PRC Meeting

Wednesday, September 13, 2023
9:30 AM to 12:00 PM
****The Committee does not anticipate a need for a closed session during this meeting****
****VIRTUAL / IN-PERSON HYBRID****

Meeting called by:	Dr. Timothy Chizmar
Type of meeting:	Protocol Review Committee

PRC Agenda Items

Call to order		Dr. Chizmar
Approval of minutes		
Announcements	Stroke Protocol – Changes to EMS Routing 2024 Meeting Schedule	Dr. Chizmar
Old Business	Asthma/COPD: Removal of Consults for Continuous Albuterol and Magnesium Sulfate and Addition of Terbutaline back into the Protocols NDT Pediatric Procedural Change Changes to Pediatric Allergic Reaction and Anaphylaxis Protocols SCT / RN Changes	Erich Goetz and Dr. Sward/Chizmar Dr. Anders Dr. Anders Dr. Chizmar
New Business	Double Sequential External Defibrillation Calcium for Whole Blood Guidelines for Infusion Pump Settings Caution/Alert on Use of Diltiazem for	Dr. Margolis Dr. Levy Dr. Levy

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	Patients with a Known History of CHF with a Low Ejection Fraction Dive Medicine OSP Burn / Carbon Monoxide	Dr. Levy Dr. Kemp/Dr. Tang Dr. Chizmar/E. Werthman
Journal Club		
Discussion(s)	Patient Refusals - Upper limit for BP to prompt base station consult	Dr. Castiglione/Dr. Chizmar
Adjournment		
Next Meeting	November 8, 2023, 9:30am-12:00pm	

Protocol Review Committee Meeting Minutes

September 13, 2023

Attendance:

Committee Members in Attendance (In-person/Virtual): Mary Alice Vanhoy, Kathleen Grote, Dr. Jennifer Anders, Christian Griffin, Tyler Stroh, Dr. Steven White, David Chisholm, Marianne Warehime, Rachel Itzoe, Mark Buchholtz, James Gannon, Dr. Kevin Pearl, Dr. Thomas Chiccone, Dr. Roger Stone, Dr. Matthew Levy, Dr. Janelle Martin, Dr. Jennifer Guyther, Dr. Timothy Chizmar (Chair), Meg Stein (Protocol Administrator)

Guests: Donna Geisel, Scott Legore, Mustafa Sidik, Terrell Buckson, Dr. Doug Floccare, Eric Garfinkel, Dr. Daniel Goltz, Dr. Stephanie Kemp, Dr. Jon Krohmer, Emily Larson, Dr. Asa Margolis, Melissa Meyers, Dr. Jeff Nusbaum, Rebecca Schwartz, Dr. Jeffrey Short, Dr. Zachary Tillett, Dr. Ruben Troncoso, Emily Werthman

Excused:

Alternates:

Absent: Mary Beachley, Melissa Fox, Gary Rains, Dr. Jeffrey Fillmore

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Meeting called to order at 9:35 a.m. by Dr. Chizmar.

Minutes: A motion was made by Marianne Warehime and seconded by Tyler Stroh to approve the minutes as written. The motion passed with no objections or abstentions.

Announcements:
Stroke Protocol: A previously approved change to the Stroke Protocol changing the transport time limit from 30 to 45 minutes for transport to a Comprehensive Stroke Center will be going live on November 1 with a formal announcement and an educational video. The change was initially going to be a Pilot but due to technical difficulties it will be implemented as a general protocol.

2024 Meeting Schedule: Due to a conflict with the National EMS Physician's Conference, the January PRC meeting is being moved from January 10 to January 31, 2024. Please contact Dr. Chizmar if you have any concerns or problems with this change.

Old Business:

Asthma/COPD – Dr. Chizmar and Erich Goetz: The previously presented proposal includes allowing paramedics to administer repeated doses of albuterol without the need for a medical consultations as well as eliminating the requirement for paramedics to consult prior to administration of magnesium sulfate. The medical consultation requirements for CRTs and EMTs would remain unchanged.

Dr. Anders noted that PEMAC has no objections to repeat albuterol dosing for pediatric patients without a consult. There was, however, a strong consensus on PEMAC to hold off on removal the medical consultation requirement for magnesium sulfate until at least next year so they can see how it plays out for adults.

Discussion included noting the need to be clear that nebulized medications should take priority over magnesium sulfate. It was also clarified that there would be no limit on the number of doses of albuterol that would be allowed.

Adding terbutaline back into the general formulary was also included in this proposal. Erich Goetz and Dr. Lawner were asked at the previous meeting to determine whether there was evidence to justify the return of terbutaline to the main formulary. They concluded that terbutaline should remain a back-up medication as there is evidence that nebulized medications are more effective. Dr. Chizmar added that, based on these findings, he would like to see terbutaline as a back-up medication in case of an albuterol shortage. Dr. Anders noted that PEMAC also prefers IM epinephrine over terbutaline but agrees to keep it as a back-up medication.

Dr. Anders pointed out that in the existing Asthma/COPD Protocol, dexamethasone can only be given PO or IV. She asked why IM was not an option. Dr. Chizmar advised that the reasoning for allowing IV and PO but not IM was to give preference to PO administration rather than having many medications administered IM.

Dr. Anders made a motion, seconded by Dr. Levy, to approve the proposal with the addition of allowing dexamethasone to be administered IM.

The motion passed with no objections or abstentions.

NDT Pediatric Procedural Change – Dr. Anders: Dr. Anders reviewed the previously presented proposal to modify the Needle Decompression Thoracostomy Procedure to include smaller needle/catheter sizes for pediatric patients. Ongoing discussion has revolved around the optimal catheter size for pediatric patients given that the recommended 1.5”, 16 gauge catheters are not readily available. Dr. Anders proposed that for children less than 4 years old, a 16 gauge catheter of whatever length is available be used. This would include 1.16”, 1.2”, and 1.25” catheters. For children greater than 4 years old, a standard adult needle (3.25”, 14 gauge) should be used. Along with this, she recommended additional education emphasizing that the needle/catheter should only be inserted until a rush of air is heard rather than inserting all the way into the chest wall.

Discussion included whether the shorter catheters would be of sufficient length for smaller children with unusual or atypical anatomy. Dr. Anders advised that she could put in a caveat that the 3.25”, 14 gauge adult length catheters could be used as a back-up on those patients.

Additional discussion points included the need for additional training and whether this proposal could be put forth as a mid-cycle change. Dr. Chizmar advised that he cannot promise a mid-cycle change but nothing precludes starting training now.

A motion was made by David Chisholm and seconded by Marianne Warehime to approve the proposal as presented. The motion passed with no further discussion, objections, or abstentions.

Changes to Allergic Reaction and Anaphylaxis Protocols – Dr. Anders: This proposal was originally presented at the September meeting and was tabled until it could be shown in a PDF format. The proposal addresses concerns that many children with anaphylaxis symptoms are being transported without administration of epinephrine IM and other anaphylaxis treatments. As written, the definition of a severe allergic reaction does not include GI symptoms. Also the Allergic Reaction and Anaphylaxis protocols are separated in the book due to the alphabetical listing of the protocols. This proposal calls for changing the list of severe symptoms to match those listed under anaphylaxis. The headings would also be changed to make the pages be sequential in the book. It was noted that the proposal calls for only wording changes rather than modification of treatments. The wording changes would apply to both the Pediatric and Adult protocols.

A motion was made by Dr. Pearl and seconded by Christian Griffin to approve the proposal as written. The motion was approved with no further discussion, objections, or abstentions.

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SCT/RN Changes for Commercial Services – Dr. Chizmar: Dr. Chizmar presented a list of proposed changes to the interventions, including medications, equipment and procedures, that can be transported by an SCT paramedic versus needing a team of SCT paramedic and RN. He pointed out that these changes would also require a regulatory change. The current regulations require a nurse (RN) for many critical care transports. The proposed regulatory change would allow SCT paramedics to transport patients who are receiving a single critical care (SCT) intervention. Patients requiring more than one SCT intervention would still require a nurse (RN) to be part of the team.

For clarification, these regulations will need to be approved by SEMSAC and the EMS Board rather than through the legislative process (General Assembly).

A motion was made by Christian Griffin and seconded by Kathleen Grote to approve the proposal. The motion passed without further discussion, objections, or abstentions.

New Business:

Double Sequential External Defibrillation – Dr. Margolis and Dr. Troncoso: Dr. Margolis explained that this proposal is really a revised approach to treating persistent ventricular fibrillation (VF). Dr. Chizmar emphasized that these changes are a big deal and they are not asking for approval today, just presenting the proposal for comments.

Dr. Troncoso reviewed the proposal. Changes to the general VF algorithm include administration of amiodarone before epinephrine with both medications being administered after the second shock. Epinephrine would be limited to a single dose unless the patient re-arrests after ROSC. After the third shock, clinicians would move to the new Refractory VF Algorithm. This algorithm incorporates vector change when only one defibrillator is available and double sequential defibrillation when two defibrillators are available. Amiodarone and esmolol administration are also included. Timing of transport in this algorithm is determined by the availability of ECPR at the receiving hospital and whether the patient meets criteria for ECPR.

Discussion included age criteria for ECPR and double sequential defibrillation, including both the upper and lower age limits. The proposed upper age limit for ECPR is 60 years of age. At the lower age limit, Dr. Anders pointed out that PEMAC generally supports the adult algorithm for patients 13 years old and older. She believes the pediatric centers would be open to ECPR. Ideal destinations for pediatric patients would have a PICU. Double sequential defibrillation has not been looked at for use in teens. With teens excluded from this algorithm, a separate protocol will be needed for patients between 13 and 18 years old.

Further discussion included timing of consults and concerns regarding potentially increasing the number of patients transported. The only destinations available for ECPR patients are Hopkins and UMMC so the ECPR arm of the algorithm would only be used in a small portion of the state but double sequential defibrillation and vector change would be used state-wide. A suggestion was made that there may be value in separating the double sequential/vector change portion of the algorithm and the ECPR algorithm into separate protocols to avoid confusion.

Calcium for Whole Blood – Dr. Levy and Dr. Floccare: This proposal would add administration of 1 gram of calcium after the first unit of blood to the Whole Blood Protocol. The goal of the change is to avoid hypocalcemia precipitated by the presence of citrate in the whole blood.

Dr. Floccare pointed out that calcium administration is needed when a second unit of blood is going to be administered. He expressed concern regarding administering the calcium too early. Dr. Levy pointed out

that we don't know how many of these patients may be getting a second unit of blood after arrival at the hospital. Dr. Chizmar suggested using the wording that "calcium may be given after the first unit of blood" to allow some flexibility.

Jaime Gannon asked to bring the proposal to Trauma Net. It was agreed to table the proposal until after the next Trauma Net meeting.

Dive Medicine OSP – Dr. Kemp and Dr. Tang: This protocol is based on the Tactical and Wilderness Protocols. The proposal includes indications, pre-dive assessments, clinician training, sea sickness treatment, additional pharmacology, a neuro assessment tool, and guidelines for aeromedical transport.

Kathleen Grote asked that we get feedback from dive physicians before moving forward with the proposal. With no objections, the proposal was tabled until the next meeting.

Guidelines for Infusion Pump Settings – Dr. Levy: Dr. Levy advised that he has no action items for this proposal today. He plans to bring addit**ions** to the Pharmacology section to the next meeting.

Burns/Carbon Monoxide – Dr. Chizmar and Emily Werthman: Emily Werthman presented proposed changes to the Carbon Monoxide/Smoke Inhalation Protocol and the Burn Protocol intended to clarify the guidelines on destination determination. Carbon monoxide patients should go to a hyperbaric center while burn patients should go to a burn center.

In discussion, Dr. Floccare expressed concern that patients with less extensive burns but possible exposure to carbon monoxide or cyanide might benefit more from a hyperbaric center than a burn center. Jaime Gannon advised he would like input from Dr. Fang before moving forward but was advised that Dr. Fang has already seen the proposal.

With limited time for discussion, it was agreed to send out drafts of the proposal to the PRC for further review and comments.

Caution/Alert for Use of Diltiazem for Patients with a Known History of CHF with a Low Ejection Fraction – Dr. Levy: Dr. Levy proposed adding cautions for the use of diltiazem in patients with known heart failure and decreased ejection fraction. Dr. Levy and Mustafa Sidik are working on a checklist for use with diltiazem administrations including further clarification of heart rate for diltiazem use in treating atrial fibrillation and atrial flutter. Dr. Levy advised he is bringing the topic up for consideration and attention today, a formal proposal will be forthcoming.

Journal Club:

Discussions:
Patient Refusals – Upper limit for BP to prompt a base station consultation – Dr. Castiglione and Dr. Chizmar: The question was raised as to whether there should be an upper limit for blood pressures that would prompt a base station consult when obtaining patient refusals. As there was no time left for discussion, PRC members were asked to email their thoughts or comments to Meg Stein who will forward them to Dr. Castiglione.

Good of the Order:

Adjournment: A motion was made by Christian Griffin and seconded by Dr. Levy to adjourn the meeting. The motion passed without objection and the meeting was adjourned at 12:07 p.m.