RECOMMENDATION FOR CONSIDERATION

Executive Committee Meeting Date: May 16, 2016

Subject: Revisions to Air and Critical Care Transport Ambulance Equipment Requirements

VTR#: 0516-01  Committee/Task Force: Critical Care Transport Task Force

☐ Recommended Goal ☒ Recommended Policy Change  ☐ Other:

Recommendation:

Rationale [Background]:
In June 11, 2014, the PEHSC Board of Directors accepted and forwarded VTR# 0614-01 to the Department of Health, which recommended minimum equipment requirements for critical care transport ambulances and revised requirements for air ambulances. On May 30, 2015, the Department of Health published a notice in the Pennsylvania Bulletin [45 Pa.B. 2680] establishing equipment requirements for critical care transport ambulances, however the recommended revisions related to air ambulances were not published at or since that time.

On March 31, 2016, the PEHSC Air Medical Task Force, now referred to as Critical Care Transport Task Force, reviewed the unpublished air ambulance equipment recommendations from 2014 and made additional changes. The task force, in response to concerns raised by the regulated community, is also recommending amendments to the published equipment requirements for critical care transport ambulances.

The attached document outlines the task force’s equipment recommendations for both air and critical care transport ambulances.

Medical Review [Concerns]:
The critical care transport task force has physician members who participated in the development of this recommendation.

Fiscal Concerns:
The task force believes there will be no significant financial impact on air ambulance agencies since the recommendations reflect the current standard of practice voluntarily maintained by these agencies. EMS agencies contemplating the addition of critical care transport as a new service line should, as part of their financial analysis, consider the cost to acquire, maintain and provide training on the recommended equipment.
**Educational Concerns:**
An EMS agency, through its medical director, is responsible to ensure that providers are trained in the proper operation of all equipment carried on board the aircraft and/or ground transport vehicle.

**Plan of Implementation:**
The Department of Health, upon acceptance of this recommendation, should publish the updated required minimum equipment list in the Pennsylvania Bulletin for both air and critical care transport ambulances and follow established procedures to disseminate this information to the regulated community.

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.

**Executive Board Comments/Concerns:**
None

Signed:_________________________________________ Date____________________

President

For PEHSC Use Only – PA Department of Health Response

Accept:____ Table:____ Modify:____ Reject:____

Comments:

Date of Department Response:___________________
I. AIR AMBULANCE SERVICE

Based on the Vehicle, Equipment and Supply Requirements for Ground and Air Ambulances as published in the Pennsylvania Bulletin on May 30, 2011 [41 Pa.B. 2296] and updated on July 5, 2014 [44 Pa.B. 4259], the following modifications are recommended:

Add

1. One (1): bougie endotracheal introducer
2. One (1): video capable laryngoscope w/ appropriate size blades
3. One (1): electronic waveform capnography capable of monitoring a non-intubated patient
4. One (1): portable transport ventilator which must have the capabilities that include, but are not limited to, controlling rate, volume, FiO2, I:E Ratio, PEEP and volume control, pressure control, SIMV and NPPV modes. Device must have both volume and pressure modes and low/high pressure warning alarms
5. Two (2): portable ventilator circuits appropriately sized for the patient being transported
6. Two (2): over needle catheters, at least 3” in length, 10, 12 or 14 gauge (for thoracic decompression)
7. One (1): automated non-invasive blood pressure monitoring device
8. One (1): 12-lead ECG device
9. One (1): invasive pressure monitor, w/ electronic waveform, two-channel capability
10. One (1): portable Doppler (no specification of probe type)
11. One (1): pelvic stabilization device
12. Two (2): blood administration sets (only if agency provides or maintains blood products)
13. Three (3): intravenous infusion pumps or one (1) multi-channel unit capable of managing three (3) simultaneous infusions
14. One (1): nasogastric or oral gastric tube, appropriately sized for patient being transported
15. Per statewide CCT protocols, approved medications must be kept within expiration dates
16. One (1) pediatric safe transport device

Delete

1. Line 15: Lateral Cervical Spine Device and Long Spine Board
2. Line 65: Phlebotomy Equipment (per regional protocols)

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1 No transmission capability required; not permitted during flight due to potential interference w/ aircraft navigation system.
2 Rarely, if ever used; applied by ground providers if indicated. Reduces aircraft weight and recognizes storage limitations.
Change

1. Line 25: Remove reference to “Sterile” for OB Kit
2. Combine lines 28 and 29: related to required linen supply to: “Appropriate patient covering capable of maintaining body temperature based on anticipated weather conditions”
3. Line 39: Remove current “6 volt” reference for hand lights

II. CRITICAL CARE TRANSPORT AMBULANCE SERVICE

Based on the Vehicle, Equipment and Supply Requirements for Critical Care Transport Ambulance Services as published in the Pennsylvania Bulletin on May 30, 2015 [45 Pa.B. 2680], the following modifications are recommended:

Add

1. One (1): pediatric safe transport device

Delete

1. Line 8: One (1) endotracheal cuff pressure manometer (to be consistent with air ambulance recommendation)

2. Line 16: Onboard oxygen with capacity of a minimum of 7,000 liters

The current onboard oxygen supply requirements for BLS and ALS ambulances in 41 Pa.B. 2296 is sufficient. Ambulances are already required in 28 Pa.C. 1027.7 (f)(11) “[a] carry an oxygen supply that is capable of providing high flow oxygen at more than 25 liters per minute to a patient for the anticipated duration of the transport”

The current 7000 liter requirement was not recommended by PEHSC; in many cases it places an undue burden on an EMS agency, whose transports are not of an extended duration, by requiring vehicles to be retrofitted to accept a larger [or multiple] oxygen cylinder[s]. The justification for the current requirement is predicated on the assumption that mechanically ventilated patients will rapidly deplete an ambulance’s oxygen supply, which is not the case in most transports. In contrast to simple, single mode ventilators, Multi-mode ventilators required for CCT ambulances are electrically powered. Oxygen consumption is based on the delivered fraction of inspired oxygen (FIO2) being blended with room air to maintain the patient’s target oxygen saturation.

Change

1. Line 11: One (1) portable Doppler (remove specification for venous and OB probe to be consistent with air ambulance recommendation)

3 Replace current voltage requirement with a parameter that is reflective of current technology, e.g. specify a minimum lumen requirement. This change facilitates the use of LED devices, which use less voltage but provide more illumination than traditional incandescent 6 volt hand lights.