations (proximal to mid-hand or mid-foot or with other severe trauma)
  - 2. Crush injuries or prolonged entrapment/entanglement.
  - 3. Blunt trauma, multisystem, with Shock.
  - 4. Pelvic Fractures.

5. Penetrating trauma to the eye(s), head, neck, chest, or abdomen, or extremity with shock.
  6. Maxillofacial trauma, Complex: including significant tissue avulsion, unstable/displaced facial or mandible fracture(s).
  7. Paralysis of a limb or limbs.
  8. Traumatic Brain Injury, Severe (GCS less than 9)
- E. Other considerations (in conjunction with significant trauma):
1. Severe multiple injuries (two or more systems) or severe single system injury
  2. Cardiac or major vessel injuries resulting from blunt or penetrating trauma
  3. Injuries with complications (e.g. shock, sepsis, respiratory failure, cardiac failure)
  4. Severe facial injuries
  5. Severe orthopedic injuries
  6. Co-morbid factors (e.g. Age < 5 or > 55 years, cardiac or respiratory disease, insulin-dependent diabetes, morbid obesity)
  7. Evidence of traumatic brain injury and/or spinal cord injury (e.g. new paralysis)
  8. Anticoagulation and bleeding disorders.
  9. Age
  10. Older Adults (risk of injury death increases after 55 years).
  11. Children (should be triaged preferentially to pediatric-capable trauma centers).
  12. Time sensitive extremity injury
  13. End-stage renal disease requiring dialysis
  14. Pregnancy > 20 weeks
  15. Paramedic provider impression is consistent with major trauma.

**Stroke Disposition Guideline** – Tabled pending update from the Brain Attack Coalition.

**ED Crowding Position Paper** – The Subcommittee continued its discussion on this topic and agreed data is necessary to move forward. Kristin Mellstrom will research Wilder Foundation data and information on the topic, and bring pertinent findings to a future meeting.

**Review SMD Scene Response/Phone Calls (standing topic)** – No items to discuss.

The meeting was **adjourned** at 1:22 p.m.

**Future meetings** – The Subcommittee agreed to combine its November 28 and December 26 meetings. The next meeting will be December 12, 2017, 11:30am-1:30pm, at the Health Services Building, Minneapolis.