

## STATE OF MAINE DEPARTMENT OF PUBLIC SAFETY MAINE EMERGENCY MEDICAL SERVICES 152 STATE HOUSE STATION AUGUSTA, MAINE 04333



JAY BRADSHAW DIRECTOR

## Medical Direction & Practices Board Meeting Minutes October 15, 2014

Members present: Dr. Sholl, Dr. Pieh, Dr. Zimmerman, Dr. Busko, Dr. Beaulieu, and Dr. Kendall

Public Representative: Jo Horn

Members absent: Dr. Chagrasulis, Dr. Randolph,

Staff: Jay Bradshaw, Jon Powers, Heather McKenny, Don Sheets

Guests: Butch Russell, Dan Batsie, Rick Petrie, Shawn Evans, Nate Yerxa, Joanne Lebrun, Dr. Tilney, Marc Minkler, Julie Ontengco, Kevin Gurney, Stephen Smith, Dr. Sihler

Called to order: 0930

- 1) September 2014 minutes Dr. Sholl: Dr. Zimmerman & Dr. Pieh. Unanimous with correction to page 3 missing Doc under PEGASUS
- 2) IRB Yale Patient Outcomes following Emergency Medical Services Intervention for Cardiovascular Disease (POEMS)
  - a. Jon Powers gave a report about what this project is and how Maine EMS would be involved if this project is approved.
  - b. Dr. Sholl reviewed how Yale would be reviewing the information and how they would match patients. It has been identified that Maine EMS has one of the more mature data sets for a rural state. This is why Yale sought out Jon Powers and Maine EMS for participation in this study.
  - c. Dr. Sholl gave an update to the newcomers about how the IRB works and how it is intended to protect patients
    - i. Question about whether this was a retrospective or prospective data review. It was clarified this was retrospective.

Motion to approve Dr. Busko, Second Dr. Zimmerman, unanimous.

3) State/Community Paramedicine Update – Jay Bradshaw updated the group that the RFP has been awarded to USM, 800 calls have been entered, Jay discussed possibility of a legislative change to lift the embargo on further pilot projects. The Board has had a hearing on the proposed QI rules with more to come. Jay gave a quick overview of major topics at NASEMSO including mobile integrated health, vehicle safety for ambulances, Military transitions.

- 4) Update re: Capitol Ambulance Pilot Project Dr. Busko, Training has been approved by Dr. Sholl and Don Sheets, changes were made and the education will be rolling out.
- 5) New Devices None
- 6) Special Circumstances Protocols Region 1 Dr. Zimmerman brought forth the final versions of a previously approved protocol
- 7) Review of PEGASUS Guidelines and their impact on our protocols
- 8) Pediatric Shock Sholl
  - a. Shock diagnosis Dr. Sholl suggests making a PEARL in the pediatrics shock guideline. Consensus was to do this.
  - b. Development of a tool for providers to assist in identification of sepsis in pediatrics. This currently exists in the protocols but this needs some updates to reflect updated surviving sepsis guidelines.
  - c. Lactate monitoring exists currently in protocol and no change is needed.
  - d. Hypoglycemia masquerading as shock and hypoglycemia in shock are concerns and there is some evidence that children in shock metabolize sugar quickly. Dr. Sholl will develop a PEARL to discuss this. There will be an addition of the glucose check in adults as well.
  - e. Prehospital pre-arrival notification to the hospital.
    - i. Dr. Zimmerman asked if we could suggest giving the weight based tape assessment to the hospital for preparation. The group felt strongly that the devices need to be available on every truck in Maine. Dr. Sholl suggests that there be a strong stance about requiring these on trucks. Color, length weight and manufacturer of the tape being used. Length color consistent with the receiving hospital. Consensus.
  - f. Volume boluses there is some inconsistency in the literature for kids but most of the standardized courses recommended 20 mL/kg but with quick assessment and additional doses. The question Dr. Sholl posed was, "Do we remove medical control at the AEMT level?". There was a lot of discussion about when to engage medical control. The consensus was to engage after the 2<sup>nd</sup> bolus.
  - g. Dr. Sholl is going to create a PEARL in the adult section to match the bolus volume in peds to address the possibility of need in increasing adults if they do not respond to 20 mL/kg.
  - h. Hemorrhage management topical hemostatic agent to be used when tourniquets cannot be applied and direct pressure does not resolve bleeding. The recommendation is to pack a wound with the hemostatic gauze. There will be a critical need to educate about packing with direct pressure for a minimum of 10 minutes. Dr. Sihler has agreed to help the group develop and review education for providers. There was consensus to move forward with these recommendations. The approved equipment list will be updated to reflect elements discussed.
  - i. Permissive hypotension this historically has been recommended in adult patients and this was transmuted to the pediatric patients as well. There is still a lot of controversy in adults but looking at the physiology of shock in children and given that hypotension is a late finding in children, this practice should be avoided in pediatrics. Consensus of the group was to remove the language and ensure that kids are treated for shock, regardless of the

presence or absence of hypotension. Dr. Sholl will take on developing the differentiation with Dr. Pieh in the green section to ensure this is clear.

- j. Sepsis
  - i. Volume is already addressed
  - ii. There is a recommendation in Pegasus to administer antibiotics if your transport time is greater than 1 hour. The consensus from the group was that operationally this would be exceedingly difficult.
  - iii. Pressor recommendations reflect our current protocol. There was a recommendation to change dose but the group felt this was an inappropriate time to change with how new this medication is and we should keep out current dose.
  - iv. IO use should be liberalized in the Pegasus recommendations as there are struggles for all comers when dealing with patients under the age of 6 years. The consensus of the group was to put language allowing the use of IO after one failed attempt but not require it. Dr. Sholl will script a PEARL to address some language changes and make this useful.
  - v. Steroids no change in use of steroids in the septic previously healthy child.
    - 1. Dr. Sholl will script language about use of a patient's Solu-Cortef in the pediatric adrenal insufficiency patient IF THE MEDICATION IS AVAILABLE and the dosing is well described. This will address the number of special circumstance protocols.
  - vi. Cardiogenic shock patients with known cardiogenic shock should not receive 20 ml/kg but 10 ml/kg. Dr. Pieh recommended updating the white paper on fluid bolus after this protocol set. Consensus from the group obtained.
- 9) Trauma Topics Dr. Pieh
  - a. Spinal Management
    - i. Dr. Pieh gave a rundown on the evidence related to backboards. This included a history of what brought backboards into EMS the work Dr. Goth did to use selective spinal immobilization. The updates with NEXUS criteria and what we use to date. The big question that comes out of this is, "Who are we helping with the use of a backboard?". There are certain conditions where a backboard may still serve a purpose, i.e. the need to roll a patient who is vomiting in the presence of a single provider, multi-bone fractures where the board is serving as a splint and any patient who needed to be extricated by backboard that is unstable and removal of the patient from the board would delay transport. There is some evidence to demonstrate that a patient self-extricating from a vehicle had less spinal motion than a patient being removed by an EMS provider.
    - ii. PEGASUS in populations with no head injury, injury, or other preclusion of reliability, it is not recommended to apply manual stabilization. Consensus was this was appropriate. The sequence being: evaluate, apply cervical collar, and extricate.
    - iii. Dr. Sholl, Dr. Zimmerman, and Dr. Sihler are going to work offline to develop a system for reporting and QI of spinal management in EMS.

- iv. Penetrating injury should not receive spinal immobilization as there is a level of evidence that demonstrates the damage is done and there is a decrease in survival. Consensus met.
- v. Dangerous mechanism high speed MVC, axial load injuries, falls greater than 10 feet, recreational vehicles. Consensus is this is captured by our education and white paper.
- vi. Caution should be exercised in older patients and very young patients as spinal assessment may be less sensitive in these populations... this will be expanded and documented in PEARLs. There was a lot of discussion about some anecdotal experience that was mitigated by the proposed work to catch these and reeducate.
- vii. There were some other language recommendations about additions that are not being added as they are covered by our current protocol.
- viii. Additional recommendations about the need to ensure there is strong collaboration and discussion about communicating with hospital to ensure they are aware of the concern with these patients.
  - ix. There was addition of language about considering lifting and sliding as opposed to log rolling patient.
  - x. The use of self-extrication is applicable in children utilizing the same criteria. Or in the infant/toddler in a car seat with a multipoint harness can be kept in that seat and extricated with attention to the neck.
  - xi. Helmet removal has already been addressed in previous work.
- xii. If a spine board must be used for transport the use of a vacuum mat or padding to assist in mitigation of pressure issues.
- xiii. Transport destination is being left as our current triage protocol.
- xiv. There will be some additional language added to the spinal clearance protocol related to distracting injuries and intoxication.
- xv. Dr. Sholl walked through the new proposed spinal protocol.
  - 1. This language will be shown on the change document and is not included here due to length
  - 2. Request for some addition of language about maintaining manual stabilization if removing a helmet. Dr. Sholl will add this.
- 10) Emerging infectious diseases there has been a lot of fear and emotion around emerging diseases. Maine EMS will be putting a letter out to providers to encourage good practice and to stay connected to the CDC guidelines as they are the experts in this process. EMD does have a protocol available but the recommendation is not to turn it on until there are confirmed cases in your community.
  - a. MDPB and Dr. Tilney for a conference call by doodle poll. For next week. Don will send out a poll.
- 11)Old Business was cut due to length of the meeting and limited information to report.

Adjourned 1230