



**MEETING MINUTES**

EMS FOR CHILDREN Advisory Committee  
 Thursday, September 01, 2016, 10am  
 Annual In-Person Meeting  
 Rossmoyne Suite, 4950 Rossmoyne Road, Mechanicsburg, PA

Committee Attendees:

- Stephen Bohr
- David Bradley
- Stephen Hall
- Robert Hrabar
- Cyndi Malinen
- Amy Morgan
- Steve Mrozowski
- Teresa Olsen
- Judy Pople
- Dr. Robert Shank
- Duane Spencer
- Josh Stuart
- Jodi Yocum

Staff:

Thomas Winkler

| AGENDA                                    | DISCUSSION  | ACTION  |
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| <b>Welcome and Introductions</b>          | <p>Mr. Stuart called the meeting to order at 10:07am.</p> <p>Mr. Stuart reported that former-chairperson of the Committee, Elizabeth Wertz-Evans, passed away, having lost her battle with cancer. Mr. Stuart reminded the Committee of the years of hard work and dedication Ms. Wertz-Evans had to the Committee and the Council, and asked that she be remembered as a true pioneer for the improvement of prehospital and in-hospital care of children with special healthcare needs. The Committee observed a moment of silence for Ms. Wertz-Evans.</p> | Mr. Winkler sent a bouquet of flowers to Ms. Wertz-Evans' memorial ceremony on behalf of the Committee and the Council. |
| <b>Minutes from Last Meeting</b>          | No Discussion – moved by Mr. Spencer; seconded by Dr. Shank   | Approved as Presented, Unanimous  |
| <b><i>OLD BUSINESS</i></b>                |   |   |
| <b>Pediatric Symposium Webinar Series</b> | Mr. Winkler reported that there were two webinars since the last meeting. Mr. Winkler reported that a webinar was held on July 06 on Pediatric Sepsis by Dr. Manoj Mittal of St. Mary Medical Center & CHoP, with 106 providers receiving con-ed credit.  | Mr. Winkler will find additional presenters for the webinars.   |

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|   | <p>Mr. Winkler reported that the other webinar was held on August 03 on Pediatric Pain Management by Dr. Christopher Malabanan of St. Christopher's Hospital for Children with 61 providers receiving con-ed credit. Mr. Winkler thanked both presenters and Mr. Spencer for assisting with the presenter for the August presentation.</p>  |  |
| <p><b>Pediatric Voluntary Recognition Program</b></p> | <p>Mr. Winkler provided an update on the program. Mr. Winkler reported that there were now 156 EMS agencies recognized under the program. Mr. Winkler reported that he has approved a significant number of new applications, that he has a handful of new applications awaiting approval, and that the annual review is scheduled for November. Mr. Spencer asked if it is possible to get an informational, one-page sheet placed on the website for EMS agencies. Mr. Winkler stated that this was possible and would be done shortly after the meeting.</p> | <p>The current list of recognized services is available under the "Current Projects" tab of the PA EMSC website (<a href="http://www.paemsc.org">www.paemsc.org</a>).</p> <p>Mr. Winkler will post the one-page information sheet on the website</p> |
| <p><b>CPR/First Aid Training in Schools</b></p>       | <p>Mr. Bohr reported that he recently attended the AHA advocacy day at the Capitol, where a total of 114 people were in attendance. He reported that Pennsylvania is the only state in the Northeast that does not require any form of CPR education to students in high school. Mr. Bohr is beginning to work on an awareness project so EMS agencies have material to use for EMS Week 2017.</p>  | <p>Mr. Bohr will continue to follow the issue and ask for assistance from the Committee as required.</p>   |
| <p><b>PTLS Instructor Course</b></p>                  | <p>Mr. Winkler reported that Dr. Russ Bieniek had contacted him to inform him that the course was held in August, with 19 candidates successfully completing the course. The first course as a result of the train the trainer class is a part of Pennsylvania's Annual EMS Conference's preconference sessions. Mr. Winkler stated that he hopes to continue to work with ITLS Pennsylvania for future courses throughout the state.</p>   | <p>Mr. Winkler will work with ITLS PA to host additional courses.</p>  |
| <p><b>A/T EMS Interaction Video</b></p>               | <p>Mr. Winkler reported that the video was completed and distributed. Mr. Winkler reported that the video is available on the EMSC website and the PEHSC YouTube page. Special thanks to Hampden Township EMS, Final Focus Productions, Sandy Zettlemoyer of Mechanicsburg Area School District, and Dr. Shank. Mr. Winkler reported that next steps for this project involve developing a continuing education program for use distributively.</p>   | <p>Mr. Winkler will work with Dr. Shank to continue working on this project.</p>   |
| <p><b>QI Collaborative &amp; ENA/EMSC Pilot</b></p>   | <p>Mr. Winkler provided an update on the Collaborative. Mr. Winkler reported that the ENA-</p>  | <p>Mr. Winkler will continue to provide updates on the</p>   |

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| <b>Project Update</b>                                     | led project was being merged with the QI Collaborative as both groups have similar goals. Mr. Winkler reported that the next in-person meeting is November 04-5, 2016. He reported that the core team has been built and consists of representatives from PTSF, DOH, Penn State Hershey Children’s Hospital, HAP, and the Pennsylvania Chapters of ENA, AAP, and ACEP. Mr. Winkler reported that he hopes to meet this fall with the initial discussion group. The meeting will introduce the concept of facility recognition and allow attendees to ask questions about the project.   | project.  |
| <b>CPAP for the Pediatric Patient</b>                     | Mr. Spencer provided a presentation (attached). Mr. Spencer stated that the long-term goal would be to roll-out to EMS agencies through the Bureau. Mr. Spencer stated that long-term education will be a challenge, but that would be addressed as the project continues. Mr. Mrozowski asked about what forms of data Mr. Spencer was hoping to obtain from research. Mr. Spencer stated that he was still in the process of trying to figure out exactly what information was need.  | Mr. Spencer and/or Ms. Popple will continue to provide updates to the Committee.                    |
| <b><i>NEW BUSINESS</i></b>                                |   |   |
| <b>Pediatric Safe Transport Considerations for Nurses</b> | Mr. Winkler stated that he and Ms. Foresman-Capuzzi spoke recently about safe transport for kids and developing a program or awareness project specific to nursing. Mr. Winkler stated that the initial idea he and Ms. Foresman-Capuzzi developed was to pilot in the Philadelphia area. This pilot would involve an EMS agency and an Emergency Department and get the nursing staff in the ambulance to visualize challenges and safety concerns related to transporting children in ambulances. Mr. Mrozowski, Ms. Morgan, and Mr. Spencer all echoed each other in discussions about discharge planning, interfacility transports, and changing perspectives. Mr. Spencer stated that when a baby is born, there is no way they leave the floor without the nurse ensuring the child has a car seat. Why, then, does that perspective completely change when it comes to an ambulance? Mr. Mrozowski also suggested working with HAP to get the word out, once the awareness program is developed. | Mr. Winkler will work on this project with Ms. Foresman-Capuzzi and Ms. Slatt of HAP to distribute. |
| <b>Pediatric Safe Transport Education for EMS</b>         | Mr. Winkler, Mr. Hrabar, and Mr. Stuart presented the topic. Mr. Stuart reported that he, Mr. Hrabar, Ms. Strotmeyer, and other contributors have   | Mr. Winkler, Mr. Hrabar, and Mr. Stuart will continue to move forward with the                      |

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| <b>Providers</b>                                       | developed an educational program related to safe transport of children in ambulances. Mr. Winkler reported that the plan is to produce a video for use for distributive education. Mr. Stuart reported that PA TIPP is on board with the project and may have funding available.  | project.  |
| <b>Pediatric Education Concerns and Considerations</b> | Mr. Winkler reported that Dr. Roth requested he speak with the Committee about ideas and concerns related to pediatric education in EMS. She wished to have areas of concern or lack of education brought up for consideration by the Program for future education.<br>Topics suggested included: Pain management, Trauma (including sustained tachycardia), Cardiology, Hematology-related cases, and diabetes/obesity |   |
| <b>Proposed Restructuring of the Committee</b>         | Mr. Winkler reported that he would like to add an additional level of structure to the Committee. Simply put, he stated, he wishes to have specific organizations represented on the Committee, while still maintaining a fully open membership.  | The Committee provided suggestions on additional members that Mr. Winkler will attempt to find.     |
| <b>Emergency Guidelines for Schools Revision</b>       | Mr. Winkler reported that it has been about 3 years since the EGS books were reviewed and updated. Mr. Winkler reported that there were changes that needed to be made, including the inclusion of the 2015 AHA guidelines. Mr. Winkler led a workgroup at the end of the Committee session and received feedback on the book   | Mr. Winkler will incorporate changes with a planned release of the 3 <sup>rd</sup> edition in 2017. |
| <b><i>PARTNER REPORTS</i></b>                          |   |   |
| <b>BEMS</b>  | No representative from the Bureau of EMS was present.   | No report provided.   |
| <b>PEHSC</b>   | Mr. Winkler provided the report. Mr. Winkler reported that the conference is coming up in September and that registration is open. He reported that with the ongoing staffing changes that this is currently a large focus of the staff and he asked for patience with processing any requests.   |   |
| <b>EMSC TI Grant</b>                                   | Mr. Winkler reported that Drs. Nancy Kassam-Adams and Sage Myers of CHoP received an EMSC TI Grant that begins September 01, 2016, focusing on family-centered care in resuscitative care. Mr. Winkler reported that they will have a standing invitation to the Committee for the duration of their grant.   |   |
| <b>EMS for Children Family Rep.</b>                    | No report provided.   |   |
| <b>SCAN</b>  | Ms. Olsen provided the report. Ms. Olsen reported   | Mr. Winkler will send an  |

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| <p>that she was in need of EMS Instructors to present for the SCAN EMS Program. She reported that Ms. Yunghans would be retiring soon from PA AAP and that Ms. Zittle would be leaving PA AAP as the DOH was taking back the grant for Child Death Review to administer the program internally.</p> | <p>email seeking additional instructors for SCAN EMS.</p>   |
| <p><b><i>OTHER BUSINESS</i></b></p>   |   |
| <p><b>ADJOURNMENT</b></p>   | <p>MEETING ADJOURNED at 1:30pm by Mr. Winkler (moved by Dr. Shank, second Mr. Spencer, unanimous). Next meeting will be on November 03, 2016, 9am, via conference call/webinar.</p> |

Staff Contact – Thomas Winkler, EMS for Children Project Director, [twinkler@pehsc.org](mailto:twinkler@pehsc.org), 717-795-0740

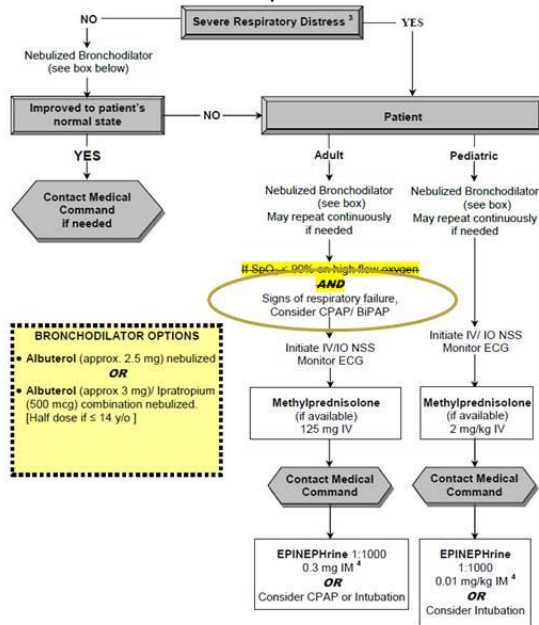
Chair Contact – Josh Stuart, Medical Rescue Team South Authority, [jstuart@mrsta.com](mailto:jstuart@mrsta.com)

# Non-Invasive Ventilation in Pediatrics

- Is there a role for NIV in pediatric patients?
  - Primary care
    - Acute Respiratory Distress Syndrome
    - Acute Asthma
    - Bronchiolitis
    - Pneumonia
  - Continued care of @home therapies
  - Interfacility care
- Pediatric = GT 30 days life

Pennsylvania Department of Health  
Respiratory  
ASTHMA / COPD / BRONCHOSPASM  
STATEWIDE ALS PROTOCOL

4022 – ALS – Adult/Peds



## Objectives of NIV in Pediatrics

- Reduce work of breathing (Reduce oxygen consumption).
  - Reverse hypoventilation (Increase TV ).
  - Increase Functional Residual Capacity ( improve oxygenation, lung compliance ).
  - Maintain and splint collapsed airways.
  - Preserved defense mechanisms.
  - Improve diaphragmatic activity.
  - Less sedation.
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## Contraindications of NIV in Pediatrics

- Apneas\* (central apnea not included)
  - Hemodynamic instability
  - Refractory hypoxemia
  - Impaired mental status
  - Moderate to severe bulbar weakness
  - Inability to handle oral secretions
  - Inability to tolerate nasal or face masks
  - Upper gastrointestinal bleed
  - Acute facial trauma
  - Upper airway abnormalities...choan a latresia..
  - Cleft palate
-

## Non-Invasive Ventilation in Pediatrics

- Technologies advancements
  - CPAP vs BiPAP
  - Nasal mask vs full face mask devices
  - Nasal prongs or pillows
  - Addition of PEEP
  - Exhalation valve vs Closed Face Mask

## Non-Invasive Ventilation in Pediatrics

- Out of Hospital research is limited
- Newer technologies have not been included in the recent limited studies
- Current state applicability and practice within scope of ALS providers
- New data through EMS Research!
- Local study – control group to maintain research integrity



## Non-Invasive Ventilation in Pediatrics

- Formal process - IRB
- Out of hospital patient population study
- Pediatric transport team
- Mix of disease types
- Standard treatment modalities and equipment

