



PENNSYLVANIA EMERGENCY
HEALTH SERVICES COUNCIL
Your Voice In EMS

RECOMMENDATION FOR CONSIDERATION

Board Meeting Date: December 6, 2017

Subject: EMT Epinephrine Administration Alternative

VTR#: 1217-01

Committee/Task Force: Medical Advisory

Recommended Goal

Recommended Policy Change

Other:

Recommendation:

The Pennsylvania Department of Health should amend the EMT scope of practice, statewide BLS protocols and applicable documents to permit EMTs who have completed additional education and are credentialed by the EMS agency medical director to administer epinephrine (1mg/ml concentration) using a syringe and vial/ampule as an alternative to an auto-injector device in cases of suspected anaphylaxis.

Rationale [Background]:

The dramatic price increase for epinephrine auto-injectors has caused a financial strain for PA EMS agencies who voluntarily carry this medication to treat suspected cases of anaphylaxis. In some cases, agencies have questioned whether they can continue to carry the auto injectors given their 2-year shelf life and general lack of reimbursement when administered by an EMT.

In 2014, King County Washington adopted a novel approach to ensure the continued availability of live saving epinephrine on the county's ambulances and achieve significant cost savings. The program, known as "Check and Inject," involved training EMTs to draw-up and administer epinephrine using a syringe and vial of medication instead of the much more expensive auto-injector. The program resulted in annual savings of \$150k and no reported administration errors or bad outcomes.

The success of "Check and Inject" has spread beyond the borders of Washington state. Numerous states, including New York and West Virginia, have adopted successful syringe-based epinephrine administration programs for EMTs. Our correspondence with officials in New York and West Virginia revealed both a high level of satisfaction from field providers and like King County, no reported incidents of administration errors or bad outcomes.

The MAC believes it is reasonable and appropriate for Pennsylvania to adopt an optional syringe-based epinephrine program for Pennsylvania EMTs. This initiative will provide agencies with a more cost effective alternative to an auto-injector and possibly encourage BLS agencies not currently carrying an auto-injector to consider adding epinephrine on its vehicles.

Medical Review [Concerns]:

The MAC has spent the last 12 months considering this issue and feels comfortable recommending this initiative based on the success of other states. Again, this is an EMS agency medical director option based on their assessment of the agency's capabilities.

Fiscal Concerns:

While we are unable to project total savings across the EMS system, there is a substantial cost difference when comparing the current and proposed concept. This will result in significant cost savings, even for an agency only stocking one vehicle. An auto injector 2-pack can cost upwards to \$600; this cost doubles when you consider that an ambulance must carry a device for both adults and pediatric patients. Conversely, a commercially available epi kit costs between \$30-\$40, while one assembled by the EMS agency can cost as little as \$10-\$20 each.

Educational Concerns:

Participating EMTs should be required to complete a standardized educational program that contains educational objectives including, but not limited to, anaphylaxis, basic epinephrine pharmacology and administration procedures. Following the completion of didactic education, the EMS agency medical director will be responsible to conduct psychomotor skill training and verification.

As part of PEHSC's inquiry, both New York and West Virginia were kind enough to share their online educational content. Using these resources, an online education program could be designed in a relatively short time period.

Plan of Implementation:

Upon acceptance of the recommendation, the Pennsylvania Department of Health should:

1. Task PEHSC to develop the content for an online education program.
2. Amend the current EMT scope of practice to permit, in addition to an auto-injector, the administration of 1:1000 epinephrine using a syringe and vial/ampule.
3. Amend the current list of approved and required medications for EMS agencies and providers to permit EMT administration of "EPINEPHrine HCL 1mg/ml."
4. For agencies who elect to utilize this option, they should carry at least (2) 1cc syringes and (2) vials/ampules containing no more than 1mg of 1:1000 epinephrine.
5. Permit agencies to either purchase commercially available epi kits or assemble a kit containing at least (1) 1cc syringe/needle, (1) vial/ampule of epinephrine, alcohol preps and other miscellaneous supplies as determined by the medical director.
6. Amend and issue an off-cycle update of statewide BLS protocol 411 – Allergic Reaction/Anaphylaxis to include both optional epinephrine auto-injector or administration by syringe and vial/ampule for adults and pediatric patients.
7. Issue an RC Memo and EMSIB to provide program guidance.

The PEHSC Committee/Task Force offers consultation to the Department in regard to the content of this Vote to Recommend (VTR) and its attached documents. The PEHSC Committee/Task Force specifically offers staff or member support to participate in Department deliberations regarding this recommendation in an effort to convey committee/task force discussions.

Board Meeting Comments/Concerns:

No concerns expressed.

Signed: _____ Date _____
President

For PEHSC Use Only – PA Department of Health Response

Accept: _____ Table: _____ Modify: _____ Reject: _____

Comments:

Date of Department Response: _____