SPEMS Protocol Changes
EMT-Intermediate (EMT-I)
2/1/10 to 1/31/11

PROTOCOL CHANGES

- **Every Page**
    - Changed dates at bottom of each page
- **Cover Page**
    - Signature with February 1, 2010 date
- **Page P-1**
    - Addition of **Disclaimer** that states:
        - "The original version of these protocols are located in the SPEMS office, any changes whatsoever are strictly prohibited without the express written permission of the SPEMS's Medical Director."
        - "On occasion a variance, addendum, or other change may be needed to the current SPEMS protocols. In this event the request MUST be facilitated through the SPEMS office. The request will then be submitted to the SPEMS Medical Director for approval."
        - No service or individual should contact the Medical Director directly. All requests should go through the SPEMS office
- **Page P-2: Table of Contents**
    - Updated
- **Page P-4**
    - Addition of #2 "Be currently certified in Health Care Provider CPR"
- **Page P-5**
    - Under #8 Skills Proficiency
        - Removed SAED as a required skill for proficiency check
        - Removed "Recommended" from EZ IO
            - Mandatory
        - Removed "Optional" from King Airway proficiency
            - Mandatory
- **Page P-9 Definitions**
    - Addition of #1 <u>Acute Coronary Syndrome</u>
        - Classic Angina
            - Traditional presentation
        - Atypical Presentation
            - Pain that is sharp, intermittent, in the teeth, neck, shoulder, arm or abdomen
            - Most commonly occurs in females, diabetics, and the elderly
        - Anginal Equivalents
            - Higher risk patients: dyspnea, palpitations, syncope or near syncope, generalized weakness with no history of a GI bleed, recent fever, and DKA
            - Signs/Symptoms not normally associated with classic angina
            - Example "Diabetic with only vomiting and no chest pain"
        - Risk Factors
            - Smoking, hypertension, age, family history of CAD, obesity, stress, and sedentary life style

    - "The key to forming an accurate impression of chest pain remains in the clinical history. In order to make this impression, one must look at the patient's physical presentation, listen to their story, and be able to compile and interpret all collected information. If the patient's story/presentation, risk factors, 12 lead and vitals signs point to ACS, then EMS personnel should **consider** the patient a candidate for the Chest Pain/Possible MI Protocol until proven otherwise"
  - Addition of #3 Aseptic Technique
    - Describes procedure to reduce risk of infection
    - Antiseptic hand hygiene and proper use of PPE
    - Use of appropriate antiseptics to cleanse the area of the patients body that is in jeopardy of infection/contamination
    - Avoid contamination of equipment and medication
    - Skin should not be touched after skin antisepsis. If this happens repeat the aseptic technique for that area
    - After the insertion of any device through the patients skin the insertion site shall be covered with the appropriate dressing to prevent infection
- **Page P-11 Definitions**
  - Addition of #13 "Optional" or "Recommended"
    - "Optional": at the discretion of the individual service (not mandatory)
    - "Recommended": equipment remains optional but is highly recommended by the Medical Director and will become mandatory with the next protocol year update
- **Page P-12 Treatment Procedures**
  - **Airway Management**
    - Removed all references to Combitube
    - Removed "optional/recommended" from King Airway
      - Combitubes must be removed
      - King Airways are now required
  - Addition of **Blood Draw for Labs**
    - "Due to the importance of rapidly diagnosing Acute Coronary Syndrome and Cerebrovascular Accidents, blood draws will be attempted in the pre-hospital setting. It is required that all units with at least ALS capabilities stock blood tubes to include, but not limited to, "blue top" (PT/PTT INR), "purple top" (CBC), and "green top" (BMP/CMP). The tubes listed above should be filled appropriately and labeled with the patients first and last name as well as the time the sample was collected. Samples can be drawn on any call as deemed necessary; however, samples should be drawn anytime a CVA or an ACS is in question. If the IV line is considered to be in jeopardy, then an alternative site should be accessed (i.e. butterfly catheter or Vacu-tainer needle)."
    - Requires carrying of blue, purple, and green top blood tubes for ACS and CVA patients
    - Must be properly filled and labeled
- **Page P-13 Through P-15 Treatment Procedures**
  - Peripheral Vascular Access
    - Intraosseous (IO) infusion (Adult and Pedi) is now under Peripheral Vascular Access
    - Removed Jamshidi from Pediatric IO
      - EZ IO now only device used for pediatric IO
    - Removed "optional/recommended" from EZ IO

    - EZ IO now mandatory
- **Page P-15 Treatment Procedures**
    - ResQPOD
        - Removed “Recommended”
        - ResQPOD is now mandatory
    - Added Taser Probe Removal statement
        - “If an individual’s EMS department policy grants EMS staff permission to remove taser probes, the EMS individual **MAY** make a single attempt to remove the probes. If the probes appear to be embedded in the bone, in a sensitive area, or it appears that the removal will be difficult, leave in place and treat as an impelled object. To lessen the risk of a needle stick type injury some type of gripping device (hemostats or pliers) should be used to facilitate the removal. The site should then be cleaned and bandaged as appropriate.”
        - Each service must decide to remove probes or not
- **Page P-16 Treatment Procedures**
    - Addition of **Uncontrolled Hemorrhage Managed with Celox (Optional)**
        - Celox is a hemostatic agent that is used to assist in bleeding control
        - Granules that assist in clot formation
        - No identified adverse reactions
        - Gives instructions for use of Celox
            1. Blot excess blood from wound with gauze pad.
            2. Immediately pour entire contents of pouch directly into the wound
            3. Apply FIRM direct pressure to wound for 5 minutes. (if bleeding persists, apply direct pressure for an additional 5 minutes.
            4. Apply pressure dressing
            5. Deliver empty package (Celox) to accepting physician
        - Instructions are printed on package
- **Page P-17 Pre-Hospital Medications and Intravenous Fluids**
    - Inhaled Medications
        - Added “Optional” to **Racemic Epinephrine**
- **Page P-32 Triage/Transfer Decision Scheme Pre-Hospital***
    - Updated to meet current guidelines
    - Addition of box at bottom that states “*If the patient does not have a secured airway and/or is in cardiac arrest, transport to the nearest facility if justified”
- **Page P-36 Medication Concentration/Storage**
    - Addition of last sentence that states: ‘It is the responsibility of the individual EMS provider to make sure that all the stocked drugs are stored as per manufactures specification. Documentation as to how drugs are stored may be requested by DSHS”
- **Page P-37 Equipment List**
    - Addition of “1- SAED with defibrillator pads/paddles to accommodate the adult and pediatric patients. However, if the BLS unit already stocks a monitor/defibrillator/SAED another SAED is not required. (If the SAED stocked does not support pediatric defibrillation a variance must be filled out through the SPEMS office and then pediatric defibrillation pads are not mandatory. The Variance must be signed by the Medical Director and a copy placed in each set of their protocols). A charged spare battery must accompany the unit as well as the one powering the unit. However, an alternative power source may take the place of the spare battery. (SAED with sealed 5 year batteries need not to have a spare)

- Added to portable suction: "with charged spare battery if the unit is battery powered. However, an alternative power source may take the place of a spare battery."
- Removal of "Optional" from ResQPOD
  - ResQPOD is now mandatory
- Added to Pulse Oximeter device: "with charged spare batteries"
- Added 2-Appropriate glucometer test strips
- Added 2-Lancet/needle
- Added "3ea-syringes that will accommodate all the appropriate drug volumes stocked"
- Added "3-hypodermic needles appropriate for SQ or IM injections (if stocked)
- Added "1-Celox (optional)"

- **Page P-38 Equipment List**
  - Added 10-Alcohol preps
  - Added King Airways
    - 1ea-King LT-D airway sizes 2 & 2.5
    - 1ea-King LTS-D airway sizes 3, 4, & 5
  - Oral Medications
    - Removed "1 bottle" from Aspirin and replaced it with "10" aspirins as the minimum number
  - Removed Combi-Tubes
    - No longer allowed to carry or use Combi-Tubes. The King airway replaces the Combi-Tube and is now mandatory. All Combi-Tubes should be removed from all units.
- **Page P-39 Equipment List**
  - Subcutaneous Medications
    - Addition of "2-Epinephrine (1:1,000) 1mg/1cc (if stocked at the BLS level, appropriate training required)
  - Addition of statement "Services under SPEMS medical direction may carry Epinephrine Auto-Injectors to accommodate both adult and pediatric patients **AND/OR** Epinephrine (1:1000) 1mg/1cc. However, Epinephrine (1:1,000) can only be carried if all active ECA's, EMT's and Intermediates are appropriately trained on SQ injections (and the standing Allergic Reaction Protocol). This training must be documented including location, date, and time. Documentation must be readily accessible upon inspection"
  - Addition of "with appropriate spare batteries" to Laryngoscope
  - Addition of "1ea-Extra laryngoscope bulbs (small and large)(extra bulbs not required for fiber optic laryngoscope sets)
  - Addition of "1ea- EZ IO Driver with spare batteries (EZ IO Drivers with the non-replaceable battery need not to have a spare)"
    - EZ IO is now mandatory
  - Addition of EZ IO Catheters
    - "1ea-EZ IO PD"
    - "1ea-Adult EZ IO"
    - "1ea-EZ-IO LD (optional)"
  - Addition of "2 ea.-Purple, Green, and Blue blood specimen tubes (red tube optional)"
  - Added "(optional)" to Racemic Epinephrine
- **Page P-40 Equipment List**
  - Amended the next to last paragraph to state "If you have medical direction for

any medications or invasive equipment not listed here, you must attach written authorization for the use of such. This document must be signed by the SPEMS Medical Director. However, non-invasive equipment (example: Vacu-Mattress, Morgan lenses, thermometer, etc…) does not require written authorization by medical direction or additions to the equipment list."
    - Changed dates and signed by Medical Director
    - ***Must*** be signed by Service Director
- **Throughout Treatment Algorithms**
    - Changed the date on the bottom to read 02/01/2010
    - Removed "recommended" from ResQPOD throughout algorithms. Now mandatory
    - Removed Combitube from all algorithms
    - Removed "recommended" from all algorithms that state King Airway as they are now mandatory
- **Page 2 Trauma**
    - Addition of "Celox (optional) if necessary" to the control bleeding box
- **Page 6 Respiratory Distress**
    - Added "Optional" to Racemic Epi box on top left
- **Page 8 *Cardiac Chest Pain or Suspected Myocardial Infarction**
    - Added "Blood draw for labs (P-12)" in first box
        - Blue, purple, and green top tubes. Red tube optional
    - Added the Atypical MI Signs and Symptoms box to the right
    - If atypical signs/symptoms present, "**Consider** patient a candidate for the Cardiac Chest Pain Protocol see ACS P-9"
    - Reminder that not all MIs have typical signs/symptoms
    - In Nitroglycerin box, added: "(rule out the use of sexual enhancement drugs)"
    - "Pain Relieved?" changed to "Symptoms Relieved?"
    - Changed box at the bottom to state: * Following the request of Paramedic backup the EMT-Basic may place the patient on the cardiac monitor/12lead if available. *EKGs may then be transmitted to the receiving hospital if capable*. Under no circumstances shall an EMT-I use monitor placement for interpretation/treatment. Appropriate training and testing must be documented prior to the placement of the cardiac monitor/12lead."
- **Page 9 Cardiogenic Shock**
    - Changed #5 in first box to state: "Fluid Challenge, NS, 250cc may repeat for clinical effect"
- **Page 10 Post Resuscitation Management**
    - Changed #2 in third box down to state: "Fluid Challenge, NS, 250cc may repeat for clinical effect"
- **Page 12 Cold Exposure**
    - Addition to box at lower right: "4. ResQPOD (if patient has reached puberty)"
- **Page 13 Decreased Level of Consciousness or Neurologic Symptoms* (Non-Traumatic)**
    - First box on top left
        - Moved "IV, **NS**, TKO" to number 4
        - Number 5 now states "Blood Draw for Labs (P-12)"
            - Blue, purple, and green top tubes. Red tube optional
        - Moved "Determine Blood Glucose" to number 6
    - Addition of box on right that states: "Access Cincinnati Stroke Scale ***
    - Addition of box at bottom center that states: "Eliminate other possibilities*****"
        - Refers you to the box at the bottom left

            - Cold exposure (Pg 12)
            - Heat exposure (Pg 15), or
            - Hypovolemia (Pg 16)
        - Cincinnati Stroke Scale Box at right
            - Changed last point to state "Report all positive findings to receiving hospital from the scene if possible, if not report ASAP. Document all findings in the narrative."
        - Changed Glucagon box to state: "***If peripheral access (IV/IO) (P-13)* is unobtainable administer **Glucagon**, 1mg/unit, IM (Optional). Appropriate training and testing must be documented prior to administration of **Glucagon** via IM injection"
            - Glucagon can only be given if IV and IO unobtainable.
            - Should attempt IO and give D50 before resorting to Glucagon IM.
- **Page 15 Heat Exposure (Heat Stroke)**
    - Removed "obtain blood sample" from algorithm
- **Page 16 Hypovolemia (Non-Traumatic)**
    - Deleted the signs/symptoms of hypovolemia box
    - On the box at left: #3
- **Page 18 Obstetric Emergency**
    - Remove "obtain blood sample" from algorithm
- **Page 19 Poisoning/Overdose**
    - Removed "obtain blood sample" from algorithm
    - Changed fluid challenge box to state: "Fluid Challenge, NS, 250cc may repeat if needed for clinical effect"
- **Page 20 Seizures***
    - Removed "obtain blood sample" from algorithm
    - Changed next to last box to state: "***If peripheral access (P-13)* is unobtainable administer **Glucagon**, 1mg/unit, IM (Optional). Appropriate training and testing must be documented prior to administration of **Glucagon** via IM injection"
        - Glucagon can only be given if IV and IO unobtainable.
        - Should attempt IO and give D50 before resorting to Glucagon IM.

CHANGES TO SUPPLEMENT

- **Drug Index**
    - Addition of Table of Contents
    - Drugs placed in alphabetical order
    - Addition of new drugs to drug index
        - Rocuronium
        - Zofran
    - Phenergan removed
    - Changed all dosages to correspond with current Protocols
- **Drug Charts (Adult and Pediatric)**
    - Drugs placed in alphabetical order
    - Addition of new drugs to drug index
        - Rocuronium
        - Zofran
    - Phenergan removed
    - Changed all dosages to correspond with current Protocols

- **Drip Rate Formulas Page Added**
  - Formulas and examples for:
    - Adult Lidocaine
    - Pedi Lidocaine
    - Dopamine
    - Adult Amiodarone