NH MEDICAL CONTROL BOARD

NH Fire Academy
Concord, NH

MINUTES OF MEETING

March 15, 2007

Members Present: Donavon Albertson, MD; Tom D'Aprix, MD; Chris Fore, MD; Jim Martin, MD; Douglas McVicar, MD; William Siegart, DO; Norman Yanofsky, MD; Sue Prentiss, Bureau Chief

Members Absent: Tom D'Aprix, Frank Hubbell, DO; Jeff Johnson, MD; Patrick Lanzetta, MD; Joseph Mastromarino, MD; John Sutton, MD

Guests: Steve Erickson, Jeanne Erickson, Doug Martin, Michael Pepin, Steven Achilles, Jonathan Dubey, David Dubey, Janet Houston, William Thorp, David Hogan

Bureau Staff: Vicki Blanchard, ALS Coordinator, Clay Odell, Trauma Coordinator; Eric Perry, Education Coordinator

I. CALL TO ORDER

Item 1. McVicar welcomed all and suggested the prudence of caution as this meeting falls upon Ides of March. With the necessary caveats being expressed McVicar then called the meeting of the NH Medical Control Board (MCB) to order at 0900 on 15 March 2007 at the New Hampshire Fire Academy, Concord, NH.

Around-the-room introductions were conducted.

II. ACCEPTANCE OF MINUTES

Item 1. January 18, 2007 Minutes were distributed, reviewed and approved unanimously without amendment.

Item 2. EMS Community. At this time McVicar sadly reported that David Dow passed away on January 25, 2007. David's impressive memorial service packed the local school auditorium. EMS made a great turn out.

Joe Mastromarino is recovering from surgery to repair damage from a posterior shoulder dislocation he sustained while cleaning his gutters. A card was passed around for Joe.

Prentiss stated that interviews have been conducted for von Recklinghausen's position. They had excellent candidates and they expected to make an offer soon. In the meantime, Scott Taylor will be helping out.

The field services position held by David Dow was posted. It will close March 16, 2007. At this time we already know we have some strong candidates applying.

III. DISCUSSION AND ACTION PROJECTS

Item 1.Protocol Rollout Update: Blanchard presented the board with a presentation on the protocol rollout progress. To date all NH hospitals have done protocol roll outs, or have pending dates for rollouts, with the exception of Alice Day Peck, Manchester V.A., Catholic Medical Center, and Southern New Hampshire Medical Center. The latter two having only a few services, arrangements were made for those units to attend other rollouts. The former two hospitals do not have EMS units.

Concerns raised at the rollout were presented to the Medical Control Board for further discussion and/or decisions, as follows:

Intraosseous (IO) and Lidocaine: EMS providers expressed concerns with the lack of lidocaine in the IO protocol. They pointed out that the manufacturer's package insert for the EZ-IO advises the use of lidocaine. The board was presented with articles from "*The Journal of Trauma Injury, Infection and Critical Care*" and "*Prehospital Emergency Care*" which discussed IO pain with pressure infusion and the use of 1% lidocaine to minimize the pain.

Board members noted that although literature was presented, there was no actual evidence contained in the articles – just authors' opinions. Fore stated that he has never used lidocaine with IO infusions and was not familiar with it. He pointed out that IV lidocaine use has decreased over the years, no longer being used for PVCs. He has never run into a situation where a patient has said of an IO insertion, "it hurts." He would like to see more evidence.

That this issue has even arisen caused some concern, since the IO was originally approved as a last resort device for use in patients in extremis in whom standard IVs are not available. Are too many IOs being done? Are they being done on patients too stable and alert to need them? Does this interest in IO technology expose an underlying deficiency in IV skills?

Martin asked what patients were getting IOs, and whether IV attempts were made prior to the IO. Blanchard to run a TEMSIS report and find out

McVicar did a Pub-Med (National Library of Medicine) search trying to find evidence establishing an advantage with lidocaine use, but he could find no evidence, only a few author's opinions, presumably based on their experience in uncontrolled situations. On the other hand, there was also no evidence against the use of lidocaine.

McVicar and other board members stated their opinion that lidocaine infusion had low potential to cause harm. There was a discussion on whether or not to make lidocaine in this setting an on-line medical control issue, but decided against.

D'Aprix moved that the IO Protocol be amended to add, "2 – 5 ml (20 – 50mg) of 1% lidocaine through IO for adult patients experiencing pain, and 0.5mg/kg for pediatrics." Albertson 2nd the motion. Vote: 5-1 Passed.

Diltiazem: The manufacturer has recently announced that Diltiazem will no longer be available in the popular LyoJect® syringes. This has caused some concern in the EMS community. The only vials available to most EMS providers would require refrigeration. Most ambulances do not have refrigerators.

The ADD-Vantage® System is an option, although the manufacturer states it has only a 30-day shelf life out of overwrap, unactivated. D'Aprix stated that the Elliot does not carry ADD-Vantage® System diltiazem. It is not clear how available that system would be to ALS providers.

McVicar stated that metoprolol was an alternative and pointed out that it is already included in the AHA algorithm for tachycardia.

Yanofsky stated in his experience metoprolol was not a good substitute for diltiazem.

There was a brief discussion regarding retro-fitting ambulances with small refrigerators but most do not have the space. Also although small refrigerators for camping are not expensive, medically approved units are quite costly.

McVicar suggested we NOT take diltiazem out of the protocol, so that those who do have refrigerators or are able to use the ADD-Vantage® System could still use the medication. But he felt we should offer an alternative, i.e. metoprolol. He added that this would have the additional advantage of bringing us into compliance with AHA guidelines.

McVicar moved to, "add metoprolol to the Tachycardia Protocol per AHA." D'Aprix 2nd. Vote 5-1. Passed.

Tachycardia Protocol: D'Aprix then presented the board with a Tachycardia Protocol (see attached). He pointed out that the current protocol did not specifically address rate and felt there was a concern for providers administering medications for a patient in atrial fibrillation with a rate of 110.

There was a lengthy discussion on the definition of stable versus unstable patients. The point is that stable patients divide into two categories – one for patients who probably would benefit from treatment, and another for patients where the risks of treatment probably outweigh potential benefits. The AHA algorithm suggests this approach, stating "rate-related symptoms uncommon if heart rate <150/min." D'Aprix's encourages treatment for stable patients with heart rates "consistently greater than 140 – 150."

There was further discussion on the proposed protocols, including the removal of amiodarone from the narrow complex tachycardias and removing the WPW reference as it was not in the AHA algorithm.

D'Aprix moved to, "adopt his protocol for tachycardia." Martin 2nd.

There was further discussion on WPW and it was decided with a vote of 6-0 that there should be a separate bulleted item for WPW and the administration of amiodarone or procainamide.

Finally vote on the accepting D'Aprix tachycardia protocol as amended to include WPW: 6-0. Passed.

Pumps and Pressors Blanchard stated that the biggest opposition she received during the protocol rollouts was the addition of pumps being required for pressor agents. The providers felt it was not necessary, they learned drips in their training and are capable of regulating them manually. Additionally, they expressed concern for patient safety if they could not afford a pump and could no longer administer the medication.

McVicar pointed out that it was not uncommon to meet resistance with change.

Martin inquired if this was an unfunded mandate. Prentiss stated no it was not as it was not a required piece of equipment. Further, it is not a requirement of licensure.

McVicar asked the board if anyone wanted to reverse their original decision?

Yanofsky asked if anyone knew of any evidence supporting the need for pumps? Albertson stated that, we all know that runaway lines happen with or without evidence. Albertson continued in pointing out it was the standard of care in the hospital and that it may be even more important to maintain this standard in the less controlled environment of the field.

McVicar stated that evidence would be difficult to find, as this is not the sort of problem that easily fits a controlled comparison model, those who use pumps would be reluctant to endanger the patient by not using them. Also it would be just about impossible to blind such a comparison.

Fore stated he had received quite a few complaints in his catchment area.

David Hogan, President of the Paramedic Association, stated that he did not see where this was anything that new, as pumps have been required for nitroglycerin and heparin infusions all along.

Yanofsky asked how much delay it causes to set up a pump. Doug Martin stated it takes him about 30 seconds to set up his pumps.

The board agreed 6-0 that they would NOT reverse their decision. Pumps will be required for pressor agents.

Blanchard asked if there was a deadline date for this to go into effect. She was advised that there is no phase-in contemplated, pumps should be put into use as soon as possible.

Pain Control for Abdominal Pain: Some providers questioned why they were calling medical control for orders to give pain relief to patients with abdominal pain.

Fore stated there were very few cases you would not treat a patient with abdominal pain.

Martin stated that there is an issue with what medication is being given. There is some belief one should not give Toradol (ketorolac) for visceral pain. There may be some concern about Toradol in case of possible internal bleeding, or contemplated surgery.

Prentiss felt that some of this concern reflects an old-school reluctance to use morphine in abdominal pain for fear of making the physical exam and diagnosis less accurate. Few, if any surgeons, or emergency physicians agree with this today.

Yanofsky stated he would take out the medical control requirement.

D'Aprix expressed concern with striking it out without any exceptions. Prentiss stated it was a local issue where Medical Directors needed to educate the provider to the risks.

Albertson brought the concern of the antiemetics being listed after the opiates, when in his practice the antiemetic is given just prior to the opiate. There was brief discussion of whether this would make any difference. However, the group determined that the antiemetic order issue was not a rush priority and should be addressed in the present (2007-2008) protocol cycle, and any changes made be included in the 2009 Edition.

Yanofsky moved to "strike the abdominal pain from the medical control section of the Pain Management Protocol." Fore 2nd. Vote: 4-2. Passed.

Interfacility Transfers: Providers involved in interfacility transfers were concerned with wording in *7.0 Interfacility Transfers*. The fourth level of minimum staffing, "UNSTABLE OR STABLE PATIENT WITH HIGH RISK OF DETERIORATION", calls for a third provider (at least 1 basic and 2 medics). Specifically, the concern related to the list of examples. In the list was, "multiple trauma." It was argued that a patient with a fractured radius and a mild concussion is correctly classified as "multiple trauma" but certainly does NOT require two medics for safe transport.

Blanchard explained that the examples were taken from NHTSA's 2006 Guide for Interfacility Patient Transfer. The board agreed that the example did cause confusion. Odell suggested changing the wording to "multi-system trauma" to be consistent with the Air-Medical Transfer Protocol. Board members felt that the wording "multi-system trauma" was no more clear, as again, a small skin wound and a broken tooth are correctly "multi-system trauma." A member suggested the wording "severe multi-system trauma." However this begs the question as the word "severe" now would need to be defined.

Yanofsky pointed out that this section just provides examples and is not intended as a precise decision tree. Therefore all this effort to exquisitely define the words is not very useful. Why not just eliminate the offending phrase?

Yanofsky moved to, "strike the words from the protocol." Fore 2nd.
Vote: 6-0. Passed.

Prentiss expressed a concern that there be no confusion between this guideline and the EMS Interfacility Transfer Exception created in NH law (RSA 153-a:16 III). In some Critical Access hospitals RN's have been trained to be the second attendant on an emergency transfer. This allows the specially trained RN's to take the place of an EMS provider in any of the first three categories. But for patients in the fourth level, "UNSTABLE, OR STABLE PATIENT WITH HIGH RISK OF DETERIORATION", the guideline still requires 3 attendants. Specifically: An Additional Paramedic, 1 Basic & 1 Qualified Advanced Healthcare Provider (For Example: Paramedic, Respiratory Therapist, Critical Care RN, Emergency RN, PA, NP, Physician, etc). It is important that these facilities and the RN's who have taken the training understand that the RSA and this guideline work together: the RSA was never intended to lower the standard of patient care. We will need to inform them of this.

Apparent Life Threatening Events (ALTE): Some providers did not think it was necessary to require on-line medical control for patients refusing transport under this protocol as it is not required under the Refusal of Care Protocol.

The board decided unanimously that they would not change the protocol since it is very important that these patients be seen by a physician. The board did not want to allow a situation where providers might have to try to decided which well-appearing infants were actually fine, and which at risk for sudden death.

Version #: It was decided to place a version number on the cover of the protocols.

Hydroxocobalamin/Cyanokit: Blanchard reported that she has contacted Dey, L.P., the pharmaceutical company distributing the Cyanokit. They indicated that Boundtree would be EMS vendor for the product. The shelf life is 30 months, with 5 gm of hydroxocobalamin in each kit. The price is still not known at this time, but Dey, L.P. indicated that the retail range should be about $650 - $800.

Using Medical Control to bypass Protocols: Blanchard ran across some providers who were using wording in the Preface of the Protocols to call medical control when they felt additional treatment is warranted beyond standing orders, and wanted to use medications in ways not allowed in protocol, e.g. for med assisted intubation, and using lidocaine for IO infusions.

The concern is that the MCB specifically voted that these procedures were not to be in protocol. If this is happening, then EMS providers are practicing outside of protocol, which is not allowed by New Hampshire law. Providing a way to circumvent the law was certainly never the intent of any wording in the Preface.

The Board asked to know how often this is actually happening. The appropriate response depends on whether this misunderstanding (or possible intentional misconduct) is widespread or localized. Blanchard is to get data from TEMSIS, and report at the May meeting.

Break

Item 2. Planning the Next Protocol Cycle: Due to time constraints today it was decided to table this item until the next meeting. D'Aprix, Chairman of the Protocol Subcommittee, stated that his plan was to have the subcommittee reconvene in September 2007 and have a final product for approval for the September 2008 MCB Meeting.

IV. INCUBATING PROJECTS & SUBCOMMITTEE REPORTS

ACEP: Fore reported he was not able to make the last meeting and did not have any minutes at this time.

Coordinating Board: Achilles reported the following from the January Coordinating Board Meeting:

National Registry Update: The National Registry is allowing recertifcation by taking the on-line written examination. Most people were not aware of this. They are going to discuss it further today and decide whether to accept this for NH or not.

Paramedic Pediatric Education: Houston handed out a survey concerning pediatric training for paramedics. Houston will be reporting the result this afternoon.

Accidental Exposure: A bill is going to the Senate. It meets the CDC's standards for HIV, but does not address hepatitis, TB, etc. There is discussion on changing for all diseases.

Strategic Highway Safety Planning: Further cooperation with highway safety and TEMSIS. This has grant money attached to it.

Public Safety Death Benefit Bill: This was discussed last meeting. Prentiss will provide an update later in the meeting.

Drop-Off Forms: Region III brought forward concern with the 24 hour reporting requirements for PCRs and providers using a drop-off form and not meeting the 24 hour requirements. This will be further discussed today.

Seatbelt Coalition is making another push to make seat belts mandatory for all in NH. The Coordinating Board will be supported this effort. Next Tuesday, March 20, 2007 from 09:00 – 10:00 is a press conference and then from 10:00 -12:00 is the hearing.

Bureau and Division Update: See attached report.

Legislative Update: Director Mason reported on three bills currently of interest to Fire and EMS:

SB435: Making an appropriation to provide a death benefit for the family of a seasonal department of transportation employee.

HS824: Establishing a death benefit to be paid to the family of a police officer, firefighter, or highway worker killed in the line of duty.

SB169: Establishing a death benefit to be paid to the family of a police officer or firefighter killed in the line of duty. An amendment to add emergency medical technicians passed, and the amended bill is moving on to the house.

Mason explained further on SB169. Specifically, at this time a few things could happen to the bill:

1. Because the benefits would be funded by the State Retirement System, legislative services must look into the constitutionality of paying out to volunteers who do not pay into the system.
2. The bill could be put into a study committee.
3. The bill could be killed due to people not playing well together.

Mason wanted to address the "political issues" this bill has brought up. He explained the history of where we have been, where we are going, and the need for a united voice.

McVicar recognized David Hogan, President of the Paramedic Association for his organization of a very successful mailing campaign that resulted in over 800 letters and emails sent to Senators asking for their support for the amendment adding EMS providers to SB169.

Prentiss stated that Senator Peter Burling, the Democratic Majority Leader, stated that it was very important to include EMS in SB169. Prentiss noted that Sen. Burling's support was very important in getting us this far, and hopefully will continue. This may be a long fight for EMS.

SB202: This bill would allow EMS providers to be grandfathered, specifically after 20 years they would automatically be re-licensed without any requirements whatsoever. Prentiss stated the hearing was cancelled and there is no other word on this. Mason will make a couple of telephone calls and see what he can find out. Hopefully the legislators realized that this grandfathering idea flies in the face of common sense and good government.

Intersections Project: No report.

NH Trauma System: Sutton not present. Odell explained that there will be a re-establishment of the Federal Trauma Program. We have used this program extensively; last year this had been zeroed out, resulting in an $80,000 loss for us. The program is scheduled to increase from $3.5 million to $12 million, so this could be a big help.

Because this is going to be coming back up for discussion, Odell urged all to send letters to their representative. Odell will forward links to the American College of Surgeon's website with form letters and links to your representatives addresses. Odell concluded that timing was important, the vote could be as early as next week, but certainly before the Easter break. He will let us know when to send out letters, if you so chose.

RSI: D'Aprix stated that he will be chairing a meeting on April 2, 2007 at NH Fire Standards and Training and EMS with the four medical directors of the EMS units currently waived to perform RSI. Items to be address include staffing requirements, experience, QM.

Other Business:
Summer Venues: Plymouth will host the July meeting, location to be announced. For the September meeting, Blanchard is working to set something up with Exeter Hospital.

Wilderness EMS Newsletter: McVicar stated that if you have an expiring subscription to TMC's Wilderness EMS Newsletter, email Hubbell and he will renew it.

Yanofsky stated there was a teenage missing from his community. He would like to email a photo to all and asks that it be posted in each ED.

William (Bud) Thorp stated that the New England EMS Institute has moved and will be hosting an open house in April. Date to be announced.

Protocol Flipbooks: Blanchard reported that TMC Books intends to publish a NH Protocol Flipbook. However, they won't put anything out until the final version, incorporating today's changes is complete.

Appointments: Blanchard informed the board that their appointments to the Medical Control Board are due to expire on May 31. 2007. Letters were sent to the Regional Council Chairs asking for re-appointments.

V. ADJOURNMENT

Motion by D'Aprix, seconded by Martin to adjourn. Approved. Meeting adjourned at 12:10

VI. NEXT MEETING

May 17, 2007 at the NH Fire Academy, Concord, NH.

Respectfully Submitted,

Suzanne M. Prentiss, Bureau Chief, EMS

(Prepared by Vicki Blanchard, ALS Coordinator)

Tachycardia Protocol as approved:

Unstable

(Hypotension, altered mental status, signs of poor perfusion)

Synchronized cardioversion:

- For **V-Tach, A-fib, PSVT**: 100J, 200J, 300J, 360J*
- For **A-flutter**: 50J, 100J, 200J, 300J, 360J*
- For **Polymorphic V-Tach**: 200J, 300J, 360J*

  *or biphasic equivalents

Consider procedural sedation if practicable:

- midazolam 2.5 mg IV or diazepam 5 mg IV

Stable

For atrial fib, atrial flutter
(With Ventricular Rate consistently greater than 140- 150 BPM)

- Metoprolol 5mg slow IV, repeat every 5 minutes to max of 15mg as needed to achieve ventricular rate of 90 - 100
  - Do not administer if systolic BP is less than 100mm Hg
  - Do not administer in a patient with known CHF, Cardiomyopathy or Asthma
- Diltiazem 0.25mg/kg IV over 2 minutes. Repeat dose at 15 minutes if necessary at 0.35mg/kg.
  - Do not administer if Wolfe-Parkinson-White syndrome is known or suspected

For Known WPW:
Amiodarone:

For PSVT or narrow complex tachycardia:
(With Ventricular Rate consistently greater than 140- 150 BPM)

- Consider vagal maneuvers (avoiding carotid sinus massage in the elderly)
- If vagal maneuvers fail, give adenosine 6 mg rapid IVP; repeat dose of 12 mg X 2 as needed.
- Patients who do not respond to adenosine consider:
  - diltiazem 0.25mg/kg IV over 2 minutes or
  - verapamil 2.5mg-5mg IV, or
  - Metoprolol 5mg slow IV, repeat every 5 minutes to max of 15mg as needed to achieve ventricular rate of 90 - 100
    - Do not administer if systolic BP is less than 100mm Hg
    - Do not administer in a patient with known CHF, Cardiomyopathy or Asthma

For uncertain wide complex tachycardia, consider:
amiodarone 150mg IV over 10 minutes or,

For VT, consider:
lidocaine 1 – 1.5 mg/kg followed by repeat bolus of 0.5 – 0.75 mg/kg IV or

amiodarone 150mg IV over 10 minutes or
procainamide 20 mg/minute up to 17 mg/kg. (If no CHF or Cardiomyopathy)

For polymorphic VT / torsades, consider:

- ❖ magnesium sulfate 2-4g IV over 5 minutes