

SPEMS Protocol Changes
Emergency Medical Technician (EMT)
2/1/11 to 1/31/12

PROTOCOL CHANGES

- **Every Page**
 - Changed dates at bottom of each page
- **Cover Page**
 - Signature with February 1, 2011 date
- **Page P-2: Table of Contents**
 - Updated to reflect additions and current page numbers
- **Page P-4 Medical Control Authorization**
 - Changed wording in 3rd paragraph to read “.....i.e.: IM injections....”
 - Changed #6 to state run report form”*software*”
 - Changed #8 to “Intramuscular Epinephrine
 - Epi is now to be given IM instead of SC
 - Added skill of “Intramuscular Epinephrine (if currently carried by your service)” to be checked off on
 - Applies only if your service does not carry Epi-Pens
- **Page P-5 Procedural Guidelines for Medical Control Authorization**
 - Second sentence, now reads “ Failure to *maintain* appropriate documentation may result in the EMS technician’s medical control authorization being suspended”
- **Pages P-9 Through P-13 Definitions**
 - Several sections relocated into this Definitions section
- **Page P-9 Definitions**
 - Addition of #3 Adult Refusal of Transport
 - Section relocated to Definition Section
 - No changes to content
- **Page P-10 Definitions**
 - Addition of #8 Duty Status-Geographical Area
 - Section relocated to Definition Section
 - No changes to content
 - Addition of #9 Errors/Deviation
 - Section relocated to Definition Section
 - No changes to content
 - Addition of #10 Medication Concentrations/Storage
 - Section relocated to Definition Section
 - No changes to content
- **Page P-11 Definitions**
 - Addition of #15 Non-EMS Licensed/Certified Personnel
 - Section relocated to Definition Section
 - No changes to content
 - Addition of #16 No Transport Codes
 - Section relocated to Definition Section
 - Deleted “5 page report” from the documentation requirement
 - Addition of # 18 Patient’s Physician On Scene
 - Section relocated to Definition Section
 - No changes to content

- **Page P-12 Definitions**
 - Addition of #19 Request Assistance from Receiving Area's ALS Service
 - Section relocated to Definition Section
 - Addition of bullet point that states "Patients who are potential candidates for thrombolytic or PCI therapy and transport time is > 25minutes."
 - Addition of #20 Transportation Guidelines
 - Section relocated to Definition Section
 - No changes to content
 - Addition of # 21 Transportation of Minors
 - Section relocated to Definition Section
 - No changes to content
 - **Page P-13 Definitions**
 - Addition of # 22 Unknown Physician on Scene
 - Section relocated to Definition Section
 - No changes to content
 - **Page P-14 Treatment Procedures**
 - Addition of Chemical Sedation/Restraint
 - Relocated to treatment procedures
 - No changes to content
 - **Page P-16 Treatment Procedures**
 - Uncontrolled Hemorrhage Manage with a Hemostatic Agent
 - Changed from "Uncontrolled Hemorrhage Managed with Celox (Optional)"
 - Addition of "A. **QUICKCLOT (optional) (Must be the heat free formulas as noted below)**
 - Combat Gauze, is a 3in X 4yrd roll of heat free hemostatic gauze
 - ACS+, is a heat free hemostatic sponge"
 - Addition of "B. **CELOX (optional)(will be discontinued on 2/1/2012)** is Chitosan-base and its granules assist in clot formation. It has no identified adverse reaction."
 - Quickclot and/or Celox are optional
 - After 2/1/2012, only Quickclot will be allowed to be carried; but it will remain optional
- **Page P-17 Pre-Hospital Medications**
 - Under Inhaled Medications: added "Optional" to Levalbuterol (Xopenex) 1.25mg/3ml
 - Removal of Subcutaneous Medications
 - Replaced with Intramuscular Medications
 - Epinephrine 1:1,000 1mg/1cc moved under IM medication
 - Epi is now given IM rather than SC
- **Page P-20 Through P-26 Do Not Resuscitate Orders**
 - Updated to reflect new form and procedures
 - Addition of 4th line: "Note: There is now a new TDSHS form for DNRs. Either the new or the old form is acceptable. A copy of both forms is on subsequent pages."
 - Addition of #1 A form is considered valid if:
 - 1. One of the six sections have been filled out and signed appropriately. **Note:** Electronic signatures are acceptable. (Only one completed section is required)
 - a. Section A: Declaration of the adult person
 - b. Section B: Declaration by legal guardian, agent or proxy on behalf of the adult person is incompetent or otherwise incapable of communication
 - c. Section C: Declaration by a qualified relative of the adult person who is incompetent or otherwise incapable of communication

- d. Section D: Declaration by physician based on directive to physicians by a person now incompetent or otherwise incapable of communication
 - e. Section E: Declaration on behalf of the minor person
 - f. Section F: Directive by two physicians on behalf of the adult, who is incompetent or unable to communicate and without guardian, agent, proxy or relative. (**Note:** if this section is utilized, no signature of witnesses or notary are required)
- Addition of #3, A form is considered valid if:
 - 3. Signatures of two witnesses or notary are present; except when section F is utilized (No witness or notary signature is required for Section F). **Note:** Electronic signatures are acceptable
 - Copies of both the new form and older forms are included (front and back) on pages P-23 through P-26
 - Summary
 - Either the new form or old form is acceptable
 - Electronic signatures are now allowed
 - Only one of the 6 sections must be filled out on the new forms
 - Witness signatures or a notary signature is still required
 - Refer to the directions for the new form on page P-26 for clarification
- **Page P-27 Cardiac Triage/Transport Decision Scheme**
 - New Section
 - References the Regional Cardiac Plan
 - Designed to provide guidance for transport of cardiac patients
 - Patients with ACS or confirmed STEMI should be transported to “PCI” (Percutaneous Coronary Intervention) Capable Facilities or to the Closest Appropriate Acute Care Facility.
 - If an adequate airway cannot be established and/or maintained or if the patient goes into cardiac arrest, has malignant cardiac dysrhythmias, or is acutely unstable, the patient should be transported to the **NEAREST ACUTE CARE FACILITY**.
 - Medical Control may order bypass in any situation as appropriate, such as when a facility is unable to meet hospital resource criteria, or when a patient is in need of specialty care.
 - If expected transport time is excessive (>25 minutes) activation of air transport should be considered.
 - If there is a question on whether or not to bypass a facility, on-line medical control should be contacted for the final decision.
 - Review this section and www.spems.org for more details
- **Page P-28 Stroke Triage/Transport Decision Scheme**
 - New Section
 - References the Regional Stroke Plan
 - Designed to provide guidance for transport of stroke patients
 - Patients who meet triage criteria for activation of the Regional Stroke Plan should be transported to the **CLOSEST HIGHEST DESIGNATED STROKE FACILITY** or the **CLOSEST APPROPRIATE ACUTE CARE FACILITY** according to the plan guidelines with special consideration under the following circumstances:
 - If an adequate airway cannot be established and/or maintained or if the patient goes into cardiac arrest, has malignant cardiac dysrhythmias, or is acutely unstable, the patient should be transported to the **NEAREST ACUTE CARE FACILITY**.

- Medical Control may order bypass in any situation as appropriate, such as when a facility is unable to meet hospital resource criteria, or when a patient is in need of specialty care.
 - If expected transport time is excessive (>25 minutes) activation of air transport should be considered.
 - If there is a question on whether or not to bypass a facility, on-line medical control should be contacted for the final decision.
 - TRANSPORTATION SHOULD BE BASED ON THE TIME OF ONSET OF SYMPTOMS
 - Patients with an onset of **STROKE SYMPTOMS < 3 HOURS** should be taken to the highest designated stroke facility for treatment and evaluation for interventional care
 - Patients with an onset of stroke **SYMPTOMS OCCURRING >3 HOURS** should be transported to the nearest acute care facility for initial diagnosis and treatment. Similarly, a non-designated facility may be appropriate if the above standards of care can be provided.
 - Review this section for more details
- **Page P-29 and P-30 Trauma Triage Criteria for EMS Facility Bypass and Transfer**
 - Addition of the word “Trauma” to the title as this refers to trauma patients
- **Page P-34 Trauma Triage/Transfer Decision Scheme Pre-Hospital**
 - Addition of the word “Trauma” to the title as this refers to trauma patients
- **Page P-36 Equipment List**
 - Hypodermic needles appropriate for *IM injections* replaces SC injections (3 required)
 - Added “Quick Clot (must be the heat free formula) (Optional)”
- **Page P-37 Equipment List**
 - Inhaled Medications
 - Added “Optional” to Levalbuterol (Xopenex) 1.25mg/3ml
 - Xopenex is now an optional drug
 - Removal of Subcutaneous Medications
 - Moved Epinephrine 1:1,000 1mg/1cc under Intramuscular Medications
 - Epi is now given IM rather than SC
- **Page P-38 Equipment List**
 - First paragraph changed to reflect required training on IM injections (rather than SC injections) prior to carrying epinephrine 1:1,000 for IM injections
 - Signature of Medical Director
 - Dated 02/01/2011
 - Service Director MUST sign all copies on units
- **Throughout Treatment Algorithms**
 - Changed the date on the bottom to read 02/01/2011
- **Page 2 Trauma**
 - Box changed on mid left to state “Control bleeding with a hemostatic agent (optional) if necessary (P-16)”
 - Allows for Celox or Quick Clot if used
- **Page 6 Respiratory Distress**
 - Xopenex is now optional
 - Xopenex is removed from flow chart, but may be substituted for Albuterol
 - Box added to bottom right that states: “Xopenex (optional), 1.25mg via nebulizer, may be substituted for Albuterol anywhere throughout this algorithm”
 - Allows for user preference of Xopenex or Albuterol

- **Page 8 Cardiac Chest Pain or Suspected Myocardial Infarction**
 - Removed “Initiate Transport” from top box
 - Addition of box on left that states:
 - “1. Reference the Cardiac Triage/Transport Scheme (P-27)”
 - “2. Initiate Transport”
- **Page 10 Allergic Reaction**
 - Addition of the 2nd box on far left that states “Xopenex (optional), 1.25mg via nebulizer may be substituted for Albuterol anywhere throughout this algorithm”
 - Epinephrine box on middle left changed to read “Epinephrine (1:1,000) 0.3mg, *IM*, Using Auto-Injector or administer 0.3mg (0.3cc), *IM* if properly trained”
 - Epi 1:1,000 now given *IM* rather than *SC*
- **Page 12 Decreased Level of Consciousness (Non-Traumatic)**
 - Removed neurological symptoms from title
 - Added motor or sensory deficit box at left to refer to the Stroke/TIA algorithm
 - Removed Cincinnati Stroke Scale box
 - Stroke and TIA management is addressed under a new algorithm on Page 20
- **Page 18 Poisoning**
 - Removed “Overdose” from title
- **Page 19 Seizures**
 - Addition of box at bottom that states:
 - “Paramedic backup must be requested for all pregnant patients that are seizing or have had a seizure prior to EMS arrival in order to treat for Eclampsia.”
 - “Eclampsia is defined as a presentation of an unexplained seizure or convulsion in the setting of the signs and symptoms of Pre-Eclampsia. Not all patients will be clinically diagnosed with Pre-Eclampsia. It is considered a complication of severe Pre-Eclampsia. It typically occurs during or after the 20th week of gestation or in the postpartum period.”
- **Page 20 Stroke/TIA or Neurological Deficit**
 - New algorithm
 - Stresses the Cincinnati Stroke Scale and early notification (from scene if possible) of receiving facility for positive CSS
 - References the Stroke Triage Scheme (P-28)
 - Defines Neurological Deficit on bottom box
 - 1. Any Sudden Motor or Sensory Deficit
 - 2. Sudden confusion, trouble speaking or understanding
 - 3. Sudden difficulty seeing in one or both eyes
 - 4. Sudden trouble walking, coordination, or focal weakness
 - If possible inquire about the patient’s baseline neurological state. Chronic neurological deficits do not warrant rapid transport to a Stroke Center. ALWAYS err on the side of caution if questionable.
 - Review this algorithm for more details

CHANGES TO SUPPLEMENT

- **Table of Contents**
 - Page numbers changed
 - D50 changed to Dextrose, 12.5%, 25%, and 50%
 - Addition of Calcium Gluconate and Mag Sulfate
- **Addition of new drugs to drug index**
 - Calcium Gluconate Page S-10
 - Magnesium Sulfate Page S-21

- IV preparation instructions included for 250cc and 500cc
- **Dextrose (Page S-12) changed to include D12.5W, D25W, and D50W**
 - Mixing procedure and dosages
- **Epinephrine 1:1,000 (Page S-14)**
 - Route changed from SC to IM
- **Adult Drug Charts (Pages S-35 to S-38)**
 - Divided into 2 sections
 - For weights up to 100kg
 - For weights of 110kg and above
 - Addition of new drugs to drug index
 - Calcium Gluconate
 - Magnesium Sulfate
 - Loading dose
 - Maintenance dose (IV drip) mixing in 250cc
 - Maintenance dose (IV drip) mixing in 500cc
 - Route for Epi 1:1,000 changed from SC to IM
 - Drips for Lidocaine corrected to gtt/min
- **Pediatric Drug Charts (Pages S-39 and S-40)**
 - Dextrose divided into D12.5W and D25W
 - Route for Epi 1:1,000 changed from SC to IM
- **IV Drip Rate Formulas and Examples (Pages S-41 and S-42):**
 - Inclusion of Magnesium Sulfate example for 250cc bag of NS
 - Inclusion of Magnesium Sulfate example for 500cc bag of NS