

June 15, 2005
MDPB Minutes

Members in Attendance: David Ettinger, Beth Collamore, Eliot Smith, Steve Diaz, Kevin Kendall, Al Riel

Education Committee Member (ex-officio): Paul Marcolini

Operations Committee Member (ex-officio): Joanne LeBrun

Absent: Dave McKelway

Staff: Jay Bradshaw

Guests: Kim McGraw, Rick Petrie, Tom Judge, Dan Palladino, Norm Dinerman, Sandy Benton, Lori Metayer, Rhonda Chase, Kathy O'Clair, Marcus Day, Bill Dunwoody, Jeff Regis, Lori Metayer, Joe Lahood, David White, John Alexander

- I. Minutes from May 2005: Motion by Kendall, second by Collamore: unanimous approval
- II. Legislative/Budget/EMSTAR: Budget from appropriations with approximately \$163,000.00 cut from Maine EMS, which is about 23% of the budget. Future beyond this year may also be bleak. On a lighter note, all 911 call handlers will have to be EMD certified which attaches medical oversight to this process by January 1, 2007. EMS Star has four work groups which have begun to meet—if any interest, contact Jay to get the times.
- III. RRC: tabled, Carolyn Reilly unable to make meeting due to travel issues.
- IV. Formalization of Partnership with Education and Operations committees: idea put forth by Diaz to formalize ex-officio members here at the MDPB from education and operations committee to facilitate communication. Broad support with LeBrun voicing concerns of the amount of transition occurring right now with MEMS. In the meantime, have agreed to try to identify such members and will have Marcolini from Education and LeBrun from operations as our ex-officio members.
- V. Education Committee member from MDPB: Diaz volunteered.
- VI. LOM

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LifeFlight of Maine
Replaces Policy #3.15

Title: Ground Transports
Date Revised 6/15/05

Purpose:

To offer an alternative method of transport to the referring hospital and local EMS providers when the aircraft is not available due to weather, maintenance or simultaneous call.

Policy:

Interfacility-When receiving a call requesting an interhospital helicopter transfer in the event that LifeFlight of Maine is unavailable, MedComm **will offer** the referring hospital, if available, the option of having a LifeFlight flight crew, respond to the facility or intercepting en route via ground ambulance.

Scene-When receiving a call requesting a scene response in the event that LifeFlight of Maine is not available to fly; MedComm **will offer** the requestor, if available, the option of having a LifeFlight flight crew, respond to the scene of the accident or event; or intercepting the critically ill patient(s) en route to the trauma center. This policy will encompass a 35 mile radius from the base (CMMC or EMMC).

The same skills, protocols and responsibilities that are granted for air transport will be utilized for ground interfacility and scene transport by the LifeFlight flight crew if the aircraft is unavailable for flight response.

Procedure:

If the referring physician or agency wishes to utilize this service MedComm will proceed with the following:

- A. Obtain patient transport information
- B.
 1. Contact on duty flight crew(s)
 2. Contact MACO for approval for Ground Critical Care transport per hospital protocol.
 3. Contact Meridian Mobile Health in Bangor or United Ambulance in Lewiston, advise the ambulance or transport vehicle to pick up crew and equipment at CMMC or EMMC.
 4. Advise referring hospital or EMS/requesting service of estimated time of arrival not number of minutes enroute remembering the launch time of ground service may be longer than that of aircraft launch.

- C. Arrange intercept location as appropriate for scene response
- D. Update Mission Approval Consultation Officer of transport status.
- E. MedComm should provide 30-minute transport updates of crew location. Noting that once on scene the crew should not be interrupted while providing patient care. If there is a delay in transport the crew will notify MedComm so they may pass the information along to the MACO and receiving institution.
- F. The Critical Care Transport Team/Flight Crew will follow LOM protocols while operating in a ground based unit and utilize their standard critical care equipment as appropriate. Equipment will be secured during the transport.
- G. The Critical Care Transport Team/Flight Crew will follow all safety guidelines established for operating in a ground-based ambulance. Transports **SHOULD NOT** be done with lights and sirens unless the crew can document that the patients diagnosis is time sensitive and definitive emergent treatment is waiting at the receiving institution. In unsafe road conditions in which the authorities have closed the roads, the transport should be delayed based on road conditions and patient condition. If the sending institution/ground service insists on the transport being initiated and the transporting crew (Meridian/United/LOM) feel that the conditions are too unsafe, they will consult with the MACO for further dialogue with the sending physician or ground service.
- H. To follow the QI plan as set forth by the MDPB on June 15, 2005.

Referral Policies:

- 3.07 Request for Scene Transfer(s)
- 3.15 Ground Transports (5/1/03)
- Meridian Vehicle Safety Policy
- United Vehicle Safety Policy

QI Plan as set forth by the MDPB:

- 1) To follow the procedure set out in SOP passed by the MDPB in June 2005.
- 2) 100% chart review with QI for crews that use this option with representatives from regional offices as part of the QI team and all forms submitted monthly to the State QI committee via chair of that group.
- 3) Quarterly update reports to the MDPB.
- 4) One year trial period.

Motion to accept by Ettinger, second by Riel. Vote of 5 in favor, 1 vote against, and 1 vote in abstention. This motion for protocol noted above is passed.

VII. RSI Presentation: Petrie/Riel/Smith:

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Maine EMS
Rapid Sequence Intubation
Working Draft

Introduction

The development of this RSI pilot program is a supplement to the current airway standard of care. Control of the airway is a time-sensitive issue that defines our ability to adequately manage our patients.

Participating Services/Personnel

Service Requirements

1. Licensed or Permitted to the Paramedic Level
2. Has identified a Physician Medical Director who:
 - a. Is a practicing Physician
 - b. Has experience with the prehospital system
 - c. Is credentialed in RSI by the hospital where they are employed
 - d. Is approved by the Regional Medical Director
 - e. Has completed an approved Medical Direction program where available.
3. Is an active participant in all local, Regional, and State QA/QI initiatives
4. Signs an agreement with the *Maine EMS Airway Oversight Committee* regarding training and tracking of RSI certified personnel.
5. Completes all required program paperwork

Personnel Requirements

1. Recommended by Service Medical Director and Service Chief.
2. Successful completion of an entrance exam.
3. Final approval by MEMS oversight committee.
4. Is a currently working Maine EMS licensed paramedic with a minimum 2 yrs paramedic experience.
5. Completes a Maine EMS approved initial training program
6. Cannot have a current regional or state generated care-based remediation agreement. If a remediation agreement is entered into while the paramedic is certified to perform RSI, then the RSI privilege is suspended until the remediation agreement is satisfied.
7. Is an active participant in all local, Regional, and State QA/QI initiatives
8. Completes all required program paperwork

Initial Training

The objectives for the initial training program are attached. Once approved, the initial training program will be developed/approved by the Maine EMS Education Committee.

Instructors will be approved by the MEMS Oversight Committee.

The Initial program will consist of didactic, practical, and clinical training. The practical training will be scenario-based and focus on total patient management.

Continuing Education

1. Yearly didactic CEH requirements.
2. Five (5) live, successful endotracheal intubations per year. If the paramedic doesn't get these in the field, they have to arrange for clinical time to complete this requirement. The advanced trauma management lab may be substituted for this requirement in any given year.

RSI Protocol

See Attached

Inclusion Criteria

1. Trauma patient with a Glasgow Coma Score <9.
2. Unable to intubate/ventilate.
3. Standing order protocol.
4. Can only be performed with two RSI-trained Paramedics on scene.

Quality Assurance

1. 100% of the RSI calls will be reviewed.
2. QI Process:
 - a. Providers will complete Airway Management Form
 - b. The form will be sent to the service Medical Director within 48 hours for review.
 - i. Form must be complete
 - ii. Attach a copy of the run report
 - iii. Form/call must be reviewed by the Medical director and returned with feedback to the providers within 14 days.
 - c. A copy of the reviewed form and feedback sent to regional office and state oversight committee within 30 days.
 - d. State oversight committee reviews forms/feedback to ensure good practice and appropriate oversight/management.
3. State Airway Management Oversight Committee (preliminary recommendations)
 - a. Appointed by State QI Committee. Members sign confidentiality agreements with Maine EMS.

- b. Meet monthly on MDPB day.
- c. Authority (?)
 - i. Recommendation only.
 - ii. Issues referred to appropriate Regional Office and local Medical Director.
 - iii. Region reports outcomes back to oversight committee.

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RSI Protocol

Patient identified as fitting inclusion criteria

Preparation

Oxygen, Position patient, IV Access, Equipment, Back-up

Premedication

Atropine .02 mg/kg for all children less than 8 years of age

Sedation

Etomidate 0.3 mg/kg IV Push

Paralysis

Cricoid Pressure

Succinylcholine

Adult 1.0 – 1.5 mg/kg IV Push

Pediatric 2mg/kg IV Push

Intubation

1. Cricoid Pressure
2. Position/Spine Immobilization
3. ET Placement
4. Confirm Location with ETCO₂/Secure Tube
5. Remove Cricoid Pressure
6. Secure Tube

Post Intubation

1. Sedation; Midazolam, Fentanyl, Lorazepam
 2. Paralysis; Rocuronium, Vecuronium
 3. Ongoing Ventilation Evaluation
 4. Transport Considerations
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Maine EMS RSI Project Objectives

1.0 Program Overview

At the completion of the program, the student will:

Cognitive

- 1.1 Discuss the reasons for the development of the RSI program
- 1.2 Define the requirements for participation by EMS services.
- 1.3 Define the requirements for participation by Paramedics.
- 1.4 Describe the initial and continuing education requirements.
- 1.5 List the patient inclusion criteria.
- 1.6 Discuss the quality assurance requirements.

2.0 Anatomy and Physiology Objectives

At the completion of the program, the student will:

Cognitive

- 2.1 State the general functions of the respiratory system
- 2.2 Identify the structures of the upper airway
- 2.3 Describe the function(s) of the structures of the upper airway
- 2.4 Identify the structures of the lower airway
- 2.5 Describe the function(s) of the structures of the lower airway
- 2.6 State the pathway of the respiratory system including nasal cavities, pharynx, and larynx.
- 2.7 State the roles of the visceral and parietal pleura in respiration
- 2.8 State the changes in air pressure within the thoracic cavity during respiration
- 2.9 Explain the diffusion of gases in external and internal respirations
- 2.10 Describe how oxygen and carbon dioxide are transported in the blood
- 2.11 Explain the nervous and chemical mechanisms that regulate respiration
- 2.12 Explain how respiration affects the pH of certain body fluids
- 2.13 Discuss the anatomical differences in the airway of the pediatric patient
- 2.14 Discuss the anatomical differences in the airway of the geriatric patient

3.0 Pharmacology

At the completion of the program, the student will:

Cognitive

- 3.1 Understand the action of muscle contraction and the difference between Depolarizing and nondepolarizing pharmacological actions

- 3.2 Identify the mechanism of action, pharmacokinetics and toxicity of Succinylcholine
- 3.3 Identify the indications, mechanisms of action, pharmacokinetics, side effects, and drug interactions of rocuronium
- 3.4 Identify the order of paralysis
- 3.5 Describe the properties of sedatives and their role in paralysis management
- 3.6 Discuss the short term management of paralysis
- 3.7 Discuss the adverse effects of paralysis

4.0 Decision Making

At the completion of the program, the student will:

Cognitive

- 4.1 Recall and list at least three dangers of the RSI procedure.
- 4.2 Recall and list at least three signs and or symptoms of a non-secure airway.
- 4.3 Recall and list at least three criteria that differentiate respiratory distress from respiratory failure.
- 4.4 Recall and list at least three criteria (patient signs or symptoms) for aggressive airway control (“taking over an airway”)
- 4.5 Recall and list the components of the Glasgow Coma Score.
- 4.6 Recall and list the two eligibility criteria for RSI in Maine.
- 4.7 Recall and list at least three indications of a (relatively) stable airway.
- 4.8 Recall and list at least three indications of for RSI.
- 4.9 Recall and list at least four signs and symptoms of a potentially difficult airway.
- 4.10 Recall and list at least three non-anatomical circumstances that would make RSI less than favorable.

5.0 Process for establishing an Airway

At the completion of the program, the student will:

Cognitive

- 5.1 Define the steps for establishing an RSI airway
- 5.2 Describe the steps/procedures necessary for patient preparation.
- 5.3 Differentiate between adult and pediatric patients when considering premedication.
- 5.4 Describe the medications used for sedation and paralysis.
- 5.5 Discuss the use of cricoid pressure in RSI.
- 5.6 List the steps for achieving endotracheal intubation once the patient is

- paralyzed.
- 5.7 Recall and list at least three different methods for affirmative endotracheal tube confirmation.
 - 5.8 Discuss the role of continuing sedation and paralysis once patient is intubated.
 - 5.9 Define the parameters for ongoing ventilation and transport considerations.
 - 5.10 Define the concept of “critical failure”
 - 5.11 Define the process to follow if endotracheal intubation missed.
 - 5.12 Define the potential complications that could accompany ongoing airway management.

6.0 Alternative Airway Devices

At the completion of the program, the student will:

Cognitive

- 6.1 Recall and state the indication for “rescue airway.”
- 6.2 Recall and list the appropriate sequence of skills included in the revised airway algorithm.
- 6.3 Recall and list at least one limitation and or complications of laryngeal mask airway use.
- 6.4 Recall and list at least three limitations and or complications of dual lumen airway use.
- 6.5 Recall and list at least two indications and at least two contraindications/limitations for surgical airways.

Psychomotor

- 6.6 Demonstrate appropriate use of at least two intubation adjunctive devices.
- 6.7 Demonstrate proper insertion of the laryngeal mask airway device.
- 6.8 Demonstrate proper insertion of the dual lumen airway device.
- 6.9 Demonstrate proper technique for needle cricothyrotomy using a commercially available dilator type device.
- 6.10 Demonstrate proper technique for surgical cricothyrotomy using a commercially available dilator type device

7.0 Quality Assurance Forms and Process

At the completion of the program, the student will:

Cognitive

- 7.1 Discuss the importance of a quality assurance program
- 7.2 Define the steps in the RSI Program QI Process
- 7.3 List their roles and responsibilities within the RSI Program QI Process

- 7.4 Have reviewed and understand the QI Form and its utilization
- 7.5 Understand the role of the Medical Director, Regional Office(s), and the State Oversight Committee

8.0 Scenario-Based Training

Note: For scenario based training students will utilize appropriate RSI equipment and (a.) an airway training manikin that allows the airway to be manipulated, (b.) a human simulator manikin or, (c.) a MEMS approved animal lab setting.

At the completion of the program, the student will:

Psychomotor

- 8.1 Demonstrate understanding of the six steps of RSI (per protocol).
- 8.2 Demonstrate appropriate timing of the six steps of RSI
- 8.3 Demonstrate appropriate problem solving steps.
- 8.4 Demonstrate competency using a tube changer to aid intubation.
- 8.5 Demonstrate competency using at least one alternative to intubation (LMA or Combitube).
- 8.6 Demonstrate competency decompressing the chest.

9.0 Clinical OR Rotation Objectives

At the completion of the program, the student will:

Psychomotor

- 9.1 Perform advanced respiratory assessments.
- 9.2 Observe/Assist in airway management to include positioning, adjunctive equipment, oxygenation and ventilation of patients.
- 9.3 Prepare and administer I.V medications and observe/document pharmacological effects.
- 9.4 Perform three (3) endotracheal intubations
- 9.5 Perform three (3) Laryngeal Mask Airway (LMA) placements
- 9.6 Evaluate proper device placement
- 9.7 Maintain proper device placement

- b. Can we use this for patient's with seizures or other potential indications outside this protocol? No
- c. Local medical direction should be more robust, given more authority, and be intimately involved. This topic surfaced again and again, and option to adopt language from Lifelight of Maine, query State QI for direction, and really spell out authority and removal of this practice if needed.
- d. Do we know if we have the numbers to make this work and is it worth the investment? Unknown answer.
- e. Perhaps address the concern for authority by having services and personnel sign agreement for removal of practice if QI dictates.
- f. Provision for annual review or personnel and services for compliance?
- g. Again, echoing the need for delineation for procedure for withdrawal of this skill.
- h. The RSI subcommittee had full consensus for this document being brought here for support from the MDPB, but questions did arise.
- i. This came from combining Lifelight of Maine's program with protocols from other states/services who had good QI.
- j. Offer to have other personnel to come talk to the MDPB about this.
- k. Do we move this forward without complete development of our medical control training/certification program for Maine medical control providers?
- l. Do we need to take a look at the new airway QI form/data from State QI before embarking upon this?
- m. Some data that with TBI, those with prehospital intubation did not fare as well as with ED intubation—a mixed study with difficulty in applicability to our question.
- n. Should we recommend mandatory capnography for these patients and protocol?
- o. We should spell out medication contraindications.
- p. Spell out the paralytic only language and intention of such—should be well delineated.
- q. Spell out the QI.

Motion by Kendall with Second by Liebow to move forward with this with incorporation of the points made above—unanimous acceptance.

- VIII. Trip Destination Discussion: Kendall, Smith, and Dinerman: a many faceted discussion regarding trip destination for patient benefit vs patient choice. Scenarios examined where two hospitals in the same town have different services which in certain circumstances, the specialty services convey a patient benefit yet the patient declines the directed transport. Smith conveyed that Region 1 has such a protocol that involved patient stability and discussion with OLMC. Some suggestions/concerns are outlined below:
 - a. Use the TAC to increase education outreach

- b. Which OLMC do you call?
- c. Are we trying to help broker a middle ground for hospitals? No
- d. How does informed consent fit in here?
- e. How else may we influence trip destination?
- f. Should OLMC talk to patients/family members?
- g. What are the legal issues surrounding patient preference/family preference and worker's comp issues?
- h. Hospitals cannot advertise as trauma centers—should this be revisited?

This is a multi-faceted and far ranging discussion, so will convene a work group to try to generate specific examples, generate list of focused objectives, and then bring back to the MDPB. Volunteers: White, Kendall, Bradshaw, Smith, Liebow, Dinerman, Ettinger, Diaz

- IX. Next Meeting at 9:30 am on September 21, 2005. MDPB members will focus on EMS STAR workgroups this summer.

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