Emergency Medical Services Council

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Medical Standards Committee
Thursday, March 04, 2021, 9:30 a.m. - 10:30 a.m.
Online
Draft Minutes

Present	Absent
1. Wade Brennom, MD, Abbott Northwestern Hospital 2. Ellen Cales, MD, Mercy Hospital 3. Doug Kayser, Ridgeview Ambulance Service 4. Charles Lick, MD, Allina Health EMS **5. Michelle London, MD, Minneapolis Children's Hospital (Chair)** 6. Paul Nystrom, MD, Edina Fire EMS 7. Lisa Pearson, MHealthFairview/Hospitals 8. Darel Radde (proxy for Kevin Sipprell, MD), Ridgeview Ambulance 9. Nick Simpson, MD (Hennepin EMS) 10. Peter Tanghe, MD, North Memorial Ambulance 11. Angela Walker, Hennepin EMS	1. Todd Joing, MD, Fairview Southdale Hospital 2. David Ladmer, MD, Methodist Hospital
Guests	**Staff**
	• Kristin Mellstrom, Hennepin County Public Health

Welcome and Introductions – Chair Michelle London called the meeting to order at 9:34 a.m. with a quorum present. After introductions, the proposed March 4, 2021 agenda and meeting summary from March 7, 2019 were approved.

Report from Ambulance Medical Directors Subcommittee – Dr. Paul Nystrom, Chair of the Ambulance Medical Directors (AMD) Subcommittee, provided a brief report on the following work of the Subcommittee:

2021 AMD Work Plan Approved
The subcommittee reviewed current work plan items for the upcoming year. The following projects will remain on the plan:

- Joint EMS – Law Enforcement responses to crisis calls/ED alternatives for patients with chemical, behavioral and/or mental health needs
- Metro ECMO coordination
- High Consequence/Emerging Infectious Disease Plan
- After action report for COVID-19 response
- Medical control certifications of physicians and of hospitals

Hospital Closure and Diversion Policy Review – Info sharing, no action
Nov 2020- Change to East Metro ED Divert Policy

- MNTrac notification was sent by Regions Hospital that explained a new diversion plan for east metro Emergency Departments (EDs) due to Covid-19 patient surges. It would allow 3 hospitals on divert before being forced off.
- Until that time, both east and west metro EDs had similar policies regarding diversion of patients.
- This could allow all downtown St. Paul hospitals to be on divert simultaneously
- Concern that many patients may be sent to downtown Minneapolis hospitals that are already full, especially with COVID patients
- No action; this will continue to be monitored for patient impact on west side

Legislative Topics
The committee would like to connect with outside agencies (e.g. MN Ambulance Association, NAMI-MN, Police Chiefs, MN Hospital Association) and with internal lobbyists from Hennepin Healthcare and other affiliated hospital systems to coordinate efforts to stay informed and work together on legislative proposals that involve EMS.

- Changes to MN Statute 253B.051 (Emergency Admission)

During the 2020 legislative session, a change was made that requires evaluation within 12 hours upon arrival at the ED.

- EMSRB requested feedback on Amendment No. 1 to H.F. 34 sponsored by Rep. Huot. A new task force is being proposed to review the provision of EMS statewide, EMS training requirements, and Primary Service Areas (PSA's).

ECMO Meeting – No action

- Several AMD's had a discussion with Dr. Yannopoulos (MHealth) regarding pre-hospital care prior to arrival at the ED. The group discussed ventilation and positioning of refractory V-Fib patients. The subcommittee discussed possible changes to protocols and all agreed that there would be no changes made at this time until there are national best practices/protocols available.

Ketamine Checklist

The committee will begin to develop a checklist for medics that will be available to use when they plan to administer ketamine unless a time delay would pose a danger to the patient or

DRAFT March 4, 2021

medical personnel.

Request for protocol review

Mr. Kenneth Brown, a member of the public, requested a review of current policies from other EMS providers that outline ways that service animals and/or service equipment could be transported for a patient who is brought to the hospital by ambulance. The Ambulance Personnel Subcommittee will begin the review process then provide recommendations to the Ambulance Medical Directors Subcommittee.

Protocol review- No action

Terbutaline is listed in some protocols as IM but this should be administered SC. Applicable protocols will be reviewed and edited at the next meeting.

Medical Control Radios

Overall, monthly radio checks continue at most hospitals; some hospitals have had several staffing changes so radio management has been inconsistent and outages due to maintenance have not been reported to West MRCC promptly but no reports have been received that medics were unable to reach medical control when needed. West MRCC has worked with MHealth radio managers to implement some workaround solutions while the radios are upgraded and back online.

Protocol changes- No action

AHA ACLS and PALS changes were discussed for protocols #3220, #3270, #4210 and #4220 -- These were not approved yet while the subcommittee waits for graphic or sample protocol from another agency to incorporate into the Hennepin EMS Council protocols.

Medical Standards Committee

I. MNTrac Hospital Closure Data – The Committee reviewed the latest report, noting that during the past year with COVID cases in ED's, there may be more closures at times when patient surges occur. No action was taken.

II. APPROVED: Proposed Addition to Current Hospital Closure and Ambulance Diversion Policy- Change Notification Language in MNTrac for equipment outages that will divert patients

The AMD Subcommittee recommends that a new format for notifications should be added to clarify what types of patients should be diverted from hospitals when there is a critical equipment failure. Rather than having notifications that identify the type of equipment failure (e.g. CT scanner down) with the note to paramedics to "Transport Accordingly," the new language would be:

On Divert Red/Critical Patients due to equipment failure

Off Divert Red/Critical Patients due to equipment failure

III. APPROVED - Protocols- Proposed Changes

- **Diabetic Hypoglycemic Patient Refusal of Transport – Adult #3020 [Changes to Protocol book 10.2020_v.1]-** *protocol was completely rewritten; changes underlined*

DIABETIC HYPOGLYCEMIC PATIENT REFUSAL OF TRANSPORT – ADULT

Standing Orders

Standing orders for all diabetic hypoglycemic patients refusing transport:

A. The following criteria must be documented on your Patient Care Report (PCR) in order to leave a patient (without contacting medical control) experiencing a diabetic hypoglycemic emergency who refuses transport:
   1. Identifiable reason to explain the hypoglycemia
   2. Blood sugar greater than 100 post treatment
   3. Awake, alert, & oriented, GCS 15 post treatment
   4. Food available and/or eaten
   5. Friend or family present to stay with the patient
   6. Discussion with the patient to contact their primary care provider
   7. Vital signs within normal limits
   8. Not on oral agents besides metformin (Glucophage)
   9. No suspected overdose of any diabetes medications
   10. No recent fever, acute illness, other concerning symptoms such as chest pain, shortness of breath, etc.

B. If ALL of these conditions are met, it is not necessary to contact a medical control physician. If however, any one of them is not met, contact medical control physician.

C. Paramedic also has discretion to contact medical control physician for any questions.

(end of edited protocol)

- **Adult Pain Management #3050 [Changes to Protocol book 10.2020_v.1]**

Added ketorolac for mild/moderate pain management
Added History of GI bleed as a contraindication for ketorolac
Decreased IV/IO ketamine dose for pain of traumatic origin from 50mg to 25 mg

PAIN MANAGEMENT – ADULT #3050

To provide relief of pain when indicated.

Exclusion criteria:

- BP less than or equal to 90
- Pain determined to be cardiac in origin (See the protocol Ischemic Chest Pain –Adult)
- Active labor

- Headache
- Non-traumatic Neck or Back Pain
- Any chronic pain (head, neck, back, fibromyalgia, abdominal or pelvic pain)
- Dental pain

Inclusion criteria:

- Acute Severe Traumatic pain
  - Neck or Back pain from acute trauma with inability to ambulate from the incident
  - Significant orthopedic injury (severe tenderness to palpation, with swelling, bruising and/or deformity)
  - Severe traumatic chest or abdominal pain with tenderness to palpation
  - Major burns
- Active cancer or palliative care
- Acute (< 2 hrs duration) non-traumatic pain with 2 or more of the following:
  - Increased heart rate and/or blood pressure
  - Nausea and/or vomiting
  - Writhing
  - Described as severe or > 7/10 in severity
- Intubated patients with injury, painful condition or evidence of increasing discomfort (vital sign changes)
- Paramedic discretion

Standing Orders

A. Assess the patient's pain on a 0-10 scale or other acceptable method for patients with difficulty communicating

B. Inform the patient that pain is an important diagnostic parameter and the goal of this protocol is to relieve suffering and not to totally eliminate pain

C. If pain is mild/moderate, consider ketorolac as first-line medication.

   1. Ketorolac 15mg IV or 30mg IM, this should be a single dose and is not to be repeated. Ketorolac specific contraindications include: pregnancy, kidney disease, history of GI bleed, allergy to NSAIDs, recent NSAID use (w/i the last 6 hours), and age over 65 years old.

D. If the patient meets inclusion criteria, administer one of the following service-dependent medications (consider lower doses for elderly patients):

   1. Morphine Sulfate 2-10 mg (usual effective initial dose 0.1 mg/kg), up to 10 mg single dose IV/IO/IM/SQ. If using IV/IO route titrate in increments to patient response. No maximum total dose of Morphine Sulfate for adults
      - Reassess the patient's pain scale and if necessary administer a second dose up to 5 mg IV/IO/IM/SQ every 5 to 10 minutes. If using IV/IO route titrate in increments to patient response
   2. Hydromorphone 0.5-2 mg IV/IO/IM. If using IV/IO route titrate in increments to patient response.

- Reassess the patient's pain scale and if necessary administer a second dose up to 0.5-2 mg IV/IO/IM. No maximum total dose of hydromorphone for adults

3. Ketamine - If pain is of a traumatic origin (non-cardiac), consider ketamine (slow IV push):
   - IV/IO route 0.2 mg/kg (maximum dose 25 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
   - 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
4. Fentanyl
   - 1mcg/kg (up to 100mcg per single dose) IV/IO/IM/IN
     - Intranasal administration should not exceed 0.5ml per nostril
   - 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
5. Inhaled nitronox may be used as an alternative if available

E. Monitor the patient's vital signs (including O_2 saturation). If respiratory depression or hypotension occurs after administration of morphine sulfate or hydromorphone ventilate the patient as necessary and administer naloxone (Narcan) 0.4-2 mg IV/IO

F. Contact medical control physician for orders if:
- The patient has a systolic BP less than or equal to 90

G. For patients experiencing pain outside the above listed inclusion criteria consider:
- Symptomatic relief of nausea/vomiting if needed
- Advising them of the general concerns in the medical community about opioid use and that doctors are being very careful about which patients receive these addictive medications
- Inform them that "we carry this type of medication for severe trauma such as broken bones and for certain medical situations that require immediate pain control such as heart attacks"
- Acknowledge their pain and try to improve comfort
- Advise them that a doctor will need to evaluate them prior to administering pain medication
- Reassure the patient that the receiving facility will be notified of the need for prompt pain management assessment
- Consult medical control if questions

After Obtaining Verbal Orders
G. Consider initial or additional pain medication including benzodiazepines as appropriate: • Midazolam HCL (Versed) 2-5 mg IV/IO/IM (if using IV/IO route, titrate to patient response), or • Lorazepam (Ativan) 1 mg IV/IO/IM H. Monitor for respiratory depression when administering narcotics and benzodiazepines together

(end of proposed changes to Adult Pain Management protocol)

- **Emergency Behavioral Health (Adult) #3410 [Changes to Protocol book 10.2020_v.1]**
  Added PO Olanzapine ODT (Zyprexa/Zydis) 5-10 mg or Risperidone M-Tab (Risperdal) 2-4mg

BEHAVIORAL EMERGENCIES – ADULT #3410

Standing Orders

A. Assess the severity of the patient's agitation.

B. Consider available resources and situational factors when determining action plan and need for sedation.

C. Consider de-escalation techniques when appropriate.
   - If sedation is needed, an IV route of administration may be used if one already exists. However, DO NOT attempt to place an IV in an agitated patient.
   - Consider offering PO (sublingual) medications for a patient that is restless/anxious/mildly agitated but redirectable and amenable to PO medications. Avoid in patients at risk for aspiration or patients the need more rapid sedation via IM/IV.

D. If sedation is needed, the following sedatives may be considered:

   PO SEDATION MEDICATIONS:
   - Olanzapine ODT (Zyprexa/Zydis) 5-10 mg
     OR
   - Risperidone M-Tab (Risperdal) 2-4mg

   IV/IM SEDATION MEDICATIONS:
   - Midazolam HCL (Versed) 5 mg IV/IO/IM
     AND/OR
   - Haloperidol (Haldol) 5-10 mg, IV/IO/IM (dosage based on the patient's age and/or weight)
     OR
   - Lorazepam (Ativan) 2 mg IV/IO/IM
     AND/OR
   - Haloperidol (Haldol) 5-10 mg, IV/IO/IM (dosage based on the patient's age and/or weight)
     OR
   - Droperidol 5-10 mg IV/IO/IM
     OR
   - Olanzapine (Zyprexa) 5-10 mg IV/IO/IM
     OR
   - Ketamine 5 mg/kg IM (if IV already established, may give 2 mg/kg IV/IO)

E. Once sedation has been administered, place the patient in a position where monitoring of condition and application of monitoring equipment can be accomplished. Restraints may be used if necessary to ensure the continued safety of the patient and providers.

F. Monitor the airway and be prepared to provide respiratory support including suctioning, oxygen, and intubation.

G. If ketamine has been administered be alert for laryngospasm (presents as stridor, abrupt cyanosis/hypoxia early in sedation period). If laryngospasm occurs, perform the following in sequence until the patient

is ventilating, then support as needed:

1. Provide jaw thrust and oxygen
2. Attempt Bag Valve Mask (BVM) ventilation
3. Attempt intubation (per individual service protocol). Vocal cords are likely to be closed if not paralyzed and there may be a need for intubation over the gum bougie/tracheal tube introducer.
4. If hypersecretion is present, consider Atropine 0.1-0.3 mg IV/IO or 0.5 mg IM

H. Consider IV access once sedation is sufficient to allow it. If IV is already present then administer Normal Saline wide open up to 1 liter

I. Consider Sodium Bicarbonate 1 amp IV/IO push

J. Rapid transport at earliest opportunity

After Obtaining Verbal Orders
For continued agitation, consider contacting a medical control physician for further orders.

(End of proposed changes to Adult Behavioral Emergencies protocol)

- **EMS Transfer of Potentially Violent Patients to ED (#2150, #3410)** – This item was moved to the Ambulance Service Personnel (ASP) Subcommittee to provide recommended language for an alert to hospitals. The ASP Subcommittee will meet in April 2021, depending on the subcommittee's agenda.

IV. Ordinance 9 Review – reported by Staff

The latest version of the updated ordinance was presented by Hennepin County Public Health to the Hennepin County Board of Commissioners in Feb. 2020. The next steps were to be a scheduled public hearing at which the public and members of the EMS Council could make presentations to the county board to suggest changes to the ordinance. After reviewing the proposed changes and feedback from the public hearing, the board would decide to proceed with a vote or wait until further discussion or information is presented. The last step in the process to change the local ordinance was to present the county board-approved version to the EMSRB Executive Committee for review and acceptance as an item on the EMSRB agenda. Due to COVID planning starting in Feb. 2020, ordinance work was abruptly halted to focus on crisis standards of care planning for EMS and hospitals. The ordinance has not been discussed again by any committees since the board briefing took place. A new timeline for presenting the ordinance to the board will be set by the Executive Committee of the EMS Council when it meets next week.

V. Future meetings

First Thursdays of March, June, Sept. Dec. from 9:30-11:30 a.m., at Edina Fire Department or online

VI. Adjourn – The meeting was adjourned at 10:15 a.m.