SPEMS Protocol Changes
Advanced EMT (AEMT)
3/1/19 to 2/29/20

PROTOCOL CHANGES

- **Every Page**
  - Name Changed from EMT-Intermediate to Advanced EMT (AEMT) to match current TDSHS verbiage
    - Note: Those that have current EMT-Intermediate certification will receive AEMT certification at renewal from TDSHS.
    - EMT-Intermediate and Advanced EMT is the SAME certification
  - Changed dates at bottom of each page
- **Cover Page**
  - Signature with March 1, 2019 date
  - Protocols will expire February 29, 2020
- **Page ii. Authorized Services**
  - New Page
  - Lists all services authorized to utilize SPEMS Protocols
  - Required by TDSHS
- **Page P-2 Table of Contents**
  - Page numbers adjusted for changes
  - Reflects addition of new Fever/Sepsis Algorithm on Page 16
- **Page P-15 Blood Draw for Labs**
  - Added Specific order that the blood tubes should be drawn. (Blue, Red, Green, Purple) Recommended by the Stroke and Cardiac committee (National Standard)
- **Page P-16 Fever Management**
  - Section removed from this page
  - Now covered in Fever/Sepsis treatment algorithm
- **Page P-23 Stroke/TIA (Suspected)**
  - New section
  - Discusses in more detail management of stroke/TIA patients
  - References performing the VAN assessment for all patients with positive CSS
    - To help determine if stroke is due to large vessel occlusion (LVO)
- **Page P-26 Transport to Freestanding Emergency Centers (FECs)**
  - New Section
  - Allows for transport of certain patient to approved FECs under for patients that meet certain criteria
    - Approved Lubbock FECs: Star ER and both Covenant HOPD locations
    - Approved Amarillo FECs: both ER Now locations
    - NO OTHER FECs are authorized by Protocols
  - Lists Indications and Contraindications for transport to these approved FECs
  - Provides guidance of timeframe and transport to appropriate facility
  - Flow chart included on page P-27
  - Lists addresses and contact phone numbers for each facility
  - ALL transports to FECs MUST be reviewed by a peer reviewer
- **Page P-30 Pre-Hospital Medications and Intravenous Fluids**
  - Removed D50W and Replaced with D10W
  - Services can comply by utilizing current stock of D50 and 250cc bags of NS. Once existing stock is exhausted or expires, it must be replaced with pre-mixed D10W in 250cc bags

- **Page P-41 Stroke/TIA Triage/Transport Decision Scheme**
  - Updated to reflect importance of determining "Last seen normal time"
  - References Large Vessel Occlusion and the VAN assessment
- **Page P-53 BLS Equipment**
  - Addition of new King Airway sizes LT(S)-D 0 & 1
    - Size "0" will accommodate patients < 5kg and Size "1" will accommodate patients from 5kg to 12kg
  - Addition of 1- Thermometer (may be oral, tympanic, or skin monitoring)
    - Since monitoring of temperature is required with the new Fever/Sepsis Protocol, a thermometer is required
- **Page P-54 ALS Equipment**
  - 2 ea. Red top blood tubes added to required blood tubes
    - Recommended by the Stroke and Cardiac committees (National Standard)
    - Blood tubes required (2 each): Blue, Red, Purple, and Green
- **Page P-55 ALS Medications**
  - Removed D50W and Replaced with D10W in 250cc prefilled bags
    - Includes "**NOTE**: Until current supplies of Dextrose 50% ($D_{50}W$), 25g/50cc are exhausted or expires, EMS services can meet the requirement for Dextrose 10% by carrying 2-Dextrose 50% ($D_{50}W$), 25g/50cc AND 2- 250cc bags of NS. $D_{10}W$ can then be achieved by removal of 50cc of the NS and injecting the 50cc of $D_{50}W$ into the IV bag. Once current supplies of $D_{50}W$ are exhausted, EMS services are required to stock the $D_{10}W$ premixed solution in a 250cc bag."
    - Numerous studies have shown that the administration of D10W is much safer and more beneficial for our patients
- **Page P-55 Signature Page**
  - Date changed to 3/1/2019
  - EMS Director MUST sign
- **Throughout Treatment Algorithms:**
  - Changed heading to show Advanced EMT rather than EMT-Intermediate
  - Changed the date on the bottom to read 03/01/2019
- **Page 15 Decreased Level of Consciousness**
  - Replaced D50W with D10W
    - Adults are given IV bolus W/O using a 10 drop IV set
      - Once patient becomes responsive reassess BGL:
        - If BGL is $\geq$ 90mg/dL TKO D10 and monitor for desired effects
        - If BGL is < 90mg/dL continue D10 W/O while monitoring for desired effect
    - Pediatrics are given IV bolus W/O using a 60 drop IV set
      - Once patient becomes responsive reassess BGL:
        - If BGL is $\geq$ 90mg/dL TKO D10 and monitor for desired effects
        - If BGL is < 90mg/dL continue D10 W/O while monitoring for desired effect
      - D25 and/or D12.5 no longer used
- **Page 16 Fever/Sepsis**
  - New Algorithm
  - Provides guidance for management of patients with sepsis
  - Lists criteria for both adult and pediatric Systemic Inflammatory Response Syndrome (SIRS)
- **Page 18 Heat Exposure**
  - Added "Obtain body temperature" to algorithm

- **Page 23 Seizures**
  - Replaced D50W with D10W
    - Adults are given IV bolus W/O using a 10 drop IV set
      - Once patient becomes responsive reassess BGL:
        - If BGL is $\geq$ 90mg/dL TKO D10 and monitor for desired effects
        - If BGL is < 90mg/dL continue D10 W/O while monitoring for desired effect
    - Pediatrics are given IV bolus W/O using a 60 drop IV set
      - Once patient becomes responsive reassess BGL
        - If BGL is $\geq$ 90mg/dL TKO D10 and monitor for desired effects
        - If BGL is < 90mg/dL continue D10 W/O while monitoring for desired effect
      - D25 and/or D12.5 no longer used
- **Page 24 Stroke/TIA**
  - Indicates IV should be established with an 18gauge IV catheter or larger
    - To better facilitate CT and tests at ER
  - Indicates VAN Assessment (P-24) for patients with motor control deficit
  - Emphasizes limited scene time to 10 minutes or less
  - Emphasizes the need to obtain the "time of onset" or "last seen normal time"
  - Lists patient history and S/S that should increase suspicion of Stroke/TIA (Box at bottom)
    - History of: CVA/TIA, Cardiac/vascular surgeries, DVT, Diabetes, HTN, CAD, A-Fib, Blood thinners
    - S/S: Altered mentation, Weakness/Paralysis, Visual changes, Sensory loss, Aphasia, Dysathria, Dysphagia, Syncope, Vertigo/Dizziness, Vomiting, Headache, SZ, Respiratory pattern changes, Hyper/Hypotension, Trouble walking/unsteady gait

PROTOCOL SUPPLEMENT CHANGES:

- **Throughout Supplement**
  - Date of 3/1/2019 throughout
- **Page i Table of Contents**
  - Page numbers adjusted
- **Drug Index**
  - **Page S-12 Dextrose 10% (D10W)**
    - Removed references to D50W, D25W, and D12.5W)
    - Reflects changes from D50 to D10 for hypoglycemic patients where an IV is obtainable
    - Adult Dosage: Utilizing a 10 drop set (A-set), give wide open bolus, until patient becomes responsive. Once responsive, obtain BGL. If BGL $\geq$ 90mg/dL, slow infusion to a TKO rate and monitor to maintain desired effect. May repeat X 1 if no improvement in LOC AND BGL remains < 70mg/dL
    - Pediatric Dosage: Utilizing a 60 drop set (mini set), give wide open bolus, until patient becomes responsive. Once responsive, obtain BGL. If BGL $\geq$ 90mg/dL, slow infusion to a TKO rate and monitor to maintain desired effect. May repeat X 1 if no improvement in LOC AND BGL remains < 70mg/dL
    - Until current stocks of D50W (25G/50cc) are exhausted or expired, D10W can be achieved by utilizing a 250cc bag of NS and pre-filled D50W. 50cc should be withdrawn from the bag and the 50cc of D50W injected into the bag. This concentration must be well mixed (shaken) and D10W is achieved

- **Page S-18 Fentanyl**
  - Lowered pediatric dosages of Fentanyl to 2mcg/kg slow IV push to a max of 100mcg per single dose
- **Page S-21 through S-23 Ketamine**
  - Added usage to include pain management and sedation prior to electrical therapy under certain circumstances
  - For Pain Management, Ketamine can be used ONLY for patients with:
    - Extended extrication time (>10 minutes)
    - Severe non-cardiac pain rated at a 9 or 10 WITH noted signs/symptoms of severe pain such as elevated pulse rate, increased BP, obvious significant injury, etc.
    - Dosage is 0.5mg/kg IV or I/O to a maximum of 500mg
    - Given slow IV or IO push (Cannot be given IM for pain management)
    - Cannot be repeated without medical direction permission
    - If Ketamine is administered, narcotics CANNOT be administered without contacting medical control for permission
    - If narcotics have been administered, Ketamine CANNOT be administered without contacting medical control for permission
    - Monitor waveform capnography if available
  - For sedation prior to electrical therapy (cardioversion or pacing), Ketamine can be used ONLY for conscious patients that are hypotensive (SBP < 90mmHg
    - Versed is drug of choice unless hypotensive
    - Dosage is 0.5mg/kg IV or I/O to a maximum of 500mg
    - Given slow IV or IO push (Cannot be given IM for sedation prior to electrical therapy)
  - All uses of Ketamine must be reviewed by a peer reviewer
- **Adult Drug Charts**
  - Removed D50W and replaced with D10W
  - Added Ketamine to charts for pain management
  - Added Ketamine to charts for sedation prior to electrical therapy
- **Pediatric Drug Charts**
  - Adjusted Fentanyl for pain to reflect 2mcg/kg
  - Removed D50W, D25W, and D12.5W and replaced with D10W
  - Added Ketamine to charts for pain management
  - Added Ketamine to charts for sedation prior to cardioversion