V2025.1 Protocol Update

Document Purpose:
To provide guidance to Sponsor Hospitals and their affiliated EMS Services for educating providers on the 2025.1 protocol updates.

Note: Not all protocols will be utilized by every service. Providers, however, must be aware of all updates and their potential applications.

This update includes a few protocols that would benefit from a skills demonstration, and/or "hands on" practice by the provider.

Note

Protocol version 2025.1 expands the AEMT scope of practice, moving some Paramedic skills into the AEMT scope. This document specifically identifies the level(s) of providers each objective applies to.

Recommended Skills

- SGA placement (see educational supplement)
- ETCO2 use (see educational supplement)
- Vector Change/Double Sequential Defibrillation

Goal

At the end of this course, providers will be able to:

- Identify and discuss all major updates in Protocol Version 2025.1.
- Explain how these changes impact provider practice according to Sponsor Hospital policies.
- Demonstrate competence in newly introduced or expanded skills where applicable.

V2025.1 Connecticut Statewide Protocol Changes

Protocol Objectives

1.0 Routine Patient Care

- Providers will understand that this protocol applies to EMT/AEMT and Paramedic
- EMT/AEMT/Paramedic providers will review formatting changes
    - Airway and Breathing each are their own sections
    - Removed language that was already present in a referenced protocol

1.1 EMR Routine Patient Care

- EMR providers will learn that items were removed due to not being in the EMR scope of practice
    - Lung sounds assessment, ETCO2, Spinal trauma protocol, musculoskeletal injuries, pulse oximetry
- EMR providers will review formatting changes
    - Removed language that was already present in a referenced protocol
- EMR providers will review the added skills that clarify EMR scope of practice
    - OPA and NPA
    - Adult/Pediatric epi autoinjectors (separate educational supplement previously)
    - Naloxone (under BVM and airway)
- EMR providers will understand that a "two- person" technique for BVM is preferred and provides for better ventilatory support
- EMR providers will understand the importance of a complete verbal report and hand-off written documentation when transferring patient care.

2.0A Abdominal Pain

- AEMT/Paramedic providers will understand that non-traumatic abdominal pain is not a contraindication to pain management.

2.2 Alcohol Withdrawal

- EMT/AEMT/Paramedic providers will learn that protocol now applies to both alcohol and benzodiazepine withdrawal.
    - This is due to an increase in benzodiazepine use and resulting withdrawal
    - "If additional sedation…." Has been changed to "If additional treatment…"
- Paramedic providers will know that they can only administer 2 doses of a benzodiazepine then will need to call DMO

2.3A/P Anaphylaxis

- All providers will review the PEARLS so they are clearer on the s/s of anaphylaxis
- EMT/AEMT/Paramedic providers are reminded to check the concentration of the epi they are administering (1:1,000 v. 1:10,000)
- Paramedic providers will understand not delay additional IM epi for an epi infusion, but that epi infusions are an important part in treatment.
- The AEMT will learn that diphenhydramine has been added to their scope of practice for allergic reaction and anaphylaxis in ***ADULTS.***
    - The dosing, indications, contraindications etc. should be reviewed with the AEMT

V2025.1 Connecticut Statewide Protocol Changes

2.6 Behavioral Emergencies

- Paramedic provider will understand that treatment for anxiety has been added
- Paramedic provider will review the treatment for anxiety and appreciate the value in treating it.
- Paramedic providers should review the RASS scoring system
- All providers will review the Youth Urgent Crisis Center guideline, learning that the Wellmore center has updated hours.
- All providers will appreciate the importance of observing a patient's living conditions and documenting them.
- All providers will review how to properly assess for a patient's capacity (see PEARLS section in protocol)

2.8A/P Fever

- All providers will know that a fever is defined as 100.4F/38C for all age groups
- AEMT/Paramedic will remember to consider sepsis as a cause for shock and fever
- AEMT will understand that they can administer IV/IO/PO Tylenol for fever to adults
- AEMT will learn that they can administer PO Tylenol to pediatric patients
- AEMT will review the correct dosing, contraindications etc. for administering Tylenol.

2.10 Hyperkalemia

- Paramedic will learn that calcium gluconate is preferred for patients with a pulse.
- Paramedic will review that the dose for calcium gluconate is 3gms for all uses in the CT EMS Protocols.
- Paramedic will remember that CaCl is irritating to the veins and to administer slowly and look for extravasation.

2.12A/P Hypoglycemia

- EMT/AEMT/Paramedic providers will learn that they can administer a patient's prescribed, intranasal glucagon/autoinjector
- EMT/AEMT/Paramedic providers will understand that the patient's glucagon is used when the patient cannot receive oral glucose (or equivalent).
- EMT/AEMT/Paramedic providers should review alternatives to oral glucose (CT Maple syrup, juice etc.)
- EMT/AEMT/Paramedic providers will know that hypoglycemia in pediatrics and adults is defined as a bgl <60mg/dL with associated AMS.
- EMT/AEMT/Paramedic will learn that patients with an inborne error of metabolism may have a specific care plan for hypoglycemia that involves administering oral corn starch.
- AEMT/Paramedic providers will know the dosing of the IN glucagon (3mg), and understand that IN glucagon must be delivered from a previously commercially prepared device.

2.13 Hypothermia

- EMT/AEMT/Paramedic providers will review that warm packs should be wrapped in a towel prior to placing on patient.
- EMT/AEMT/Paramedic providers will review the clarifications made in the "Localized Injuries" section
    - Exposing the affected area and removing jewelry and clothing
    - Applying loose sterile dressing to affected area
    - Place gauze between fingers and toes

- EMT/AEMT/Paramedic will recall that hypothermic patients without other contraindications to CPR should have resuscitation provided until the patient's core temp is >32 degrees Celsius (90 degrees Fahrenheit)
- ALS providers will review the guidelines for treating the hypothermic patient.
    - Limit epinephrine to 3 doses and increase dosing interval to 6-10 minutes.
    - Give anti-dysrhythmics based on specific dysrhythmia
    - Avoid transcutaneous pacing in the severely hypothermic patient

2.14 Nausea/Vomiting

- AEMT will learn that ondansetron has been added to their scope of practice for adult and pediatric and will review the medications dosing, administration, contraindications and side effects.
- AEMT/Paramedic will learn that the guidelines for giving PO ondansetron is patients who are >20kg.
- Paramedics will see that statements regarding prolonged QTc have been summarized into the following, "All antiemetics can prolong QTc, avoid them if known QTc of >500ms."
- Paramedic will recall that droperidol can cause a dystonic reaction
- Paramedic will understand that both diphenhydramine and haloperidol have been added to the protocol.
- Paramedic will review doses for diphenhydramine and haloperidol as it applies to n/v.
- Paramedic will know that diphenhydramine is the antidote for a dystonic reaction from the following: prochlorperazine, droperidol or metoclopramide.
- Paramedic will appreciate that if one anti-emetic isn't working they can administer one dose of an alternate class.

2.19A/P Adult & Pediatric Pain Management

- AEMT will realize that IV/IO/PO acetaminophen has been added to their scope of practice for adults.
- AEMT will recognize that they may also administer acetaminophen to pediatrics for pain, but that it is only administered PO.
- AEMT will review the dosing, indications and contraindication for acetaminophen.
- Paramedic providers will review that NSAIDS are contraindicated in patients who are anticoagulated.

2.20A Poisoning

- AEMT providers will appreciate that IV/IO naloxone has been added to their scope of practice and review the appropriate dosing
- Paramedic providers will see a clarification on when suboxone can be administered, and understand that naloxone does not have to have been administered first.
- Paramedic providers who are administering budprenorphine should review the COWS scoring system and understand that the threshold for administering budprenorphine is a COWS score of >=5.

V2025.1 Connecticut Statewide Protocol Changes

2.24P Pediatric Smoke Inhalation

- Paramedics will learn that the dosing for pediatric administration of hydroxocobalamin has been clarified (70mg/kg)
- Paramedics will see that a weight-based dosing chart has been added to the protocol that includes dosing in mLs.
- Paramedics will know that they should remove excess medication from the vial prior to infusing the medication.

2.25 Stroke

- All providers will learn the BEFAST stroke scale and understand that this is replacing FAST.
- All providers will know why BEFAST is a more comprehensive scale, since it also evaluates balance and eyes – identifying some more subtle signs of a CVA or one caused by a large vessel occlusion (LVO).
- All providers will appreciate that stroke patients are at a higher risk for aspiration so should be positioned with head of stretcher elevated at least 15-30 degrees as long as the SBP is >100mmHg. The patient's head/next should remain in neutral alignment.
- All providers will see that a stroke "checklist" has been added to the protocol. Providers can adapt this to aid them in keeping track of assessment points and time.
- AEMT/Paramedics will review that IV placement should be above the wrist in a potential stroke patient.

2.27 Hospice NEW PROTOCOL

- All providers will value the need for a Hospice protocol. Hospice patients' needs are often different than that of a "standard" patient – specifically when it comes to "goals of care."
- All providers will review the process outlined for treating a hospice patient – understanding that attempting to reach the patient's hospice provider is important.
- Providers will justify why clarifying the patients' goals of care is important.
- Providers will understand that calls for hospice patients may have a longer scene time due to the need for communication with the hospice provider.
- Providers will appreciate the importance of clear communication with family members.
- Providers will justify why giving Narcan to a hospice patient is rare due to these patients being on high doses of opioids already and that Narcan administration can precipitate a pain crisis in the hospice patient.
- Providers will know what interventions they should avoid in a hospice patient:
    - Sirens, lights or aggressive interventions with family or caregivers
    - IV therapy (except where other forms of medication administration are not possible).
    - Cardiac resuscitation: CPR, resuscitation medications, endotracheal intubation, supraglottic airway, cardioversion, cardiac pacing, defibrillation.
    - Hospice patients should not be transported to the hospital except when transport is specifically requested by the patient, their healthcare agent, or Power of Attorney, and preferably in consultation with the hospice team and exhaustion of other comfort focused treatments at home are inadequate at controlling symptoms.
- Providers will learn what an adult hospice emergency kit/"comfort pack" is
- EMT/AEMTs will review the recommend guidance is for the following: breakthrough pain, dyspnea/air hunger, dehydration, confusion/delirium
- Paramedic will learn what adjunct treatments they may give for the same and additionally for N/V, anxiety/agitation.

V2025.1 Connecticut Statewide Protocol Changes

3.2A Cardiac Arrest

- EMTs will learn that SGA can be used in the cardiac arrest setting (see separate educational supplement)
- EMTs will know that if placing an SGA – ETCO2 must also be used (see separate educational supplement)
- EMT/AEMT/Paramedic will continue to value the importance of not interrupting compressions when placing an advanced airway
- Paramedics will know that properly ventilating and oxygenating SGAs should not routinely be transitioned to ETT in a cardiac arrest.
- Paramedics will see a clarification of when to administer amiodarone
    - If VF/Pulseless VT persists following second defibrillation, in addition to AEMT standing orders, administer: Amiodarone 300 mg IV/IO.
    - If after 5 minutes, VF/pulseless VT remains unresponsive to CPR, defibrillation, and vasopressor therapy, administer an additional 150 mg amiodarone IV/IO.
    - If successful, consider amiodarone (1mg/mL) maintenance infusion at 1 mg/minute.

4.2 Eye Injuries

- Paramedics will know that when using a morgan lens that the preferred solution is lactated ringers.

4.10 Hemorrhage

- Paramedics will see that the dosing/administration of TXA has changed in order to stay current with recent recommendations. TXA should now be administered 2 grams in 10ML (200mg/mL) IV/IO syringe bolus over at least 1 minute.

5.2.1 Bilevel ventilation

- AEMT providers will review the uses of bilevel ventilation.
- AEMT providers will understand that they can administer bilevel ventilation with a disposable device (not a mechanical ventilator).
- AEMT providers will know that their service requires sponsor hospital approval prior to initiating this at their service.

5.7 Quantitative Waveform Capnography

- EMT/AEMT will know the value of using quantitative capnography to confirm effective ventilation with a BVM and/or SGA.
- EMT/AEMT will know why colorimetric devices are not to be used in place of quantitative capnography.
- EMT will know that sponsor hospital approval is required to use quantitative capnography.

6.9 Naloxone leave behind

- All providers will know that they no longer need to collect demographic information and contact information in order to leave naloxone.
- All providers will know that a leave behind naloxone kit does not have to include a face mask.
- All providers should review where they can obtain their Narcan leave behind kits (Regional Behavioral Health Action Organizations Find you RBHAOS

V2025.1 Connecticut Statewide Protocol Changes

6.23 Double Sequential Defibrillation NEW PROTOCOL

- Paramedics will know that this applies to vfib/vtach that is refractory to 3 consecutive shocks with no change in rhythm.
- Paramedics will appreciate the difference between *refractory* vfib/vtach v. *recurrent* vfib/vtach
- Paramedics will understand that a vector change is also an option.
- Paramedics will understand that their service needs to receive approval from their sponsor hospital to perform this procedure.
- Paramedics should ensure the pads from the second AED are not touching the originally placed pads
- Paramedics should learn the protocol for the steps leading up to DSD and should practice initiating it in order to know how to reduce compression interruptions.
- Paramedic should appreciate that another agency may not allow use of their defibrillator for DSD.

7.1 Mass Casualty

- Providers will appreciate that under an MCI that they may perform necessary, life-saving procedures, within their scope of practice, without direct medical oversight, even if such procedures would ordinarily require DMO. Within the scope of a Mass Casualty Incident, the EMS provider may, within the limits of their scope.

Appendices

Appendix 1: Adult Medication Reference

- Paramedics will understand that "termination of AV nodal re-entry arrhythmia and rate control in narrow complex tachycardia with an irregular rhythm" have been added to **metoprolol**
- Paramedics will remember that afib with wpw is a contraindication for **metoprolol**.
- Paramedics will see that clarification of a goal ventricular rate of less than 110bpm has been added to **metoprolol.**
- EMT/AEMT/Paramedics will learn that a clarification for the timing of **nitro** administration to a patient who has taken a phosphodiesterase inhibitor. Nitro should not be administered if the patient has taken the phosphodiesterase inhibitor within the past 48 hours.
- Paramedics will know that **TXA** has been updated to match the change in the hemorrhage control protocol.

Appendix 2: Pediatric Medication Reference

- Paramedics will remember that the dosing for **hydoxycobalamin** has been clarified and know to refer to the Pediatric smoke inhalation protocol for the dosing.
- Paramedics will appreciate that the dosing for **calcium gluconate** (60mg/kg) has been added to the pediatric medication reference.

V2025.1 Connecticut Statewide Protocol Changes

Scope of Practice Updates

- SGA for EMTs – Separate Educational Supplement
- ETCO2 for EMTs – Separate Educational Supplement
- Interfacility Transport – Separate Educational Supplement
- AEMT
    - 2.3A Benadryl administration
    - 2.8A/P Acetaminophen administration
    - 2.12A/P IN glucagon
    - 2.14 Ondasteron administration
    - 2.19A/P Acetaminophen administration
    - 2.20A Naloxone IV/IO
    - 5.2.1 Bilevel ventilation added